A Test Lab Techno Corp.

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SAR EVALUATION REPORT

Test Report No.	:	1202FS12-01
Applicant	:	HTC Corporation
Product Type	:	Smartphone
Trade Name	:	HTC
Model Number	:	PJ46100
Dates of Received	:	Jan. 19, 2012
Dates of Test	:	Feb. 09 ~ Mar. 01, 2012
Date of Issued	:	Mar. 05, 2012
Test Environment	:	Ambient Temperature： 22 ±2 ° C
		Relative Humidity：40 - 70 %
Standard	:	ANSI/IEEE C95.1-1999
		IEEE Std. 1528-2003
		47 CFR Part §2.1093;
		FCC/OET Bulletin 65 Supplement C [July 2001]
Max. SAR	:	0.598 W/kg Head SAR
		1.010 W/kg Body SAR
Test Lab Location	:	Chang-an Lab

1. The test operations have to be performed with cautious behavior, the test results are as attached.
2. The test results are under chamber environment of A Test Lab Techno Corp. A Test Lab Techno Corp. does not assume responsibility for any conclusions and generalizations drawn from the test results with regard to other specimens or samples.
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Approved By : Yung-Tan Tsai (Yung Tan Tsai)

Tested By : Bill Hu (Bill Hu)

Contents

1. Description of Equipment under Test (EUT)

Applicant	HTC Corporation	
Applicant Address	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan	
Manufacture	HTC Corporation	
Manufacture Address	No. 23, Xinghua Rd., Taoyuan City, Taoyuan County 330, Taiwan	
Product Type	Smartphone	
Trade Name	HTC	
Model Number	PJ46100	
IMEI No.	35918804000252	
FCC ID	NM8PJ46100	
RF Function	GSM/GPRS/EGPRS/DTM 850 (Device Class A, Multi-slot Class 12) GSM/GPRS/EGPRS/DTM 1900 (Device Class A, Multi-slot Class 12) WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ (QPSK) Band II WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ (QPSK) Band V IEEE 802.11b / 802.11g / draft 802.11n 2.4GHz Standard-20MHz with Wi-Fi Hot spot mode IEEE 802.11a / draft 802.11n 5GHz Standard-20MHz Bluetooth 3.0 / Bluetooth 4.0	
Tx Frequency	Band	Operate Frequency (MHz)
	GSM/GPRS/EGPRS/DTM 850	824.2 - 848.8
	GSM/GPRS/EGPRS/DTM 1900	1850.2 - 1909.8
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ (QPSK) Band II	1852.4 - 1907.6
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ (QPSK) Band V	826.4 - 846.4
	IEEE 802.11b/802.11g	2412 - 2462
	draft 802.11n 2.4GHz Standard-20MHz	2412 - 2462
	IEEE 802.11a	5180 - 5825
	draft 802.11n 5GHz Standard-20MHz	5180 - 5825
	Bluetooth 3.0 / Bluetooth 4.0	2402 - 2480

RF Conducted Power (Avg.)	Band	Power (W / dBm)
	GSM/GPRS/EGPRS/DTM 850	2.109 / 33.24
	GSM/GPRS/EGPRS/DTM 1900	1.079 / 30.33
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ (QPSK) Band II	0.213 / 23.29
	WCDMA(RMC 12.2K) / HSDPA / HSUPA / HSPA+ (QPSK) Band V	0.227 / 23.56
	IEEE 802.11b	0.066 / 18.22
	IEEE 802.11g	0.019 / 12.71
	draft 802.11n 2.4GHz Standard-20MHz	0.014 / 11.50
	IEEE 802.11a	0.018 / 12.64
	draft 802.11n 5GHz Standard-20MHz	0.014 / 11.51
	Bluetooth 3.0	0.00068 / -1.69
	Bluetooth 4.0	0.00059 / -2.49
Max. SAR Measurement	0.598 W/kg Head SAR 1.010 W/kg Body SAR	
Antenna Type	PIFA Type	
Device Category	Portable Device	
RF Exposure Environment	General Population / Uncontrolled	
Battery Option	Standard	
Application Type	Certification	

This wireless portable device has been shown to be capable of compliance for localized specific absorption rate (SAR) for uncontrolled environment / general population exposure limits specified in Standard C95.1-1999 and had been tested in accordance with the measurement procedures specified in IEEE Std. 1528-2003.

2. Introduction

The A Test Lab Techno Corp. has performed measurements of the maximum potential exposure to the user of **HTC Corporation Trade Name：HTC Model(s)：PJ46100.** The test procedures, as described in American National Standards, Institute C95.1-1999〔1〕, FCC/OET Bulletin 65 Supplement C [July 2001] were employed and they specify the maximum exposure limit of 1.6mW/g as averaged over any 1 gram of tissue for portable devices being used within 20cm between user and EUT in the uncontrolled environment. A description of the product and operating configuration, detailed summary of the test results, methodology and procedures used in the equipment used are included within this test report.

2.1 SAR Definition

Specific Absorption Rate (SAR) is defined as the time derivative (rate) of the incremental energy (dw) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dv) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Figure 2).

$$SAR = \frac{d}{dt}\left(\frac{dw}{dm}\right) = \frac{d}{dt}\left(\frac{dw}{\rho dv}\right)$$

Figure 2. SAR Mathematical Equation

SAR is expressed in units of Watts per kilogram (W/kg)

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

Where：

σ = conductivity of the tissue (S/m)

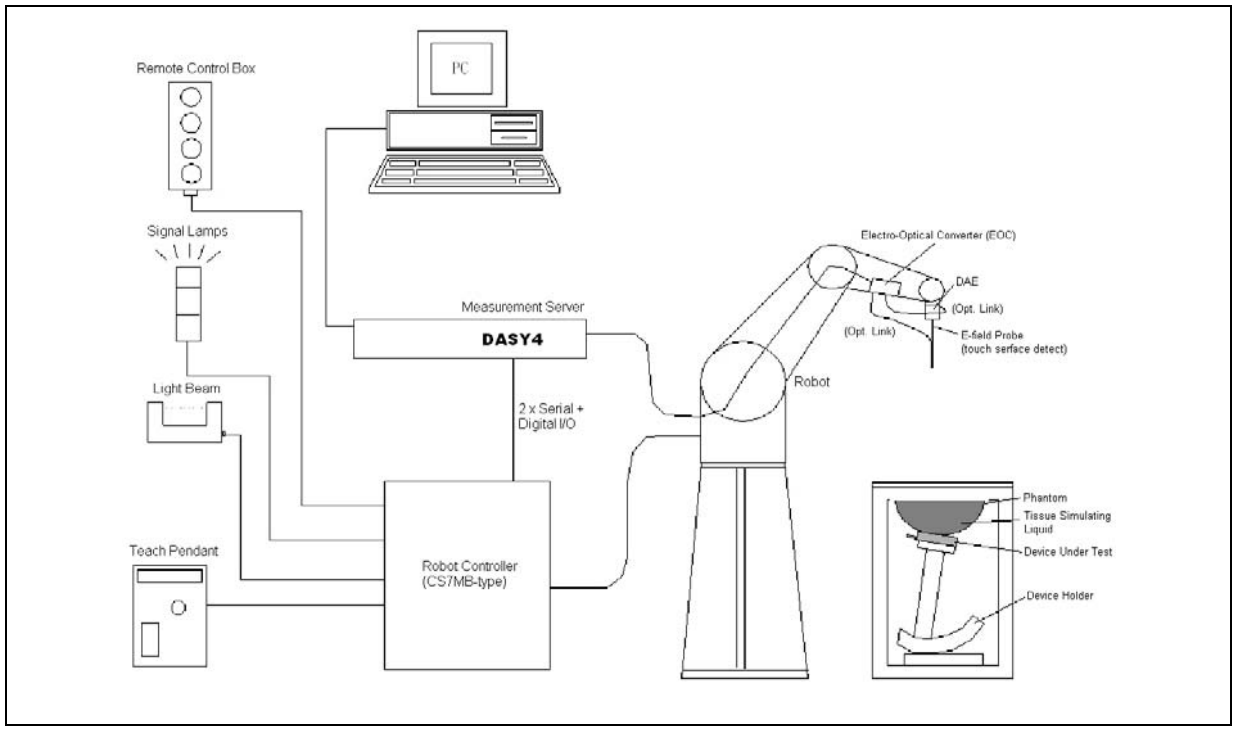
ρ = mass density of the tissue (kg/m^3)

E = RMS electric field strength (V/m)

＊Note：

The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relations to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane〔2〕

3. SAR Measurement Setup



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

1. A standard high precision 6-axis robot (Stäubli RX family) with controller, teach pendant and software. An arm extension for accommodating the data acquisition electronics (DAE).
2. A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
3. 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.
4. 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.
5. A probe alignment unit which improves the (absolute) accuracy of the probe positioning.
6. A computer operating Windows 2000 or Windows XP.
7. DASY4 software.
8. Remote controls with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
9. The SAM twin phantom enabling testing left-hand and right-hand usage.
10. The device holder for handheld mobile phones.
11. Tissue simulating liquid mixed according to the given recipes.
12. Validation dipole kits allowing validating the proper functioning of the system.

3.1 DASY4 E-Field Probe System

The SAR measurements were conducted with the dosimetric probe EX3DV4 or ES3DV3 (manufactured by SPEAG), designed in the classical triangular configuration〔3〕and optimized for dosimetric evaluation. The probes is constructed using the thick film technique; with printed resistive lines on ceramic substrates. The probe is equipped with an optical multi-fiber line ending at the front of the probe tip. It is connected to the EOC box on the robot arm and provides an automatic detection of the phantom surface. Half of the fibers are connected to a pulsed infrared transmitter, the other half to a synchronized receiver. As the probe approaches the surface, the reflection from the surface produces a coupling from the transmitting to the receiving fibers. This reflection increases first during the approach, reaches maximum and then decreases. If the probe is flatly touching the surface, the coupling is zero. The distance of the coupling maximum to the surface is independent of the surface reflectivity and largely independent of the surface to probe angle. The DASY4 software reads the reflection during a software approach and looks for the maximum using a 2nd order fitting. The approach is stopped when reaching the maximum.

3.1.1 E-Field Probe Specification

Construction	Symmetrical design with triangular core
	Built-in optical fiber for surface detection System
	Built-in shielding against static charges
	PEEK enclosure material (resistant to organic solvents, e.q., glycol)
Calibration	In air from 10 MHz to 6 GHz
	In brain and muscle simulating tissue at frequencies of 835, 1900, 2450, 5200, 5500, 5800MHz (accuracy ±8%)
	Calibration for other liquids and frequencies upon request
Frequency	±0.2 dB (30 MHz to 6 GHz) for EX3DV4
	±0.2 dB (30 MHz to 4 GHz) for ES3DV3
Directivity	±0.3 dB in brain tissue (rotation around probe axis)
	±0.5 dB in brain tissue (rotation normal probe axis)
Dynamic Range	10 μW/g to > 100mW/g; Linearity: ±0.2dB
Dimensions	Overall length: 337mm
	Tip length: 20mm
	Body diameter: 12mm
	Tip diameter: 2.5mm for EX3DV4, 3.9mm for ES3DV3
	Distance from probe tip to dipole centers: 1.0mm for EX3DV4, 2.0mm for ES3DV3
Application	General dosimetry up to 6GHz
	Compliance tests of mobile phones
	Fast automatic scanning in arbitrary phantoms

Figure 3. E-field Probe

Figure 4. Probe setup on robot

3.1.2 E-Field Probe Calibration process

Dosimetric Assessment Procedure

Each E-Probe/Probe Amplifier combination has unique calibration parameters. A TEM cell calibration procedure is conducted to determine the proper amplifier settings to enter in the probe parameters. The amplifier settings are determined for a given frequency by subjecting the probe to a known E-field density (1 mW/cm^2) using an RF Signal generator, TEM cell, and RF Power Meter.

Free Space Assessment

The free space E-field from amplified probe outputs is determined in a test chamber. This calibration can be performed in a TEM cell if the frequency is below 1 GHz and in a waveguide or other methodologies above 1 GHz for free space. For the free space calibration, the probe is placed in the volumetric center of the cavity and at the proper orientation with the field. The probe is rotated 360 degrees until the three channels show the maximum reading. The power density readings equates to 1 mW/cm^2.

Temperature Assessment

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

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

Where：

Δt = Exposure time (30 seconds),

C = Heat capacity of tissue (head or body),

ΔT = Temperature increase due to RF exposure.

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

Where：

σ = Simulated tissue conductivity,

ρ = Tissue density (kg/m^3).

3.2 Data Acquisition Electronic (DAE) System

Cell Controller

Processor：	Intel Pentium 4
Clock Speed：	2.4GHz
Operating System：	Windows XP Professional

Data Converter

Features：	Signal Amplifier, multiplexer, A/D converter, and control logic
Software：	DASY4 v4.7 (Build 80) & SEMCAD v1.8 (Build 186)
Connecting Lines：	Optical downlink for data and status info
	Optical uplink for commands and clock

3.3 Robot

Positioner：	Stäubli Unimation Corp. Robot Model: RX90L
Repeatability：	±0.025 mm
No. of Axis：	6

3.4 Measurement Server

Processor：	PC/104 with a 166MHz low-power Pentium
I/O-board：	Link to DAE4 (or DAE3)
	16-bit A/D converter for surface detection system
	Digital I/O interface
	Serial link to robot
	Direct emergency stop output for robot

3.5 Device Holder

The DASY device holder is constructed of low-loss POM material having the following dielectric parameters: relative permittivity ε=3 and loss tangent δ=0.02. The amount of dielectric material has been reduced in the closest vicinity of the device, since measurements have suggested that the influence of the clamp on the test results could thus be lowered.

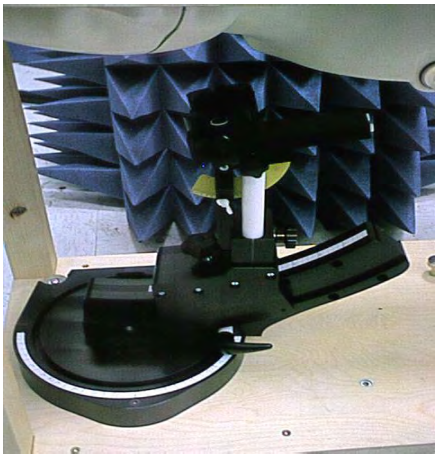


Figure 5. Device Holder

3.6 Phantom - SAM v4.0

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

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 25 liters
Dimensions	1000x500 mm (LxW)

Table 1. Specification of SAM v4.0

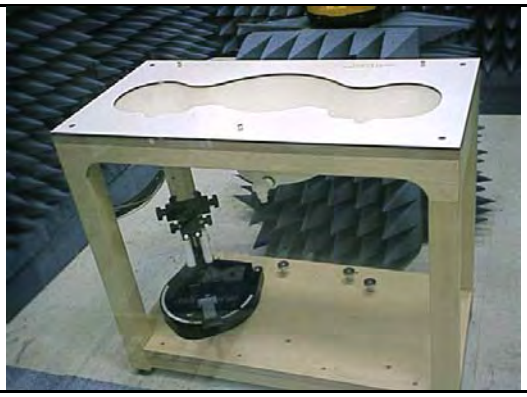


Figure 6. SAM Twin Phantom

3.7 Oval Flat Phantom - ELI 4.0

The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (Oval Flat) phantom defined in IEEE 1528-2003, CENELEC 50361 and IEC 62209. It enables the dosimetric evaluation of wireless portable device usage as well as body mounted usage at the flat phantom region. A cover prevents evaporation of the liquid. Reference markings on the phantom allow the complete setup of all predefined phantom positions and measurement grids by manually teaching three points with the robot.

Shell Thickness	2 ±0.2 mm
Filling Volume	Approx. 30 liters
Dimensions	190×600×400 mm (H×L×W)

Table 2. Specification of ELI 4.0

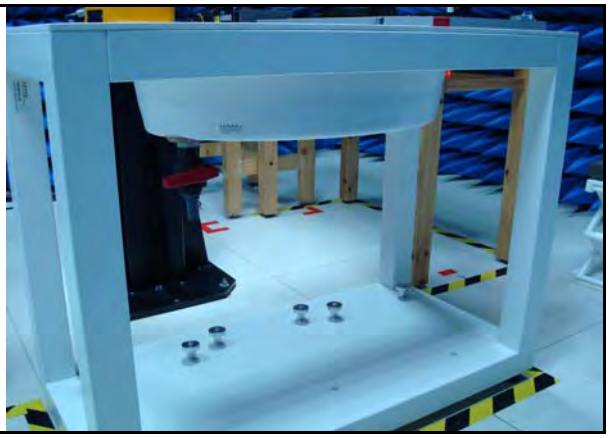


Figure 7. Oval Flat Phantom

3.8 Data Storage and Evaluation

3.8.1 Data Storage

The DASY4 software stores the assessed data from the data acquisition electronics as raw data (in microvolt readings from the probe sensors), together with all the necessary software parameters for the data evaluation (probe calibration data, liquid parameters and device frequency and modulation data) in measurement files with the extension DA4 The post processing software evaluates the desired unit and format for output each time the data is visualized or exported. This allows verification of the complete software setup even after the measurement and allows correction of erroneous parameter settings. For example, if a measurement has been performed with an incorrect crest factor parameter in the device setup, the parameter can be corrected afterwards and the data can be reevaluated.

3.8.2 Data Evaluation

The DASY4 post processing software (SEMCAD) automatically executes the following procedures to calculate the field units from the microvolt readings at the probe connector. The parameters used in the evaluation are stored in the configuration modules of the software：

Probe parameters：	- Sensitivity	Normi, ai0, ai1, ai2	
	- Conversion factor		ConvFi
	- Diode compression point		dcpi
Device parameters：	- Frequency	f	
	- Crest factor		cf
Media parameters：	- Conductivity	σ	
	- Density		ρ

These parameters must be set correctly in the software. They can be found in the component documents or they can be imported into the software from the configuration files issued for the DASY components. In the direct measuring mode of the multimeter option, the parameters of the actual system setup are used. In the scan visualization and export modes, the parameters stored in the corresponding document files are used.

The first step of the evaluation is a linearization of the filtered input signal to account for the compression characteristics of the detector diode. The compensation depends on the input signal, the diode type and the DC-transmission factor from the diode to the evaluation electronics. If the exciting field is pulsed, the crest factor of the signal must be known to correctly compensate for peak power. The formula for each channel can be given as：

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

with $\boldsymbol{V_i}$ = compensated signal of channel i (i = x, y, z)

$\boldsymbol{U_i}$ = input signal of channel i (i = x, y, z)

$\boldsymbol{cf}$ = crest factor of exciting field (DASY parameter)

$\boldsymbol{dcp_i}$ = diode compression point (DASY parameter)

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

E-field probes： $$E_i = \sqrt{\frac{V_i}{Norm_i \cdot ConvF}}$$

H-field probes：

$$H_i = \sqrt{V_i} \cdot \frac{a_{i0} + a_{i1} f + a_{i2} f^2}{f}$$

with V_i = compensated signal of channel i (i = x, y, z)

$Norm_i$ = sensor sensitivity of channel i (i = x, y, z)

μV/(V/m)^2 for E-field Probes

$ConvF$ = sensitivity enhancement in solution

a_{ij} = sensor sensitivity factors for H-field probes

f = carrier frequency [GHz]

E_i = electric field strength of channel i in V/m

Hi = magnetic field strength of channel i in A/m

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

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

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

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

with SAR = local specific absorption rate in mW/g

E_{tot} = total field strength in V/m

σ = conductivity in [mho/m] or [Siemens/m]

ρ = equivalent tissue density in g/cm^3

∗**Note**：That the density is set to 1, to account for actual head tissue density rather than the density of the tissue simulating liquid.

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

$$P_{pwe} = \frac{E_{tot}^2}{3770} \quad \text{or} \quad P_{pwe} = \frac{H_{tot}^2}{37.7}$$

with P_{pwe} = equivalent power density of a plane wave in mW/cm^2

E_{tot} = total electric field strength in V/m

H_{tot} = total magnetic field strength in A/m

4. Tissue Simulating Liquids

The mixture is calibrated to obtain proper dielectric constant (permittivity) and conductivity of the tissue. The dielectric parameters of the liquids were verified prior to the SAR evaluation using an 85070C Dielectric Probe Kit and an E5071B Network Analyzer.

IEEE SCC-34/SC-2 in 1528 recommended Tissue Dielectric Parameters

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in 1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in human head. Other head and body tissue parameters that have not been specified in 1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equation and extrapolated according to the head parameter specified in 1528.

Target Frequency	Head		Body	
(MHz)	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 - 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00
(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)				

Table 3. Tissue dielectric parameters for head and body phantoms

4.1 Ingredients

The following ingredients are used:

- Water: deionized water (pure H_20), resistivity ≥ 16 M Ω -as basis for the liquid
- Sugar: refied white sugar (typically 99.7 % sucrose, available as crystal sugar in food shops) -to reduce relative permittivity
- Salt: pure NaCl -to increase conductivity
- Cellulose: Hydroxyethyl-cellulose, medium viscosity (75-125 mPa.s, 2% in water, 20°C), CAS # 54290 -to increase viscosity and to keep sugar in solution.
- Preservative: Preventol D-7 Bayer AG, D-51368 Leverkusen, CAS # 55965-84-9 -to prevent the spread of bacteria and molds
- DGBE: Diethylenglycol-monobuthyl ether (DGBE), Fluka Chemie GmbH, CAS # 112-34-5 -to reduce relative permittivity

4.2 Recipes

The following tables give the recipes for tissue simulating liquids to be used in different frequency bands.

Note: The goal dielectric parameters (at 22 ℃) must be achieved within a tolerance of ±5% for εand ±5% for σ.

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

Simulating Liquids for 5 GHz, Manufactured by SPEAG

Ingredients	(% by weight)
Water	78
Mineral oil	11
Emulsifiers	9
Additives and Salt	2

4.3 Liquid Confirmation

4.3.1 Parameters

Liquid Verify								
Ambient Temperature： 22 ± 2 °C；Relative Humidity：40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
835MHz Head	820MHz	22.0	εr	41.50	41.41	-0.23%	± 5	02/11/2012
			σ	0.90	0.890	-1.13%	± 5	
	835MHz	22.0	εr	41.50	41.20	-0.72%	± 5	
			σ	0.90	0.904	0.50%	± 5	
	850MHz	22.0	εr	41.50	40.99	-1.22%	± 5	
			σ	0.90	0.919	2.09%	± 5	
1900MHz Head	1850MHz	22.0	εr	40.00	38.37	-4.06%	± 5	02/12/2012
			σ	1.40	1.346	-3.88%	± 5	
	1900MHz	22.0	εr	40.00	38.20	-4.50%	± 5	
			σ	1.40	1.370	-2.14%	± 5	
	1930MHz	22.0	εr	40.00	38.12	-4.70%	± 5	
			σ	1.40	1.398	-0.16%	± 5	
2450MHz Head	2400MHz	22.0	εr	39.20	39.73	1.36%	± 5	02/12/2012
			σ	1.80	1.743	-3.14%	± 5	
	2450MHz	22.0	εr	39.20	39.60	1.02%	± 5	
			σ	1.80	1.800	-0.02%	± 5	
	2500MHz	22.0	εr	39.20	39.45	0.63%	± 5	
			σ	1.80	1.868	3.77%	± 5	

Table 4. Measured Tissue dielectric parameters for head and body phantoms-1

Liquid Verify								
Ambient Temperature： 22 ± 2 °C；Relative Humidity：40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
5200MHz Head	5150MHz	22.0	εr	36.05	36.40	0.97%	± 5	02/13/2012
			σ	4.608	4.560	-1.03%	± 5	
	5200MHz	22.0	εr	36.00	36.30	0.83%	± 5	
			σ	4.660	4.610	-1.07%	± 5	
	5250MHz	22.0	εr	35.95	36.30	0.97%	± 5	
			σ	4.710	4.660	-1.06%	± 5	
5200MHz Head	5150MHz	22.0	εr	36.05	36.40	0.97%	± 5	02/14/2012
			σ	4.608	4.560	-1.03%	± 5	
	5200MHz	22.0	εr	36.00	36.30	0.83%	± 5	
			σ	4.660	4.610	-1.07%	± 5	
	5250MHz	22.0	εr	35.95	36.30	0.97%	± 5	
			σ	4.710	4.660	-1.06%	± 5	
5200MHz Head	5150MHz	22.0	εr	36.05	36.40	0.97%	± 5	02/15/2012
			σ	4.608	4.560	-1.03%	± 5	
	5200MHz	22.0	εr	36.00	36.30	0.83%	± 5	
			σ	4.660	4.610	-1.07%	± 5	
	5250MHz	22.0	εr	35.95	36.30	0.97%	± 5	
			σ	4.710	4.660	-1.06%	± 5	
5500MHz Head	5450MHz	22.0	εr	35.73	35.90	0.49%	± 5	02/13/2012
			σ	4.913	4.870	-0.87%	± 5	
	5500MHz	22.0	εr	35.65	35.90	0.70%	± 5	
			σ	4.965	4.910	-1.11%	± 5	
	5550MHz	22.0	εr	35.58	35.70	0.35%	± 5	
			σ	5.018	4.960	-1.15%	± 5	
5500MHz Head	5450MHz	22.0	εr	35.73	35.90	0.49%	± 5	02/14/2012
			σ	4.913	4.870	-0.87%	± 5	
	5500MHz	22.0	εr	35.65	35.90	0.70%	± 5	
			σ	4.965	4.910	-1.11%	± 5	
	5550MHz	22.0	εr	35.58	35.70	0.35%	± 5	
			σ	5.018	4.960	-1.15%	± 5	

Table 5. Measured Tissue dielectric parameters for head and body phantoms-2

Liquid Verify								
Ambient Temperature： 22 ± 2 °C；Relative Humidity：40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
5500MHz Head	5450MHz	22.0	εr	35.73	35.90	0.49%	± 5	02/15/2012
			σ	4.913	4.870	-0.87%	± 5	
	5500MHz	22.0	εr	35.65	35.90	0.70%	± 5	
			σ	4.965	4.910	-1.11%	± 5	
	5550MHz	22.0	εr	35.58	35.70	0.35%	± 5	
			σ	5.018	4.960	-1.15%	± 5	
5800MHz Head	5750MHz	22.0	εr	35.35	35.40	0.14%	± 5	02/13/2012
			σ	5.220	5.180	-0.77%	± 5	
	5800MHz	22.0	εr	35.30	35.30	0.00%	± 5	
			σ	5.270	5.240	-0.57%	± 5	
	5850MHz	22.0	εr	35.25	35.30	0.14%	± 5	
			σ	5.323	5.290	-0.61%	± 5	
5800MHz Head	5750MHz	22.0	εr	35.35	35.40	0.14%	± 5	02/14/2012
			σ	5.220	5.180	-0.77%	± 5	
	5800MHz	22.0	εr	35.30	35.30	0.00%	± 5	
			σ	5.270	5.240	-0.57%	± 5	
	5850MHz	22.0	εr	35.25	35.30	0.14%	± 5	
			σ	5.323	5.290	-0.61%	± 5	
5800MHz Head	5750MHz	22.0	εr	35.35	35.40	0.14%	± 5	02/15/2012
			σ	5.220	5.180	-0.77%	± 5	
	5800MHz	22.0	εr	35.30	35.30	0.00%	± 5	
			σ	5.270	5.240	-0.57%	± 5	
	5850MHz	22.0	εr	35.25	35.30	0.14%	± 5	
			σ	5.323	5.290	-0.61%	± 5	

Table 6. Measured Tissue dielectric parameters for head and body phantoms-3

Liquid Verify								
Ambient Temperature： 22 ± 2 °C；Relative Humidity：40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
835MHz Body	820MHz	22.0	εr	55.20	53.85	-2.45%	± 5	02/10/2012
			σ	0.97	0.969	-0.10%	± 5	
	835MHz	22.0	εr	55.20	53.70	-2.72%	± 5	
			σ	0.97	0.985	1.51%	± 5	
	850MHz	22.0	εr	55.20	53.58	-2.94%	± 5	
			σ	0.97	1.001	3.17%	± 5	
835MHz Body	820MHz	22.0	εr	55.20	53.85	-2.45%	± 5	02/29/2012
			σ	0.97	0.969	-0.10%	± 5	
	835MHz	22.0	εr	55.20	53.72	-2.68%	± 5	
			σ	0.97	0.985	1.55%	± 5	
	850MHz	22.0	εr	55.20	53.58	-2.93%	± 5	
			σ	0.97	1.001	3.20%	± 5	
1900MHz Body	1850MHz	22.0	εr	53.30	52.17	-2.13%	± 5	02/09/2012
			σ	1.52	1.454	-4.36%	± 5	
	1900MHz	22.0	εr	53.30	52.00	-2.44%	± 5	
			σ	1.52	1.500	-1.32%	± 5	
	1930MHz	22.0	εr	53.30	52.01	-2.43%	± 5	
			σ	1.52	1.531	0.70%	± 5	
1900MHz Body	1850MHz	22.0	εr	53.30	52.17	-2.13%	± 5	02/10/2012
			σ	1.52	1.454	-4.36%	± 5	
	1900MHz	22.0	εr	53.30	52.00	-2.44%	± 5	
			σ	1.52	1.500	-1.32%	± 5	
	1930MHz	22.0	εr	53.30	52.01	-2.43%	± 5	
			σ	1.52	1.531	0.70%	± 5	
1900MHz Body	1850MHz	22.0	εr	53.30	52.17	-2.12%	± 5	02/29/2012
			σ	1.52	1.454	-4.34%	± 5	
	1900MHz	22.0	εr	53.30	52.04	-2.36%	± 5	
			σ	1.52	1.503	-1.12%	± 5	
	1930MHz	22.0	εr	53.30	52.01	-2.42%	± 5	
			σ	1.52	1.531	0.72%	± 5	

Table 7. Measured Tissue dielectric parameters for head and body phantoms-4

Liquid Verify								
Ambient Temperature： 22 ± 2 °C；Relative Humidity：40 -70%								
Liquid Type	Frequency	Temp (°C)	Parameters	Target Value	Measured Value	Deviation (%)	Limit (%)	Measured Date
2450MHz Body	2400MHz	22.0	εr	52.70	51.81	-1.68%	± 5	02/13/2012
			σ	1.95	1.880	-3.60%	± 5	
	2450MHz	22.0	εr	52.70	51.70	-1.90%	± 5	
			σ	1.95	1.940	-0.51%	± 5	
	2500MHz	22.0	εr	52.70	51.50	-2.27%	± 5	
			σ	1.95	2.001	2.63%	± 5	
2450MHz Body	2400MHz	22.0	εr	52.70	51.81	-1.68%	± 5	02/19/2012
			σ	1.95	1.880	-3.60%	± 5	
	2450MHz	22.0	εr	52.70	51.70	-1.90%	± 5	
			σ	1.95	1.940	-0.51%	± 5	
	2500MHz	22.0	εr	52.70	51.50	-2.27%	± 5	
			σ	1.95	2.001	2.63%	± 5	
5200MHz Body	5150MHz	22.0	εr	49.01	47.89	-2.29%	± 5	03/01/2012
			σ	5.30	5.460	3.02%	± 5	
	5200MHz	22.0	εr	49.01	47.76	-2.55%	± 5	
			σ	5.30	5.520	4.15%	± 5	
	5250MHz	22.0	εr	49.01	47.63	-2.82%	± 5	
			σ	5.30	5.550	4.72%	± 5	
5500MHz Body	5450MHz	22.0	εr	48.61	47.16	-2.98%	± 5	03/01/2012
			σ	5.65	5.840	3.36%	± 5	
	5500MHz	22.0	εr	48.61	47.09	-3.13%	± 5	
			σ	5.65	5.900	4.42%	± 5	
	5550MHz	22.0	εr	48.61	46.93	-3.46%	± 5	
			σ	5.65	5.930	4.96%	± 5	
5800MHz Body	5750MHz	22.0	εr	48.20	46.54	-3.44%	± 5	03/01/2012
			σ	6.00	6.210	3.50%	± 5	
	5800MHz	22.0	εr	48.20	46.40	-3.73%	± 5	
			σ	6.00	6.270	4.50%	± 5	
	5850MHz	22.0	εr	48.20	46.35	-3.84%	± 5	
			σ	6.00	6.290	4.83%	± 5	

Table 8. Measured Tissue dielectric parameters for head and body phantoms-4

4.3.2 Liquid Depth

The liquid level was during measurement 15cm ±0.5cm.

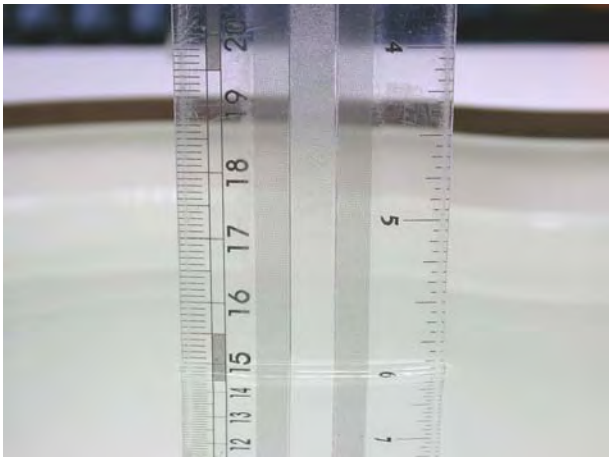


Figure 8. Head-Tissue-Simulating-Liquid

Figure 9. Body-Tissue-Simulating-Liquid

5. SAR Testing with RF Transmitters

5.1 SAR Testing with DTM Mode

DTM Mode setup for SAR Measurement.

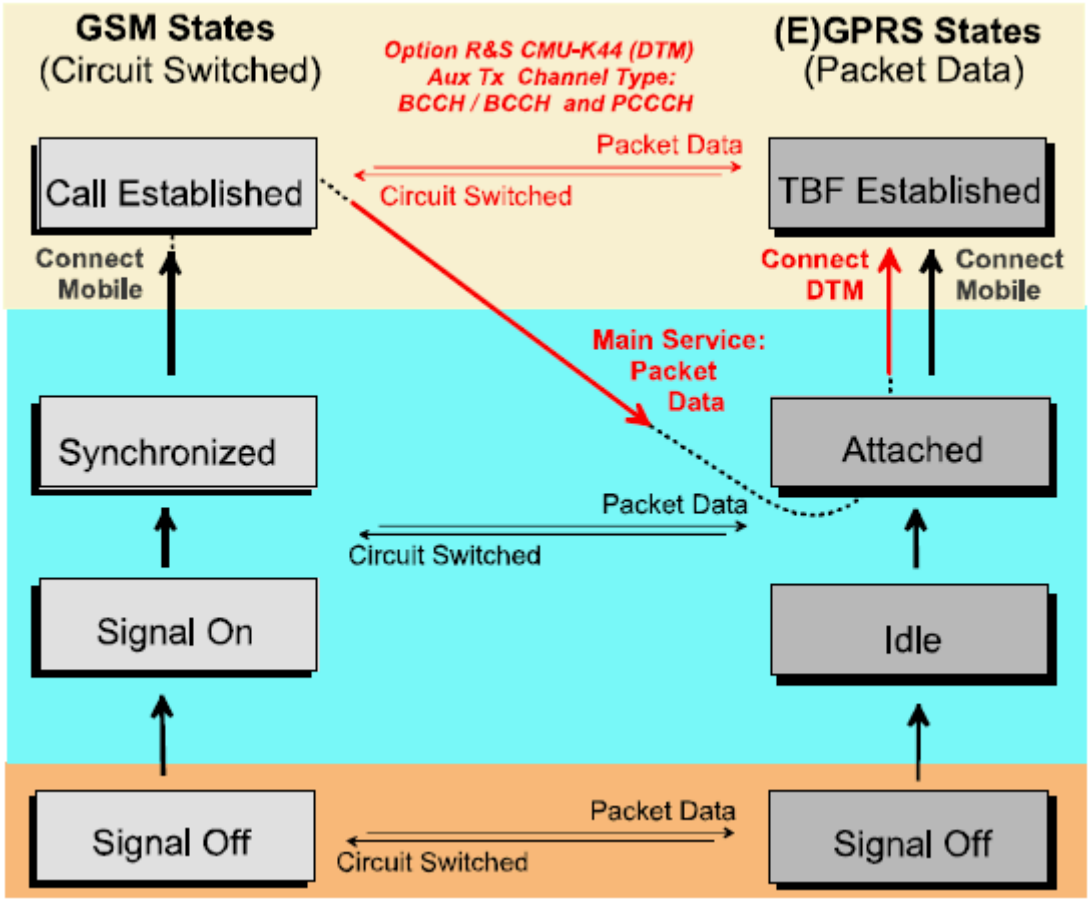
When devices have DTM function, the number of uplink, the numbers of downlink are defined by DTM class. Table as below:

Table 9-1 DTM multislot classes

Multislot class	Maximum number of slots		
	Downlink (MS RX)	Uplink (MS TX)	Sum
5	2	2	4
6	3	2	4
9	3	2	5
10	4	2	5
11	4	3	5

The DTM mode is GSM & GPRS used at the same time, therefore GSM has 1Tx 1Rx, The Sum deduct 1Tx 1Rx, others are GPRS configuration, EX: DTM Class 11

The Sum is 5, maximum Tx is 3, therefore 2 Downlink 3 Uplink is max transmission. Before link DTM, make sure GSM & GPRS setting, like DTM Class 11, for GSM use 1Down1Up for GPRS use 1Down2Up, and follow chart as below, first link GSM next link GPRS:



5.2 SAR Testing with HSDPA Transmitters

HSDPA Date Devices setup for SAR Measurement.

HSDPA should be configured according to the UE category of a test device. The number of HS-DSCH/HS-PDSCHs, HARQ processes, minimum inter-TTI interval, transport block sizes and RV coding sequence are defined by the H-set. To maintain a consistent test configuration and stable transmission conditions, QPSK is used in the H-set for SAR testing. HS-DPCCH should be configured with a CQI feedback cycle of 4 ms with a CQI repetition factor of 2 to maintain a constant rate of active CQI slots. DPCCH and DPDCH gain factors(βc, βd), and HS-DPCCH power offset parameters (ΔACK, ΔNACK, ΔCQI) should be set according to values indicated in the Table below.[32] The CQI value is determined by the UE category, transport block size, number of HS-PDSCHs and modulation used in the H-set.[33]

Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1,2)	CM (dB)(3)	MRP (dB)(3)
1	2/15	15/15	64	2/15	4/15	0.0	0.0
2	12/15(4)	15/15(4)	64	12/15(4)	24/15	1.0	0.0
3	15/15	8/15	64	15/8	30/15	1.5	0.5
4	15/15	4/15	64	15/4	30/15	1.5	0.5

Note

1. Δ_{ACK}, Δ_{NACK} and Δ_{CQI} = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc
2. For theHS-DPCCH power mask requirement test in clause 5.2C, 5.7A, and the Error Vector Magnitude(EVM) with HS-DPCCH test in clause 5.13.1A and HSDPA EVM with phase discontinuity in clause 5.13.1AA, Δ_{ACK} and Δ_{NACK} = 30/15 with βhs = 30/15 *βc and Δ_{CQI} = 24/15 with βhs = 24/15*βc
3. CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH and HS-DPCCH the MPR is based on the relative CM difference. This is applicable for only UEs that support HSDPA in release 6 and later releases.
4. For subtest 2 the βc/βd ratio of 12/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 11/15 and βd = 15/15.

Table 9. Setup for Release 5 HSDPA

HSPA Date Devices setup for SAR Measurement.

The following procedures are applicable to HSPA (HSUPA/HSDPA) data devices operating under 3GPP Release 6. Body exposure conditions generally apply to these devices, including handsets and data modems operating in various electronic devices. HSUPA operates in conjunction with WCDMA and HSDPA. SAR is initially measured in WCDMA test configurations without HSPA. The default test configuration is to establish a radio link between the DUT and a communication test set to configure a 12.2 kbps RMC (reference measurement channel) in Test Loop Mode 1. SAR for HSPA is selectively measured with HS-DPCCH, EDPCCH and E-DPDCH, all enabled, along with a 12.2 kbps RMC using the highest SAR configuration in WCDMA with 12.2 kbps RMC only. An FRC is configured according to HSDPCCH Sub-test 1 using H-set 1 and QPSK. HSPA is configured according to E-DCH Subtest 5 requirements. SAR for other HSPA sub-test configurations is also confirmed selectively according to output power, exposure conditions and E-DCH UE Category. Maximum output power is verified according to procedures in applicable versions of 3GPP TS 34.121 and SAR must be measured according to these maximum output conditions. The UE Categories for HSDPCCH and HSPA should be clearly identified in the SAR report. The following procedures are applicable only if Maximum Power Reduction (MPR) is implemented according to Cubic Metric (CM) requirements.

When voice transmission and head exposure conditions are applicable to a WCDMA/HSPA data device, head exposure is measured according to the 'Head SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. SAR for body exposure configurations are measured according to the 'Body SAR Measurements' procedures in the 'WCDMA Handsets' section of this document. In addition, body SAR is also measured for HSPA when the maximum average output of each RF channel with HSPA active is at least ¼ dB higher than that measured without HSPA using 12.2 kbps RMC or the maximum SAR for 12.2 kbps RMC is above 75% of the SAR limit. Body SAR for HSPA is measured with E-DCH Sub-test 5, using H-Set 1 and QPSK for FRC and a 12.2 kbps RMC configured in Test Loop Mode 1 with power control algorithm 2, according to the highest body SAR configuration in 12.2 kbps RMC without HSPA. When VOIP is applicable for head exposure, SAR is not required when the maximum output of each RF channel with HSPA is less than ¼ dB higher than that measured using 12.2 kbps RMC; otherwise, the same HSPA configuration used for body measurements should be used to test for head exposure.

Due to inner loop power control requirements in HSPA, a commercial communication test set should be used for the output power and SAR tests. The 12.2 kbps RMC, FRC H-set 1 and E-DCH configurations for HSPA should be configured according to the β values indicated below as well as other applicable procedures described in the 'WCDMA Handset' and 'Release 5 HSDPA Data Devices' sections of this document.

The highest body SAR measured in Antenna Extended & Retracted configurations on a channel in 12.2 kbps RMC. The possible channels are the High, Middle & Low channel. Contact the FCC Laboratory for test and approval requirements if the maximum output power measured in E-DCH Sub-test 2 - 4 is higher than Sub-test 5.

Sub-test	βc	βd	βd (SF)	βc/βd	βhs(1)	βec	βed	Bed (SF)	Bed (codes)	CM(2) (dB)	MPR (dB)	AG(4) Index	E-TFCI
1	11/15(3)	15/15(3)	64	11/15(3)	22/15	209/225	1039/225	4	1	1.0	0.0	20	75
2	6/15	15/15	64	6/15	12/15	12/15	94/75	4	1	3.0	2.0	12	67
3	15/15	9/15	64	15/9	30/15	30/15	βed1: 47/15 βed2: 47/15	4	2	2.0	1.0	15	92
4	2/15	15/15	64	2/15	4/15	2/15	56/75	4	1	3.0	2.0	17	71
5	15/15(4)	15/15(4)	64	15/15(4)	30/15	24/15	134/15	4	1	1.0	0.0	21	81

Note 1: ΔACK, ΔNACK and ΔCQI = 8 ⇔ Ahs = βhs/βc = 30/15 ⇔ βhs= 30/15 *βc.
Note 2: CM = 1 for βc/βd =12/15, βhs/βc=24/15. For all other combinations of DPDCH, DPCCH, HS- DPCCH, E-DPDCH and E-DPCCH the MPR is based on the relative CM difference.
Note 3: For subtest 1 the βc/βd ratio of 11/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 10/15 and βd = 15/15.
Note 4: For subtest 5 the βc/βd ratio of 15/15 for the TFC during the measurement period (TF1, TF0) is achieved by setting the signaled gain factors for the reference TFC (TF1, TF1) to βc = 14/15 and βd = 15/15.
Note 5: Testing UE using E-DPDCH Physical Layer category 1 Sub-test 3 is not required according to TS 25.306 Table 5.1g.
Note 6: βed can not be set directly; it is set by Absolute Grant Value.

Table 10. Setup for Release 6 HSPA / Release 7 HSPA+

5.3 SAR Testing with 802.11 Transmitters

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

5.3.1 General Device Setup

Chipset based test mode software is hardware dependent and generally varies among manufacturers. The device operating parameters established in test mode for SAR measurements must be identical to those programmed in production units, including output power levels, amplifier gain settings and other RF performance tuning parameters. The test frequencies should correspond to actual channel frequencies defined

for domestic use. SAR for devices with switched diversity should be measured with only one antenna transmitting at a time during each SAR measurement, according to a fixed modulation and data rate.

The same data pattern should be used for all measurements.

5.3.2 Frequency Channel Configurations

802.11 a/b/g and 4.9 GHz operating modes are tested independently according to the service requirements in each frequency band. 802.11 b/g modes are tested on channels 1, 6 and 11. 802.11a is tested for UNII operations on channels 36 and 48 in the 5.15-5.25 GHz band; channels 52 and 64 in the 5.25-5.35 GHz band; channels 104, 116, 124 and 136 in the 5.470-5.725 GHz band; and channels 149 and 161 in the 5.8 GHz band. When 5.8 GHz §15.247 is also available, channels 149, 157 and 165 should be tested instead of the UNII channels. 4.9 GHz is tested on channels 1, 10 and 5 or 6, whichever has the higher output power, for 5 MHz channels; channels 11, 15 and 19 for 10 MHz channels; and channels 21 and 25 for 20 MHz channels. These are referred to as the “default test channels”. 802.11g mode was evaluated only if the output power was 0.25 dB higher than the 802.11b mode.

802.11 Test Channels per FCC Requirement

Mode		GHz	Channel	Turbo Channel	Default Test "Channels"			
					§15.247		UNII	
					802.11b	802.11g		
802.11 b/g		2412	1		✓	▽		
		2437	6	6	✓	▽		
		2462	11		✓	▽		
802.11a	UNII	5.18	36				✓	
		5.20	40	42 (5.21 GHz)				*
		5.22	44					*
		5.24	48	50 (5.25 GHz)				
		5.26	52				✓	
		5.28	56	58 (5.29 GHz)				*
		5.30	60					*
		5.32	64				✓	
		5.500	100	Unknown				*
		5.520	104				✓	
		5.540	108					*
		5.560	112					*
		5.580	116				✓	
		5.600	120					*
		5.620	124				✓	
		5.640	128					*
		5.660	132					*
		5.680	136				✓	
		5.700	140					*
	UNII or §15.247	5.745	149		✓		✓	
		5.765	153	152 (5.76 GHz)		*		*
		5.785	157		✓			*
		5.805	161	160 (5.80 GHz)		*	✓	
	§15.247	5.825	165		✓			

5.4 Conducted Power

Band	Modulation	Mode	CH	Frequency (MHz)	RF Conducted Output Power (dBm)	
					Time Average	Average burst
GSM 850	GMSK	1Down1Up Duty factor 1/8	Lowest	824.2	23.96	33.15
			Middle	836.6	24.01	33.20
			Highest	848.8	24.05	**33.24**
GPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5		4Down1Up Duty factor 1/8	Lowest	824.2	23.99	33.18
			Middle	836.6	24.02	33.21
			Highest	848.8	24.04	33.23
		3Down2Up Duty factor 2/8	Lowest	824.2	26.88	33.11
			Middle	836.6	26.92	33.15
			Highest	848.8	26.98	33.21
		2Down3Up Duty factor 3/8	Lowest	824.2	28.01	32.48
			Middle	836.6	28.01	32.48
			Highest	848.8	28.00	32.47
		1Down4Up Duty factor 4/8	Lowest	824.2	28.10	31.32
			Middle	836.6	28.08	31.30
			Highest	848.8	28.09	31.31
EGPRS 850 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	824.2	17.81	27.00
			Middle	836.6	17.81	27.00
			Highest	848.8	17.82	27.01
		3Down2Up Duty factor 2/8	Lowest	824.2	20.77	27.00
			Middle	836.6	20.77	27.00
			Highest	848.8	20.74	26.97
		2Down3Up Duty factor 3/8	Lowest	824.2	21.76	26.23
			Middle	836.6	21.75	26.22
			Highest	848.8	21.72	26.19
		1Down4Up Duty factor 4/8	Lowest	824.2	21.81	25.03
			Middle	836.6	21.79	25.01
			Highest	848.8	21.80	25.02
DTM 850 Multi Class :11 Max Up:3 Down:4 Sum:5	GMSK	GSM + GPRS 2Down3Up Duty factor 3/8	Lowest	824.2	27.98	32.45
			Middle	836.6	27.88	32.35
			Highest	848.8	27.78	32.25
	GMSK/8PSK	GSM + EGPRS 2Down3Up Duty factor 3/8	Lowest	824.2	21.73	26.20
			Middle	836.6	21.71	26.18
			Highest	848.8	21.69	26.16

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10*LOG(1/8)

2up: Average burst power+10*LOG(2/8)

3up: Average burst power+10*LOG(3/8)

4up: Average burst power+10*LOG(4/8)

2. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Modulation	Mode	CH	Frequency (MHz)	RF Conducted Output Power (dBm)	
					Time Average	Average burst
GSM 1900	GMSK	1Down1Up Duty factor 1/8	Lowest	1850.2	21.07	30.26
			Middle	1880.0	21.10	30.29
			Highest	1909.8	21.14	**30.33**
GPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5		4Down1Up Duty factor 1/8	Lowest	1850.2	20.99	30.18
			Middle	1880.0	21.03	30.22
			Highest	1909.8	21.09	30.28
		3Down2Up Duty factor 2/8	Lowest	1850.2	23.97	30.20
			Middle	1880.0	24.00	30.23
			Highest	1909.8	24.05	30.28
		2Down3Up Duty factor 3/8	Lowest	1850.2	24.99	29.46
			Middle	1880.0	24.99	29.46
			Highest	1909.8	25.03	29.50
		1Down4Up Duty factor 4/8	Lowest	1850.2	25.11	28.33
			Middle	1880.0	25.08	28.30
			Highest	1909.8	25.13	28.35
EGPRS 1900 Multi Class :12 Max Up:4 Max Down:4 Sum:5	8PSK	4Down1Up Duty factor 1/8	Lowest	1850.2	16.49	25.68
			Middle	1880.0	16.61	25.80
			Highest	1909.8	16.52	25.71
		3Down2Up Duty factor 2/8	Lowest	1850.2	19.46	25.69
			Middle	1880.0	19.46	25.69
			Highest	1909.8	19.48	25.71
		2Down3Up Duty factor 3/8	Lowest	1850.2	20.46	24.93
			Middle	1880.0	20.42	24.89
			Highest	1909.8	20.46	24.93
		1Down4Up Duty factor 4/8	Lowest	1850.2	20.50	23.72
			Middle	1880.0	20.49	23.71
			Highest	1909.8	20.53	23.75
DTM 1900	GMSK	GSM + GPRS 2Down3Up Duty factor 3/8	Lowest	1850.2	24.93	29.40
			Middle	1880.0	24.83	29.30
			Highest	1909.8	24.83	29.30
	GMSK/8PSK	GSM + EGPRS 2Down3Up Duty factor 3/8	Lowest	1850.2	20.30	24.77
			Middle	1880.0	20.20	24.67
			Highest	1909.8	20.00	24.47

Note: 1. Time Average power slot duty cycle factor calculate:

1up: Average burst power+10*LOG(1/8)

2up: Average burst power+10*LOG(2/8)

3up: Average burst power+10*LOG(3/8)

4up: Average burst power+10*LOG(4/8)

2. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Modulation	Sub-test	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
					Average
WCDMA Band II	RMC12.2K	---	Lowest	1852.4	22.94
			Middle	1880.0	22.93
			Highest	1907.6	**23.29**
HSDPA Band II	QPSK	1	Lowest	1852.4	21.93
			Middle	1880.0	21.91
			Highest	1907.6	22.26
		2	Lowest	1852.4	21.90
			Middle	1880.0	21.88
			Highest	1907.6	22.25
		3	Lowest	1852.4	21.49
			Middle	1880.0	21.46
			Highest	1907.6	21.78
		4	Lowest	1852.4	21.41
			Middle	1880.0	21.39
			Highest	1907.6	21.75
HSUPA Band II		1	Lowest	1852.4	21.03
			Middle	1880.0	21.30
			Highest	1907.6	21.66
		2	Lowest	1852.4	19.00
			Middle	1880.0	19.21
			Highest	1907.6	19.72
		3	Lowest	1852.4	20.12
			Middle	1880.0	20.40
			Highest	1907.6	20.71
		4	Lowest	1852.4	19.07
			Middle	1880.0	19.39
			Highest	1907.6	19.76
		5	Lowest	1852.4	20.94
			Middle	1880.0	21.29
			Highest	1907.6	21.57
HSPA+ (QPSK) Band II		1	Lowest	1852.4	21.01
			Middle	1880.0	21.28
			Highest	1907.6	21.64
		2	Lowest	1852.4	18.99
			Middle	1880.0	19.19
			Highest	1907.6	19.70
		3	Lowest	1852.4	20.11
			Middle	1880.0	20.39
			Highest	1907.6	20.69
		4	Lowest	1852.4	19.06
			Middle	1880.0	19.38
			Highest	1907.6	19.74
		5	Lowest	1852.4	20.92
			Middle	1880.0	21.27
			Highest	1907.6	21.55

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Modulation	Sub-test	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
					Average
WCDMA Band V	RMC12.2K	---	Lowest	826.4	23.40
			Middle	836.6	**23.56**
			Highest	846.4	23.29
HSDPA Band V	QPSK	1	Lowest	826.4	23.09
			Middle	836.6	23.28
			Highest	846.4	22.98
		2	Lowest	826.4	23.08
			Middle	836.6	23.28
			Highest	846.4	22.98
		3	Lowest	826.4	22.60
			Middle	836.6	22.80
			Highest	846.4	22.50
		4	Lowest	826.4	22.55
			Middle	836.6	22.76
			Highest	846.4	22.43
HSUPA Band V		1	Lowest	826.4	22.34
			Middle	836.6	22.53
			Highest	846.4	22.37
		2	Lowest	826.4	20.31
			Middle	836.6	20.59
			Highest	846.4	20.29
		3	Lowest	826.4	21.40
			Middle	836.6	21.56
			Highest	846.4	21.28
		4	Lowest	826.4	20.44
			Middle	836.6	20.53
			Highest	846.4	20.29
		5	Lowest	826.4	22.28
			Middle	836.6	22.46
			Highest	846.4	22.46
HSPA+ (QPSK) Band V		1	Lowest	826.4	22.33
			Middle	836.6	22.52
			Highest	846.4	22.35
		2	Lowest	826.4	20.30
			Middle	836.6	20.57
			Highest	846.4	20.26
		3	Lowest	826.4	21.38
			Middle	836.6	21.53
			Highest	846.4	21.27
		4	Lowest	826.4	20.43
			Middle	836.6	20.52
			Highest	846.4	20.27
		5	Lowest	826.4	22.26
			Middle	836.6	22.45
			Highest	846.4	22.43

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Data Rate	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
IEEE 802.11b	1 M	1	2412.0	17.85
		6	2437.0	17.95
		11	2462.0	**18.22**
	2 M	1	2412.0	17.85
		6	2437.0	17.98
		11	2462.0	18.16
	5.5 M	1	2412.0	17.71
		6	2437.0	17.87
		11	2462.0	18.01
	11 M	1	2412.0	17.71
		6	2437.0	17.82
		11	2462.0	18.06
IEEE 802.11g	6 M	1	2412.0	12.31
		6	2437.0	12.50
		11	2462.0	**12.71**
	9 M	1	2412.0	12.32
		6	2437.0	12.51
		11	2462.0	12.57
	12 M	1	2412.0	12.21
		6	2437.0	12.43
		11	2462.0	12.51
	18 M	1	2412.0	12.15
		6	2437.0	12.32
		11	2462.0	12.50
	24 M	1	2412.0	11.97
		6	2437.0	12.22
		11	2462.0	12.29
	36 M	1	2412.0	11.90
		6	2437.0	12.11
		11	2462.0	12.10
	48 M	1	2412.0	11.75
		6	2437.0	12.04
		11	2462.0	12.01
	54 M	1	2412.0	11.70
		6	2437.0	12.02
		11	2462.0	12.07

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Data Rate	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
Draft 802.11n_HT20 (2.4 GHz)	6.5 M	1	2412.0	11.08
		6	2437.0	**11.50**
		11	2462.0	11.37
	13.0 M	1	2412.0	10.97
		6	2437.0	11.31
		11	2462.0	11.45
	19.5 M	1	2412.0	10.91
		6	2437.0	11.42
		11	2462.0	11.32
	26.0 M	1	2412.0	10.95
		6	2437.0	11.43
		11	2462.0	11.38
	39.0 M	1	2412.0	10.79
		6	2437.0	11.27
		11	2462.0	11.13
	52.0 M	1	2412.0	10.78
		6	2437.0	11.08
		11	2462.0	11.07
	58.5 M	1	2412.0	10.57
		6	2437.0	11.02
		11	2462.0	10.93
	65.0 M	1	2412.0	10.64
		6	2437.0	11.09
		11	2462.0	11.07

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Data Rate	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
IEEE 802.11a	6.0 M	36	5180.0	**12.64**
		40	5200.0	12.62
		44	5220.0	12.61
		48	5240.0	12.33
		52	5260.0	12.52
		56	5280.0	12.46
		60	5300.0	12.49
		64	5320.0	12.54
		100	5500.0	12.12
		104	5520.0	12.12
		108	5540.0	12.08
		112	5560.0	12.02
		116	5580.0	12.00
		120	5600.0	11.89
		124	5620.0	11.93
		128	5640.0	11.86
		132	5660.0	11.81
		136	5680.0	11.73
		140	5700.0	11.62
		149	5745.0	11.44
		153	5765.0	11.43
		157	5785.0	11.46
		161	5805.0	11.37
		165	5825.0	11.36

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Data Rate	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
IEEE 802.11a	54.0 M	36	5180.0	11.99
		40	5200.0	11.88
		44	5220.0	11.83
		48	5240.0	11.79
		52	5260.0	11.90
		56	5280.0	11.93
		60	5300.0	11.95
		64	5320.0	11.81
		100	5500.0	11.43
		104	5520.0	11.36
		108	5540.0	11.40
		112	5560.0	11.37
		116	5580.0	11.23
		120	5600.0	11.17
		124	5620.0	11.17
		128	5640.0	11.03
		132	5660.0	10.92
		136	5680.0	10.93
		140	5700.0	10.82
		149	5745.0	10.68
		153	5765.0	10.72
		157	5785.0	10.78
		161	5805.0	10.74
		165	5825.0	10.76

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Data Rate	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
Draft 802.11n_HT20 (5 GHz)	6.5 M	36	5180.0	11.40
		40	5200.0	11.34
		44	5220.0	11.31
		48	5240.0	11.26
		52	5260.0	11.40
		56	5280.0	11.48
		60	5300.0	**11.51**
		64	5320.0	11.37
		100	5500.0	10.99
		104	5520.0	10.90
		108	5540.0	10.80
		112	5560.0	10.78
		116	5580.0	10.78
		120	5600.0	10.60
		124	5620.0	10.65
		128	5640.0	10.56
		132	5660.0	10.54
		136	5680.0	10.50
		140	5700.0	10.49
		149	5745.0	10.27
		153	5765.0	10.30
		157	5785.0	10.36
		161	5805.0	10.40
		165	5825.0	10.49

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Data Rate	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
Draft 802.11n_HT20 (5 GHz)	65 M	36	5180.0	10.82
		40	5200.0	10.74
		44	5220.0	10.80
		48	5240.0	10.75
		52	5260.0	11.00
		56	5280.0	10.95
		60	5300.0	10.93
		64	5320.0	10.90
		100	5500.0	10.44
		104	5520.0	10.34
		108	5540.0	10.35
		112	5560.0	10.29
		116	5580.0	10.28
		120	5600.0	10.19
		124	5620.0	10.07
		128	5640.0	10.07
		132	5660.0	9.95
		136	5680.0	9.90
		140	5700.0	9.85
		149	5745.0	9.73
		153	5765.0	9.76
		157	5785.0	9.85
		161	5805.0	9.85
		165	5825.0	9.95

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

Band	Packet Type	CH	Frequency (MHz)	RF Conducted Output Power (dBm)
				Average
Bluetooth 3.0	DH1	00	2402	-5.95
		39	2441	-5.69
		78	2480	-5.65
	DH3	00	2402	-2.69
		39	2441	-2.35
		78	2480	-2.38
	DH5	00	2402	-2.00
		39	2441	-1.83
		78	2480	**-1.69**
Bluetooth 4.0	---	00	2402	-2.86
		19	2440	-2.58
		39	2480	**-2.49**

Note: 1. Selected Mode for SAR testing:

a. Head – GSM(Voice mode)/GPRS(1Down4Up)/DTM(2Down3Up)/WCDMA(RMC 12.2K mode)/802.11a/802.11b

b. Body worn accessory 10mm – GSM(Voice mode)/DTM(2Down3Up)

c. Body 10mm - BT 3.0/4.0

d. Body Hot-Spot mode 10mm – GPRS(1Down4Up)/802.11a/802.11b/WCDMA(RMC 12.2K mode)

5.5 Simultaneous Transmitting Evaluate

RF Conducted Power		
Band	dBm	W
GSM/GPRS/EGPRS 850	28.10	0.65
GSM/GPRS/EGPRS 1900	25.13	0.33
WCDMA/HSDPA/HSUPA/HSPA+ (QPSK) Band II	23.56	0.23
WCDMA/HSDPA/HSUPA/HSPA+ (QPSK) Band V	23.29	0.21
Wi-Fi 802.11a	12.64	0.02
Wi-Fi 802.11b	18.22	0.07
Wi-Fi 802.11g	12.71	0.02
Wi-Fi 802.11n_2.4GHz	11.50	0.01
Wi-Fi 802.11n_5GHz	11.51	0.01
BT 3.0 / BT 4.0	-1.69	0.001

Antenna Distance	
Antenna Account	Distance (cm)
BT to WLAN	0
BT to WWAN (License)	8
WLAN to WWAN (License)	8

BT and WWAN and WLAN simultaneously SAR Description

(1) Antenna Distance

1a.BT & WWAN 8 cm

1b.BT & WLAN 0 cm

(2) WWAN/BT – with antenna separation distance greater than 5cm – BT power is less than 2Pref, than both stand alone for BT and simultaneous SAR of WWAN /BT is not required.

(3) WLAN/BT – Use the same antenna, then antenna separation distance greater than <2.5cm

Max sum of BT and WLAN (2.4GHz) is 0.118+0.028 =0.146 <1.6mW/g, therefore Simultaneous SAR is not required.

Max sum of BT and WLAN (5GHz) is 0.213+0.028 =0.241 <1.6 mW/g, therefore Simultaneous SAR is not required.

(4) WLAN/WWAN – with antenna separation distance greater than > 5cm

Max sum of WWAN and WLAN is 1.01+0.118 =1.128 <1.6 mW/g, therefore Simultaneous SAR is not required.

(5) GSM850/PCS/WCDMA BV/WCDMA BII/802.11a/b/g/n/BT

Stand-alone SAR is required due to routine evaluation requirements.

(6) Highest Simultaneous SAR Evaluation:

Body SAR：∑SAR=GPRS PCS+Wifi 802.11b=1.128 mW/g < SAR limit: 1.6mW/g

Head SAR：∑SAR=DTM PCS+Wifi 802.11b=0.853mW/g < SAR limit: 1.6mW/g

Therefore, the Simultaneous SAR is not required.

(7) For Wi-Fi hot spot mode, since the GSM network will support the DTM mode, therefore the GPRS/EGPRS SAR of head is required.

Note:

1. Simultaneous Transmitting Summary, please find the table 12 as below.
2. Simultaneous Transmission Summation of SAR, please find the table 13 as below.

2.1 For hot-spot mode, the main antenna location to edge >2.5 cm, therefore test Edge Top is not required.

2.2 For hot-spot mode, the Wi-Fi antenna location to edge >2.5 cm, therefore test (Edge Left and Edge Bottom) are not required.

2.3 802.11a unsupported wifi hot-spot.

Table 11. Simultaneous Transmitting Summary

Simultaneous Transmitting	802.11a	802.11b	802.11g	802.11n	Bluetooth
GPRS/EGPRS/DTM 850		V	V	V	V
GPRS/EGPRS/DTM 1900		V	V	V	V
HSDPA/HSUPA/HSPA+(QPSK) Band V		V	V	V	V
HSDPA/HSUPA/HSPA+(QPSK) Band II		V	V	V	V
GSM 850	V	V	V	V	V
GSM 1900	V	V	V	V	V
WCDMA Band V	V	V	V	V	V
WCDMA Band II	V	V	V	V	V
Bluetooth	V	V	V	V	

Table 12.

Right-Cheek mode					
The sum of the 1-g SAR					
Simult Tx	Configuration	GSM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.153	0.154	0.307	<1.6
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.184	0.154	0.338	<1.6
Simult Tx	Configuration	DTM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.183	0.154	0.337	<1.6
Simult Tx	Configuration	GSM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.128	0.154	0.282	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.295	0.154	0.449	<1.6
Simult Tx	Configuration	DTM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.310	0.154	0.464	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.120	0.154	0.274	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.178	0.154	0.332	<1.6

Right-Tilted mode					
The sum of the 1-g SAR					
Simult Tx	Configuration	GSM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.096	0.190	0.286	<1.6
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.117	0.190	0.307	<1.6
Simult Tx	Configuration	DTM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.123	0.190	0.313	<1.6
Simult Tx	Configuration	GSM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.096	0.190	0.286	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.161	0.190	0.351	<1.6
Simult Tx	Configuration	DTM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.191	0.190	0.381	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.078	0.190	0.268	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.115	0.190	0.305	<1.6

Left-Cheek mode					
The sum of the 1-g SAR					
Simult Tx	Configuration	GSM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.202	0.255	0.457	<1.6
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.316	0.255	0.571	<1.6
Simult Tx	Configuration	DTM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.301	0.255	0.556	<1.6
Simult Tx	Configuration	GSM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.179	0.255	0.434	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.502	0.255	0.757	<1.6
Simult Tx	Configuration	DTM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.598	0.255	0.853	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.185	0.255	0.440	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.329	0.255	0.584	<1.6

Left-Tilted mode					
The sum of the 1-g SAR					
Simult Tx	Configuration	GSM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.107	0.193	0.300	<1.6
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.179	0.193	0.372	<1.6
Simult Tx	Configuration	DTM 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.093	0.193	0.286	<1.6
Simult Tx	Configuration	GSM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.083	0.193	0.276	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.227	0.193	0.420	<1.6
Simult Tx	Configuration	DTM 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.176	0.193	0.369	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.100	0.193	0.293	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Head SAR	Right-Cheek	0.111	0.193	0.304	<1.6

Hot-spot mode _ Back surface					
The sum of the 1-g SAR					
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.433	0.118	0.551	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	1.010	0.118	1.128	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.267	0.118	0.385	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.726	0.118	0.844	<1.6

Hot-spot mode _ Front surface					
The sum of the 1-g SAR					
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.424	0.067	0.491	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.493	0.067	0.560	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.261	0.067	0.328	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.340	0.067	0.407	<1.6

Hot-spot mode _ Edge Right					
The sum of the 1-g SAR					
Simult Tx	Configuration	GPRS 850 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.318	0.072	0.390	<1.6
Simult Tx	Configuration	GPRS 1900 SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.106	0.072	0.178	<1.6
Simult Tx	Configuration	WCDMA Band II SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.173	0.072	0.245	<1.6
Simult Tx	Configuration	WCDMA Band V SAR mW/g	WLAN SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.066	0.072	0.138	<1.6

The body worn accessory _ Back Surface					
The sum of the 1-g SAR					
Simult Tx	Configuration	GSM 850 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.401	0.213	0.614	<1.6
Simult Tx	Configuration	DTM 850 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.432	0.213	0.645	<1.6
Simult Tx	Configuration	GSM 1900 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.346	0.213	0.559	<1.6
Simult Tx	Configuration	DTM 1900 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.872	0.213	1.085	<1.6

The body worn accessory _ Front Surface					
The sum of the 1-g SAR					
Simult Tx	Configuration	GSM 850 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.325	0.076	0.401	<1.6
Simult Tx	Configuration	DTM 850 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.423	0.076	0.499	<1.6
Simult Tx	Configuration	GSM 1900 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.162	0.076	0.238	<1.6
Simult Tx	Configuration	DTM 1900 SAR mW/g	WLAN 5G SAR mW/g	∑ SAR mW/g	∑ SAR
Body SAR	Flat	0.621	0.076	0.697	<1.6

6. System Performance Check

6.1 Symmetric Dipoles for System Validation

Construction	Symmetrical dipole with l/4 balun enables measurement of feed point impedance with NWA matched for use near flat phantoms filled with head simulating solutions Includes distance holder and tripod adaptor Calibration Calibrated SAR value for specified position and input power at the flat phantom in head simulating solutions.
Frequency	835, 1900, 2450, 5200, 5500, 5800 MHz
Return Loss	> 20 dB at specified validation position
Power Capability	> 100 W (f < 1GHz); > 40 W (f > 1GHz)
Options	Dipoles for other frequencies or solutions and other calibration conditions are available upon request
Dimensions	D835V2: dipole length 161 mm; overall height 340 mm D1900V2: dipole length 67.7 mm; overall height 300 mm D2450V2：dipole length 51.5 mm; overall height 300 mm D5GHzV2: dipole length 20.6 mm; overall height 300 mm

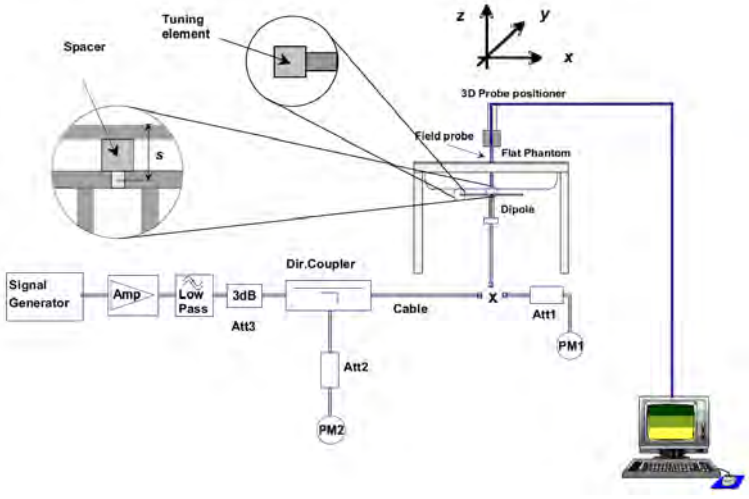


Figure 10. System Verification Setup Diagram

Figure 11. Validation Kit

6.2 Validation

Prior to the assessment, the system validation kit was used to test whether the system was operating within its specifications of ± 7%. The validation was performed at 835, 1900, 2450, 5200, 5500 and 5800MHz.

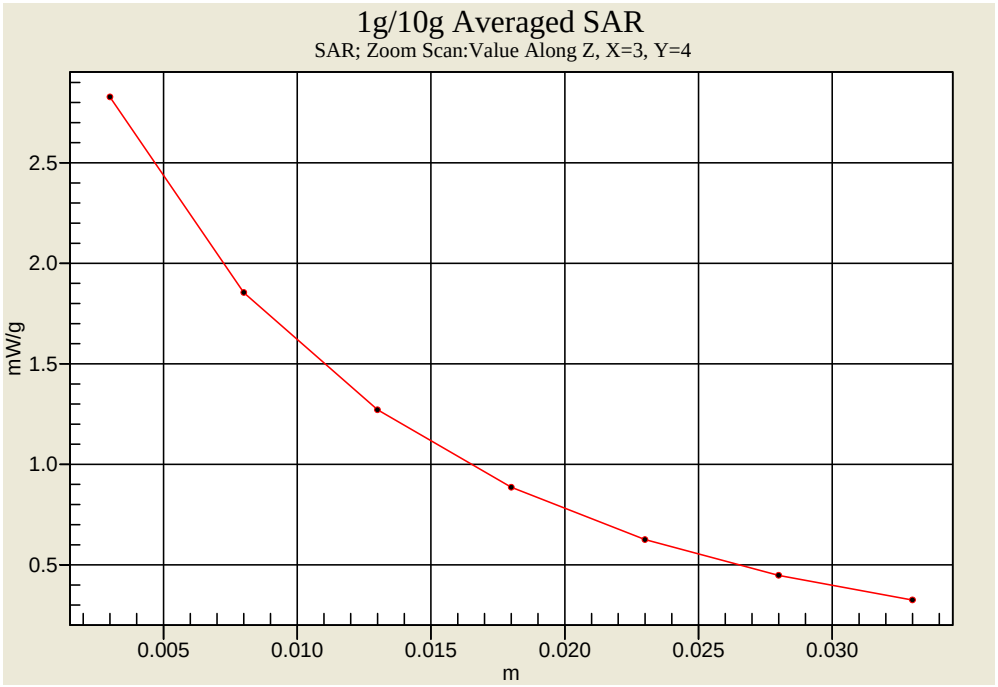
Validation kit		Mixture Type	SAR_{1g} [mW/g]		SAR_{10g} [mW/g]		Date of Calibration
D835V2-SN4d082		Head	9.25		6.07		07/19/2011
D1900V2-SN5d111		Head	39.90		20.80		07/22/2011
D2450V2-SN712		Head	52.90		24.50		02/23/2011
D5GHzV2-SN1021_5200MHz		Head	83.50		23.60		02/16/2011
Frequency (MHz)	Power (dBm)	SAR_{1g} (mW/g)	SAR_{10g} (mW/g)	Drift (dB)	Difference percentage		Date
					1g	10g	
835 (Head)	250mW	2.40	1.56	0.055	3.8 %	2.8 %	02/11/2012
	Normalize to 1 Watt	9.60	6.24				
1900 (Head)	250mW	10.10	5.26	-0.003	1.3 %	1.2 %	02/12/2012
	Normalize to 1 Watt	40.40	21.04				
2450 (Head)	250mW	13.00	5.97	-0.006	-1.7 %	-2.5 %	02/12/2012
	Normalize to 1 Watt	52.00	23.88				
5200 (Head)	100mW	8.14	2.35	0.002	-2.5 %	-0.4 %	02/13/2012
	Normalize to 1 Watt	81.40	23.50				
5200 (Head)	100mW	8.44	2.46	0.020	1.1 %	4.2 %	02/14/2012
	Normalize to 1 Watt	84.40	24.60				
5200 (Head)	100mW	8.44	2.47	0.186	1.1 %	4.7 %	02/15/2012
	Normalize to 1 Watt	84.40	24.70				

Validation kit		Mixture Type	SAR_{1g} [mW/g]		SAR_{10g} [mW/g]		Date of Calibration
D5GHzV2-SN1021_5500MHz		Head	89.30		25.10		02/16/2011
D5GHzV2-SN1021_5800MHz		Head	82.80		23.20		02/16/2011
D835V2-SN4d082		Body	9.43		6.22		07/19/2011
D1900V2-SN5d111		Body	40.90		21.50		07/22/2011
Frequency (MHz)	Power (dBm)	SAR_{1g} (mW/g)	SAR_{10g} (mW/g)	Drift (dB)	Difference percentage		Date
					1g	10g	
5500 (Head)	100mW	8.60	2.46	0.034	-3.7 %	-2.0 %	02/13/2012
	Normalize to 1 Watt	86.00	24.60				
5500 (Head)	100mW	8.51	2.44	0.002	-4.7 %	-2.8 %	02/14/2012
	Normalize to 1 Watt	85.10	24.40				
5500 (Head)	100mW	8.73	2.50	0.022	-2.2 %	-0.4 %	02/15/2012
	Normalize to 1 Watt	87.3	25.00				
5800 (Head)	100mW	8.36	2.40	0.046	1.0 %	3.4 %	02/13/2012
	Normalize to 1 Watt	83.60	24.00				
5800 (Head)	100mW	8.20	2.34	0.000	-1.0 %	0.9 %	02/14/2012
	Normalize to 1 Watt	82.00	23.40				
5800 (Head)	100mW	8.19	2.37	0.149	-1.1 %	2.2 %	02/15/2012
	Normalize to 1 Watt	81.90	23.70				
835 (Body)	250mW	2.37	1.55	-0.148	0.5 %	-0.3 %	02/10/2012
	Normalize to 1 Watt	9.48	6.20				
835 (Body)	250mW	2.41	1.56	-0.110	2.2 %	0.3 %	02/29/2012
	Normalize to 1 Watt	9.64	6.24				
1900 (Body)	250mW	10.00	5.19	0.037	-2.2 %	-3.4 %	02/09/2012
	Normalize to 1 Watt	40.00	20.76				
1900 (Body)	250mW	10.00	5.15	-0.104	-2.2 %	-4.2 %	02/10/2012
	Normalize to 1 Watt	40.00	20.60				
1900 (Body)	250mW	10.3	5.26	-0.107	0.7 %	-2.1 %	02/29/2012
	Normalize to 1 Watt	41.2	21.04				

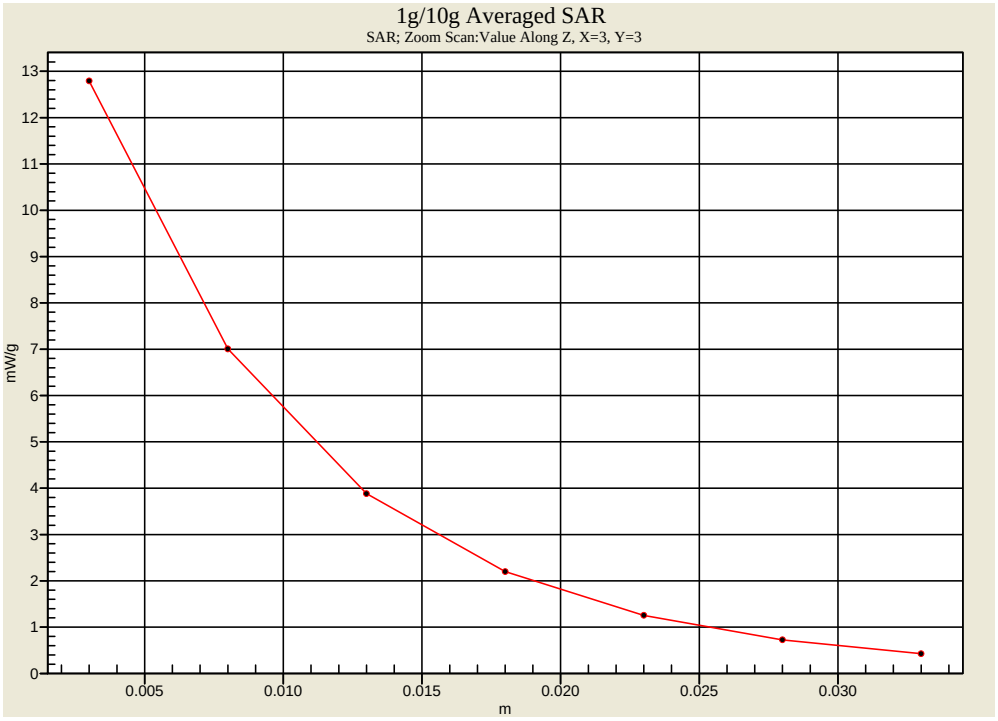
Validation kit	Mixture Type	SAR_{1g} [mW/g]	SAR_{10g} [mW/g]	Date of Calibration
D2450V2-SN712	Body	50.40	23.30	02/23/2011
D5GHzV2-SN1023_5200MHz	Body	72.30	20.40	01/19/2012
D5GHzV2-SN1023_5500MHz	Body	78.20	21.70	01/19/2012
D5GHzV2-SN1021_5800MHz	Body	73.10	20.20	02/16/2011

Frequency (MHz)	Power (dBm)	SAR_{1g} (mW/g)	SAR_{10g} (mW/g)	Drift (dB)	Difference percentage		Date
					1g	10g	
2450 (Body)	250mW	13.00	5.89	-0.002	3.2 %	1.1 %	02/13/2012
	Normalize to 1 Watt	52.00	23.56				
2450 (Body)	250mW	12.80	5.69	-0.020	1.6 %	-2.3 %	02/19/2012
	Normalize to 1 Watt	51.20	22.76				
5200 (Body)	100mW	7.42	2.1	0.018	2.6 %	2.9 %	03/01/2012
	Normalize to 1 Watt	74.2	21				
5500 (Body)	100mW	7.72	2.17	0.012	-1.3 %	0.0 %	03/01/2012
	Normalize to 1 Watt	77.2	21.7				
5800 (Body)	100mW	7.23	2.06	-0.018	-1.1 %	2.0 %	03/01/2012
	Normalize to 1 Watt	72.3	20.6				

Z-axis Plot of System Performance Check

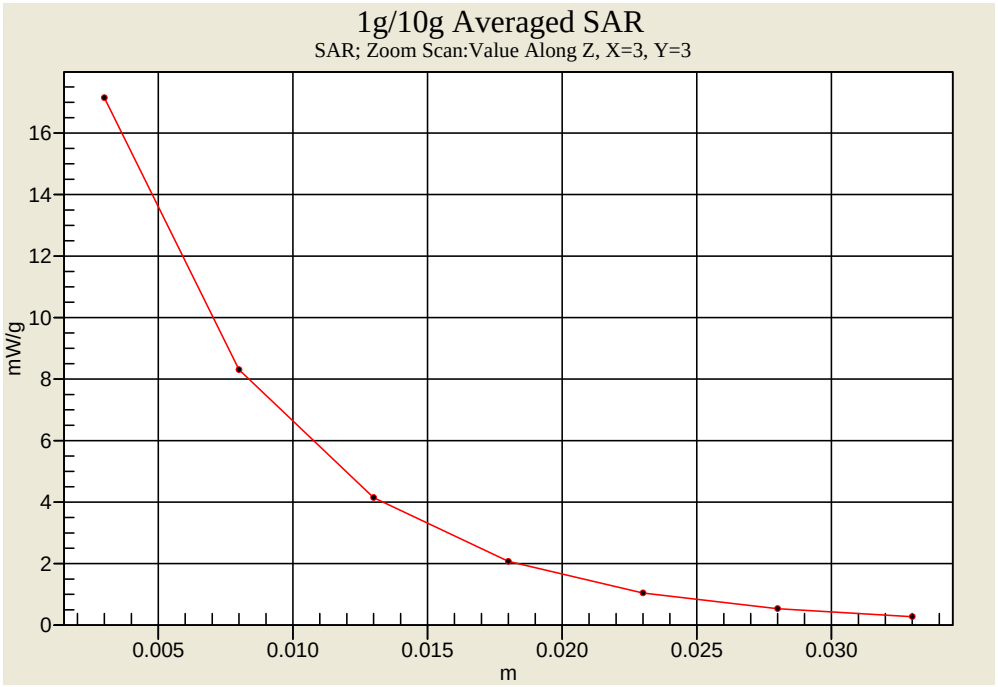


Head-Tissue-Simulating-Liquid 835MHz

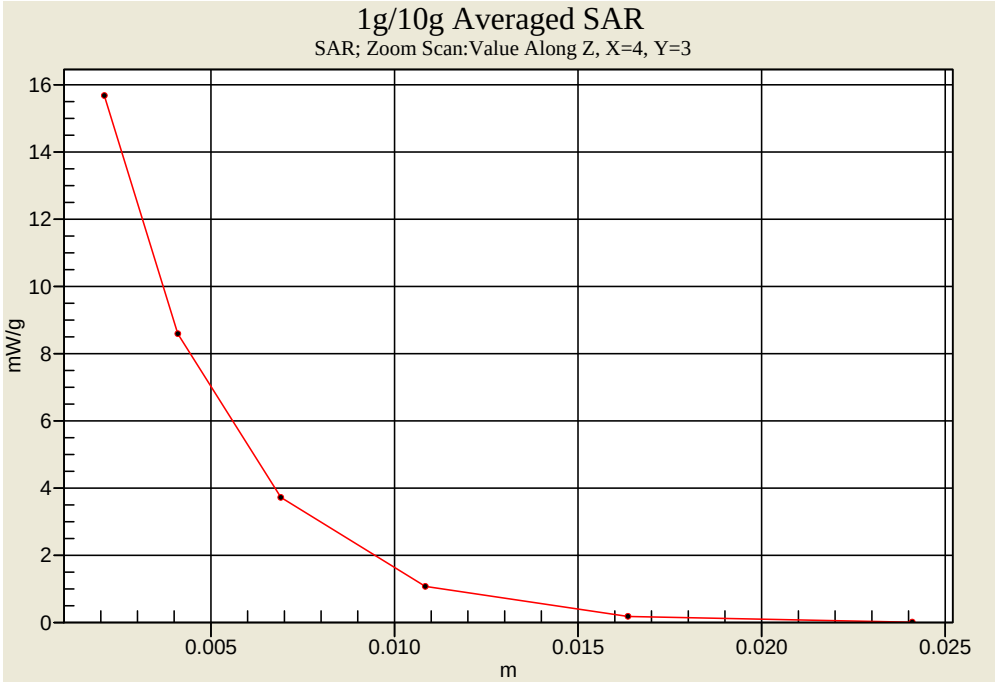


Head-Tissue-Simulating-Liquid 1900MHz

Z-axis Plot of System Performance Check

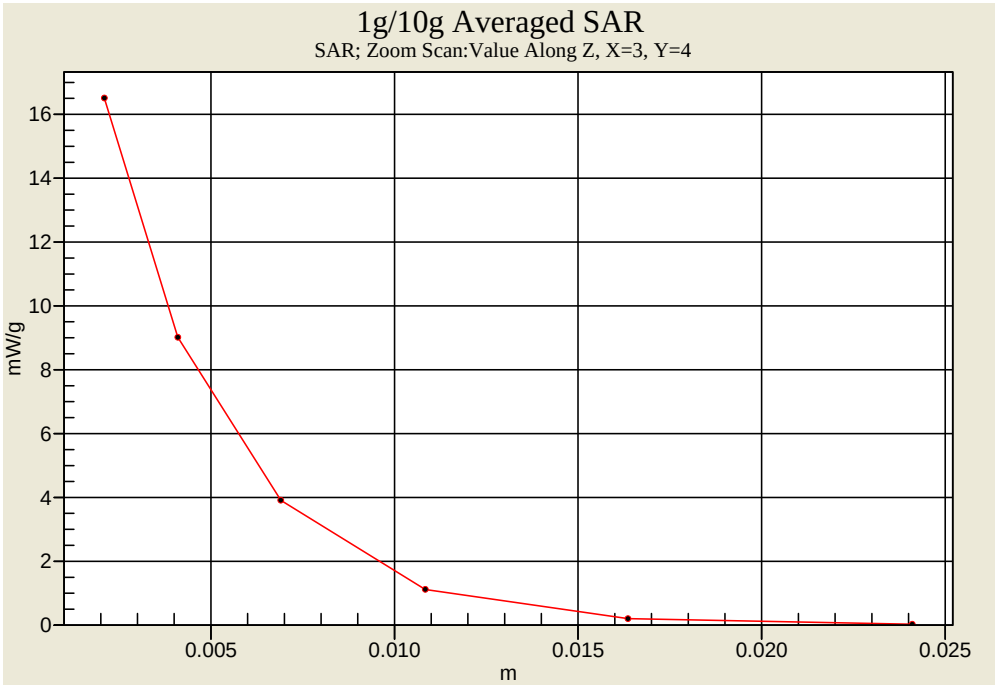


Head-Tissue-Simulating-Liquid 2450MHz

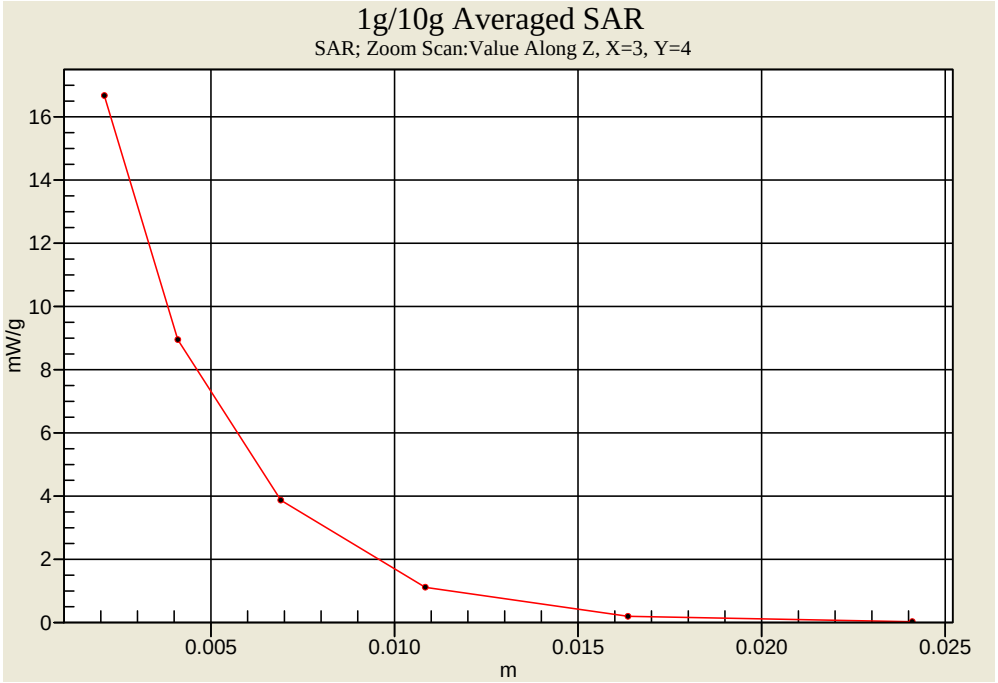


Head-Tissue-Simulating-Liquid 5200MHz (02/13/2012)

Z-axis Plot of System Performance Check

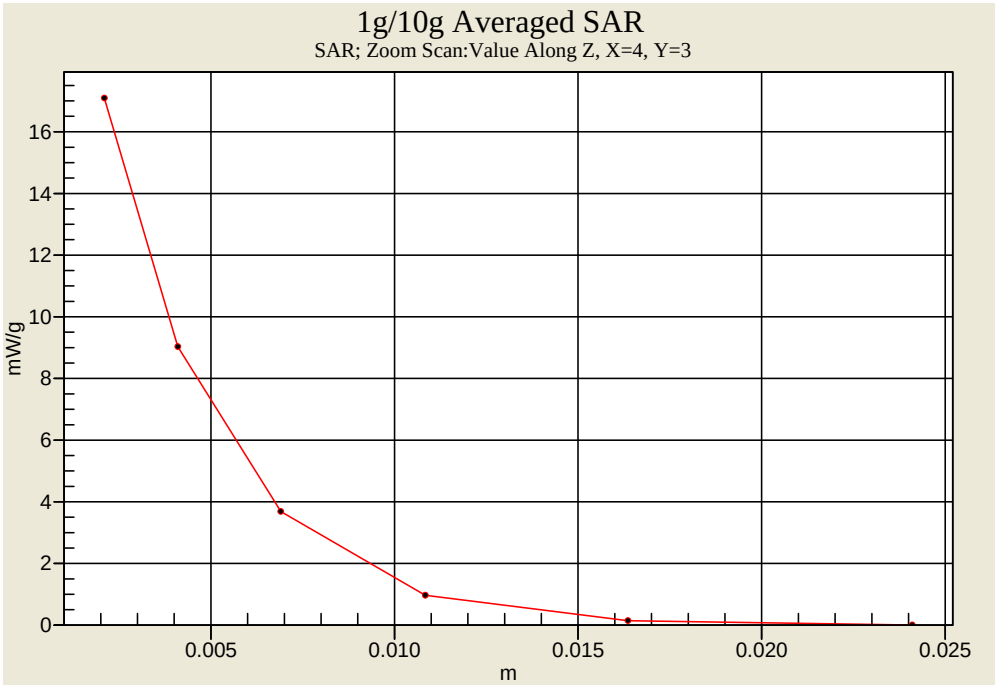


Head-Tissue-Simulating-Liquid 5200MHz (02/14/2012)

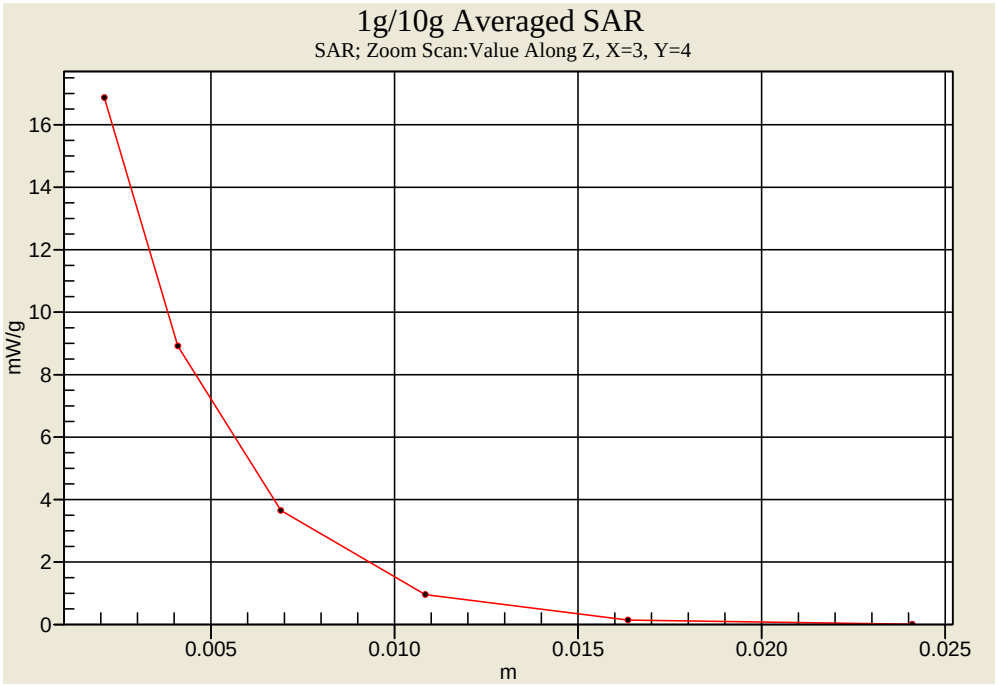


Head-Tissue-Simulating-Liquid 5200MHz (02/15/2012)

Z-axis Plot of System Performance Check

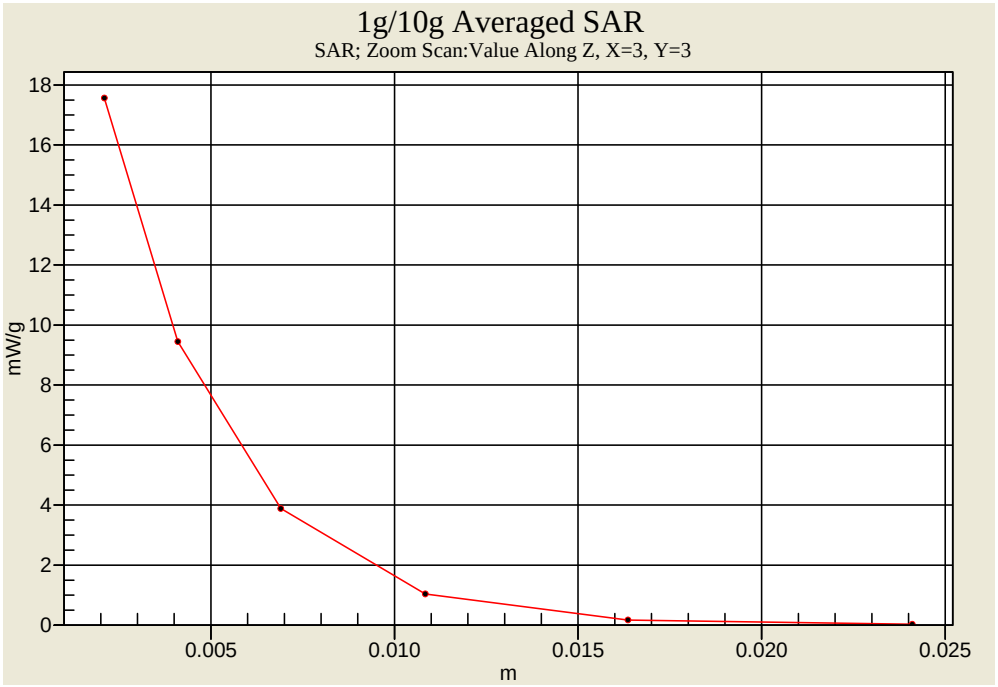


Head-Tissue-Simulating-Liquid 5500MHz (02/13/2012)

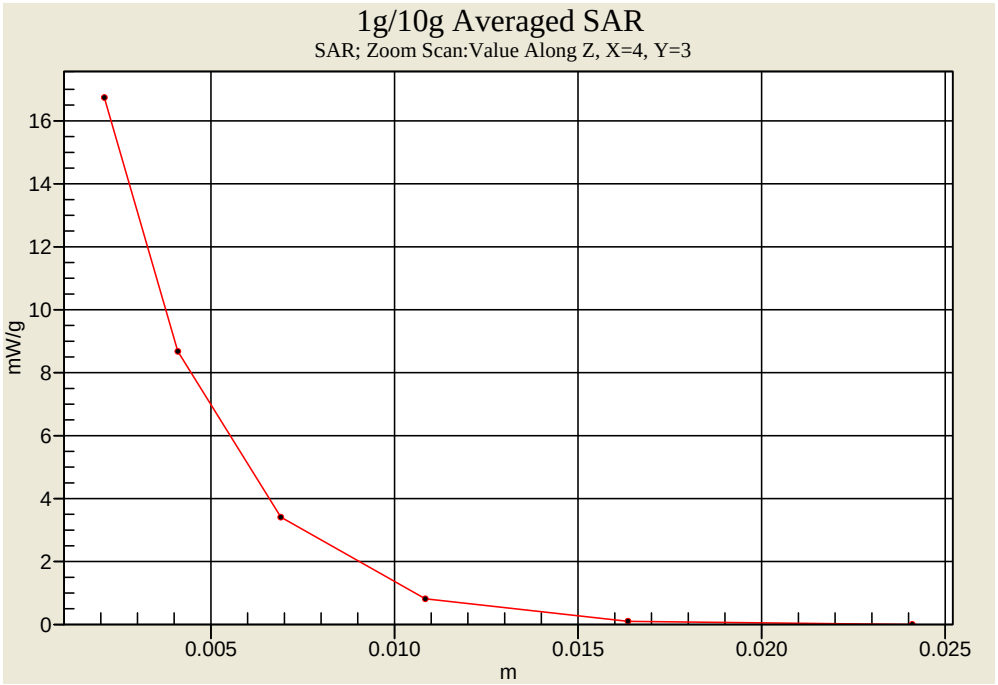


Head-Tissue-Simulating-Liquid 5500MHz (02/14/2012)

Z-axis Plot of System Performance Check

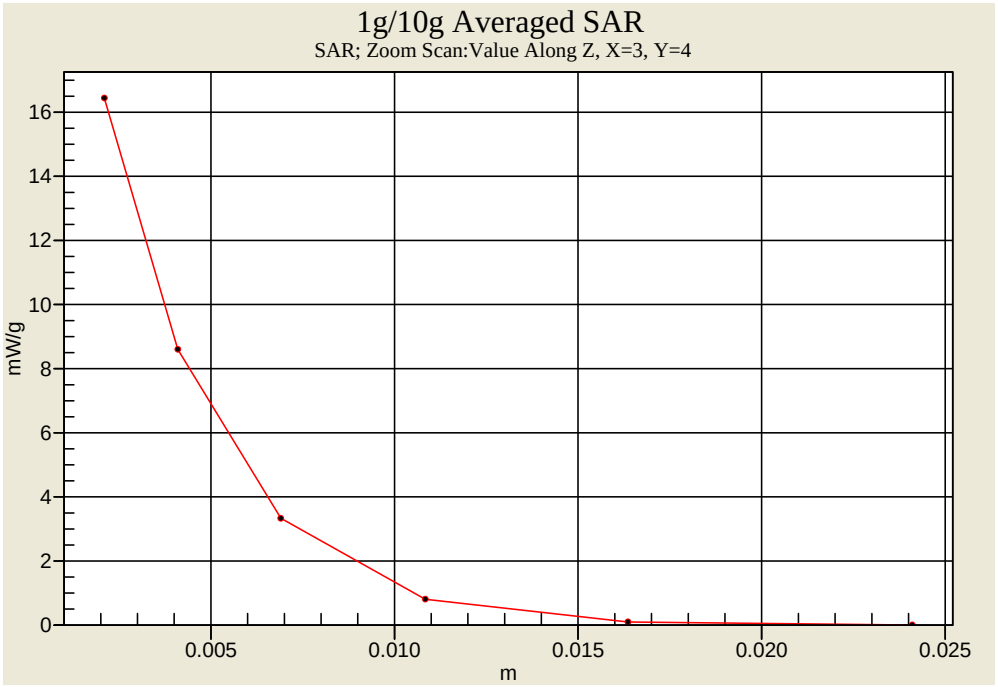


Head-Tissue-Simulating-Liquid 5500MHz (02/14/2012)

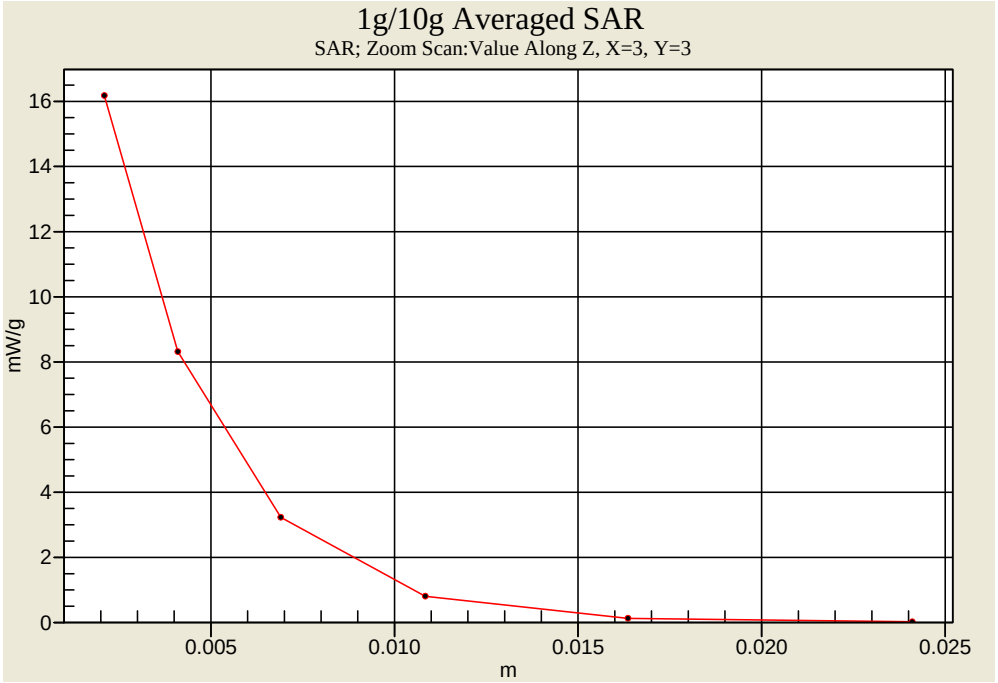


Head-Tissue-Simulating-Liquid 5800MHz (02/13/2012)

Z-axis Plot of System Performance Check

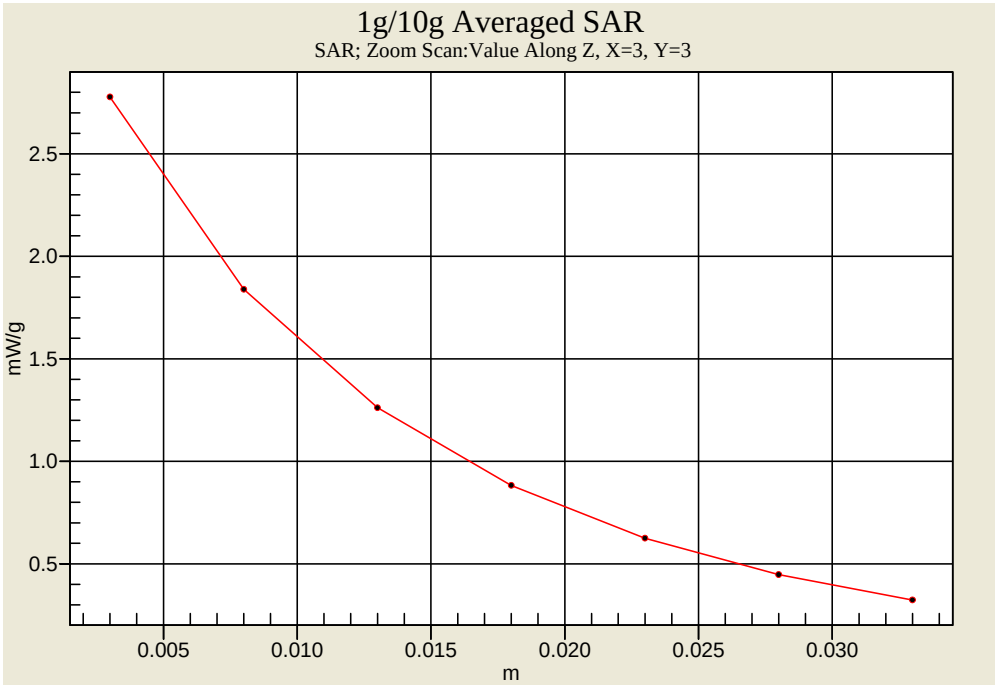


Head-Tissue-Simulating-Liquid 5800MHz (02/14/2012)

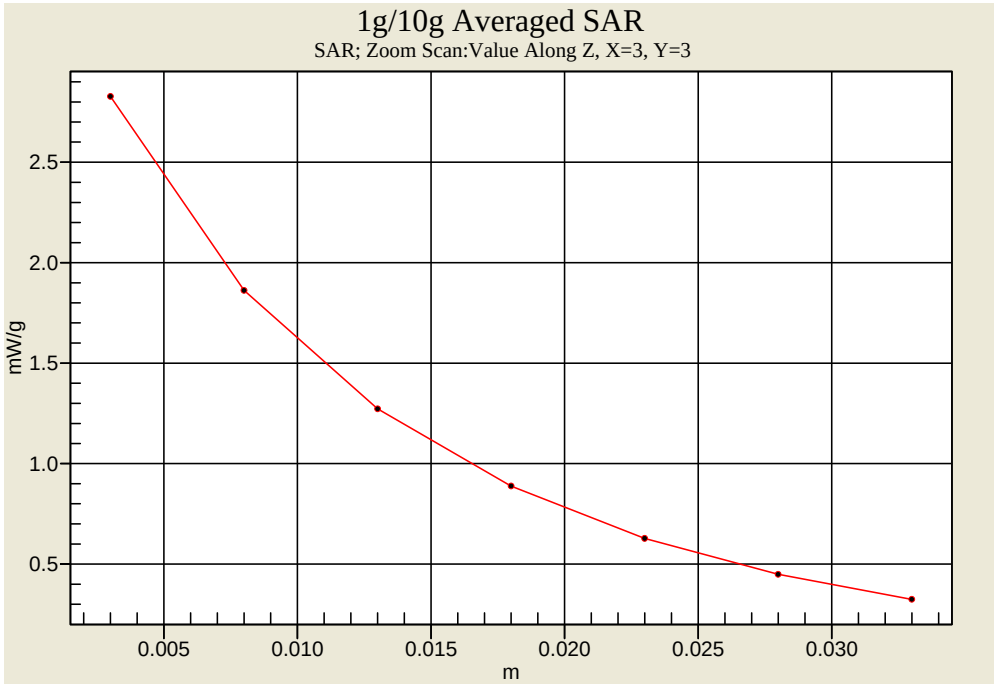


Head-Tissue-Simulating-Liquid 5800MHz (02/15/2012)

Z-axis Plot of System Performance Check

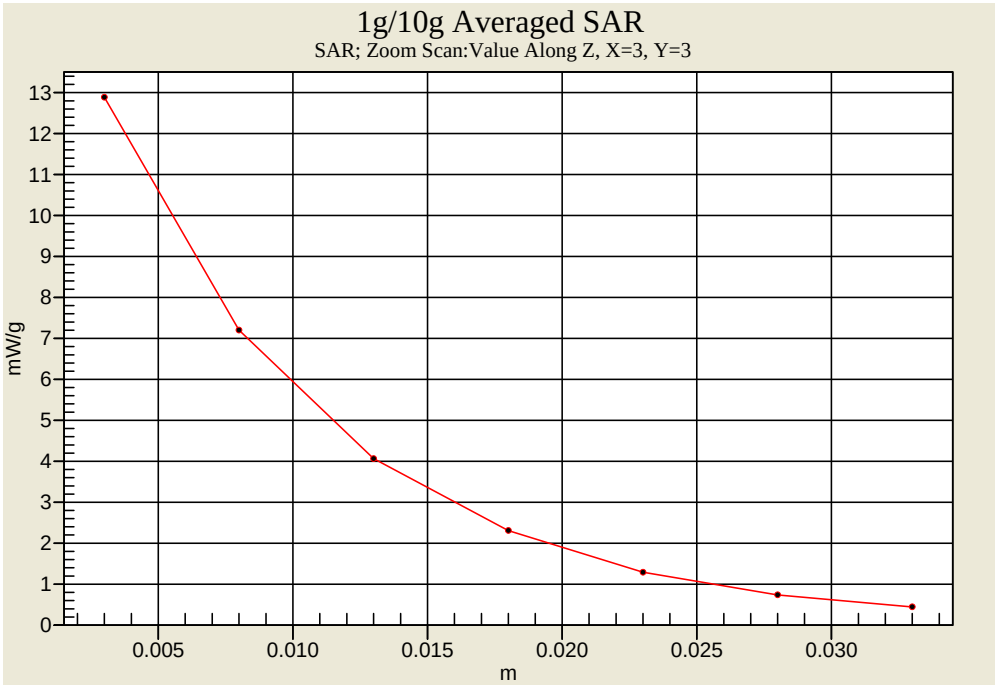


Body-Tissue-Simulating-Liquid 835MHz (02/10/2012)

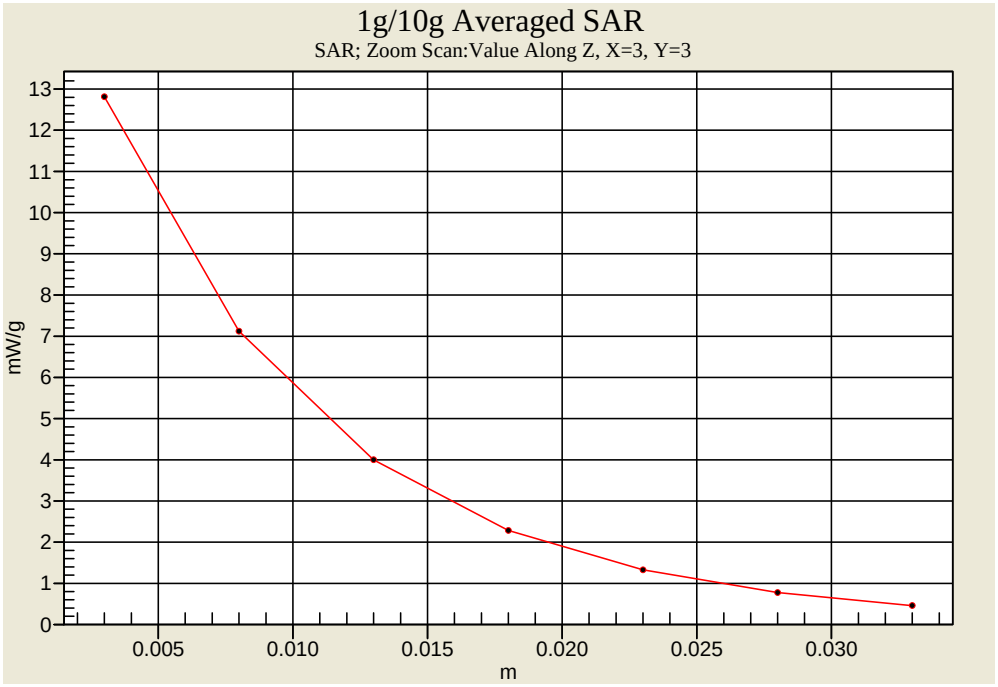


Body-Tissue-Simulating-Liquid 835MHz (02/29/2012)

Z-axis Plot of System Performance Check

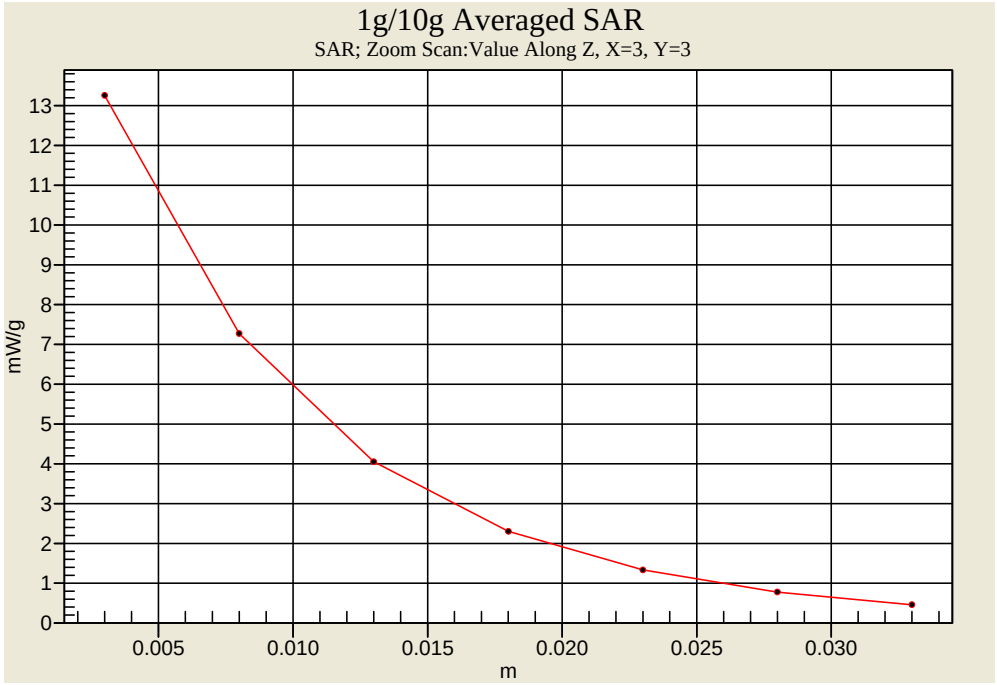


Body-Tissue-Simulating-Liquid 1900MHz (02/09/2012)

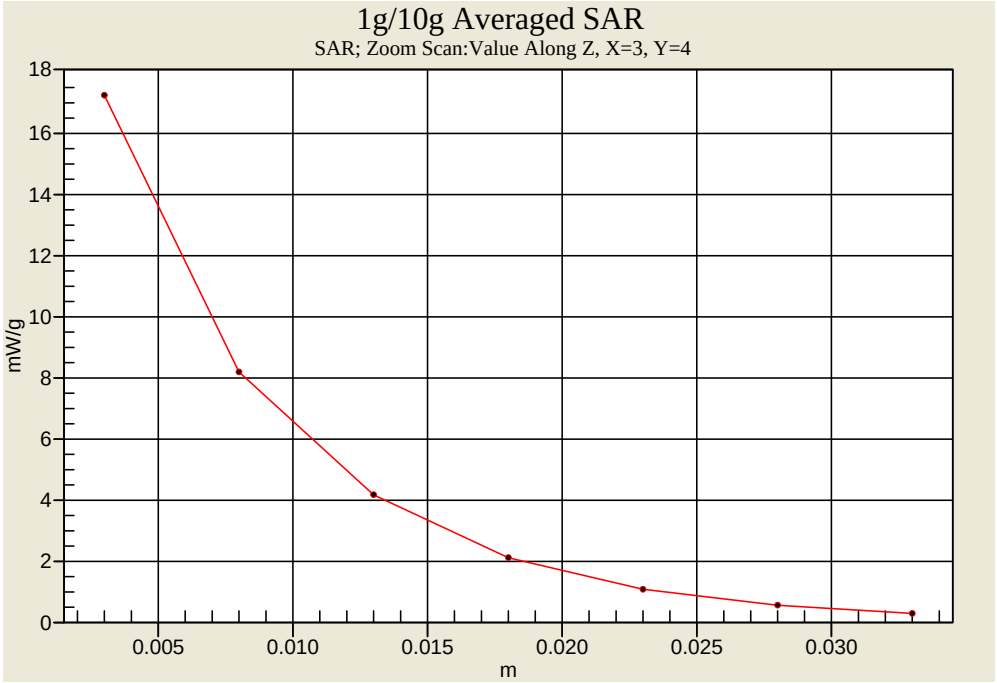


Body-Tissue-Simulating-Liquid 1900MHz (02/10/2012)

Z-axis Plot of System Performance Check

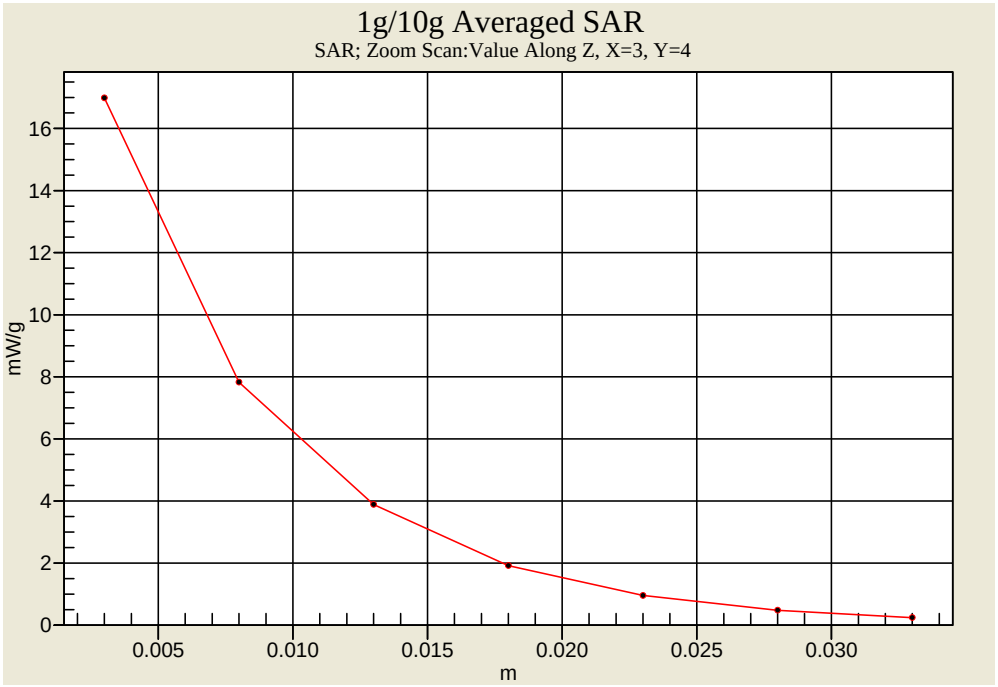


Body-Tissue-Simulating-Liquid 1900MHz (02/29/2012)

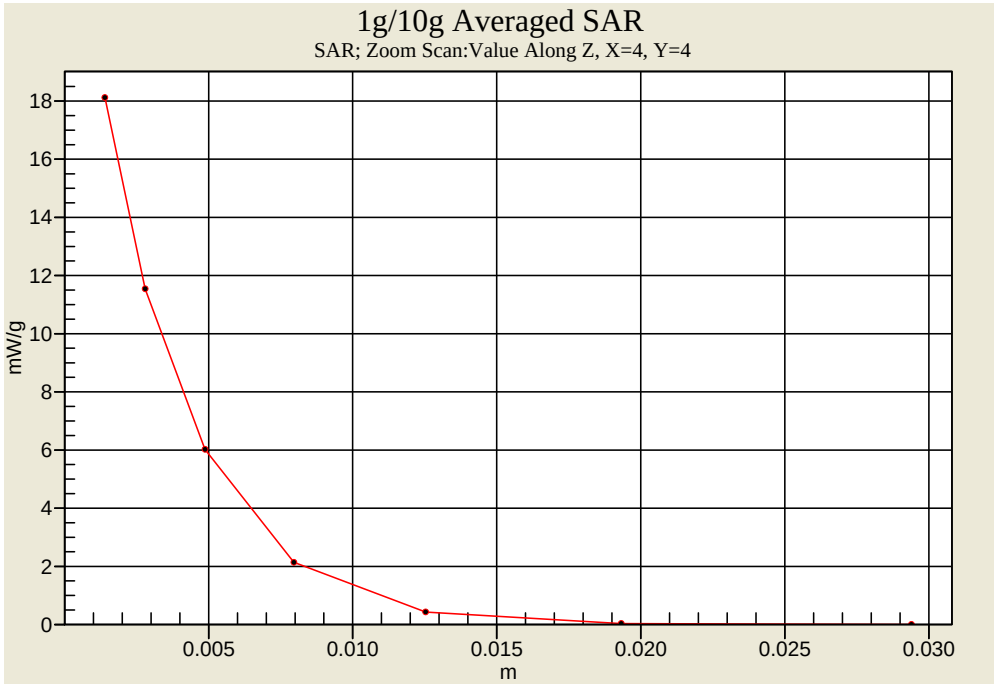


Body-Tissue-Simulating-Liquid 2450MHz (02/13/2012)

Z-axis Plot of System Performance Check

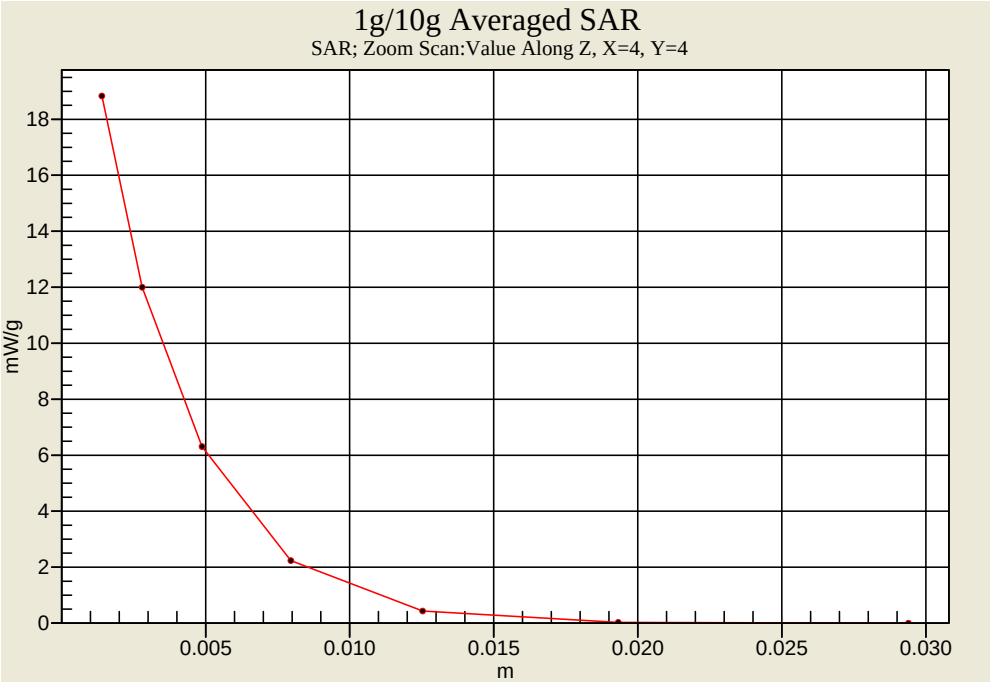


Body-Tissue-Simulating-Liquid 2450MHz (02/19/2012)

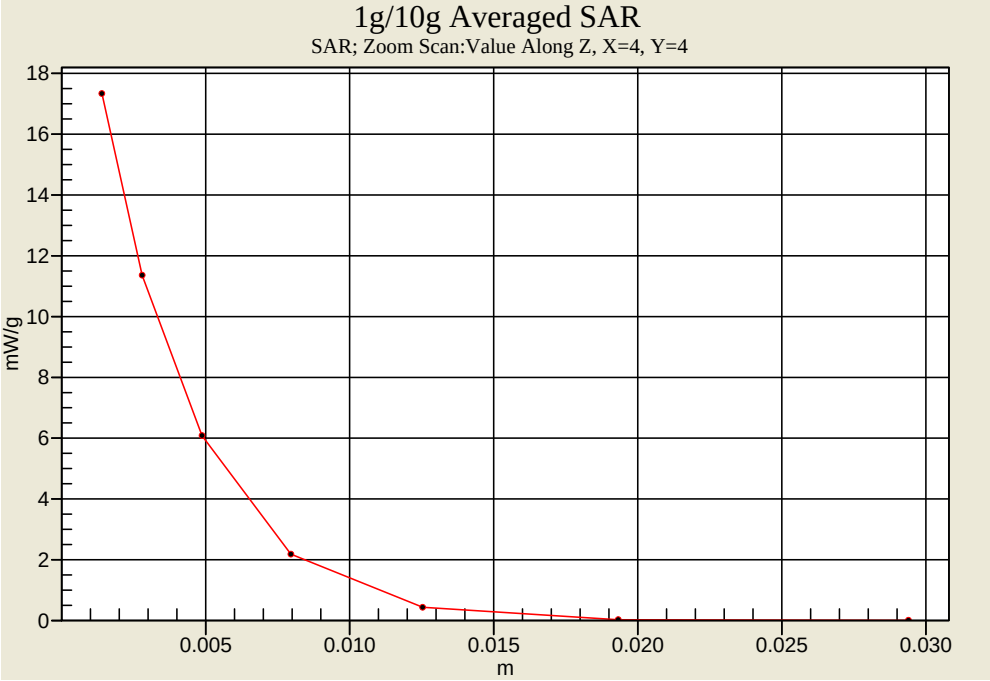


Body-Tissue-Simulating-Liquid 5200MHz

Z-axis Plot of System Performance Check



Body-Tissue-Simulating-Liquid 5500MHz (03/01/2012)



Body-Tissue-Simulating-Liquid 5800MHz (03/01/2012)

Body-Tissue-Simulating-Liquid 5800MHz (03/01/2012)

7. Test Equipment List

Manufacturer	Name of Equipment	Type/Model	Serial Number	Calibration	
				Last Cal.	Due Date
SPEAG	Dosimetric E-Field Probe	ES3DV3	3270	09/12/2011	09/12/2012
SPEAG	Dosimetric E-Field Probe	EX3DV4	3573	01/04/2012	01/04/2013
SPEAG	835MHz System Validation Kit	D835V2	4d082	07/19/2011	07/19/2012
SPEAG	1900MHz System Validation Kit	D1900V2	5d111	07/22/2011	07/22/2012
SPEAG	2450MHz System Validation Kit	D2450V2	712	02/23/2011	02/23/2012
SPEAG	5GHz System Validation Kit	D5GHZV2	1021	02/16/2011	02/16/2012
SPEAG	5GHz System Validation Kit	D5GHZV2	1023	01/19/2012	01/19/2013
SPEAG	Data Acquisition Electronics	DAE4	779	01/23/2012	01/23/2013
SPEAG	Measurement Server	SE UMS 011 AA	1025	NCR	
SPEAG	Device Holder	N/A	N/A	NCR	
SPEAG	Phantom	SAM V4.0	TP-1150	NCR	
SPEAG	Robot	Staubli RX90L	F00/589B1/A/01	NCR	
SPEAG	Software	DASY4 V4.7 Build 80	N/A	NCR	
SPEAG	Software	SEMCAD V1.8 Build 186	N/A	NCR	
Agilent	Dielectric Probe Kit	85070C	US99360094	NCR	
Agilent	ENA Series Network Analyzer	E5071B	MY42404655	07/07/2011	07/07/2012
R&S	Power Sensor	NRP-Z22	100179	05/27/2011	05/27/2012
Agilent	MXG Vector Signal Generator	N5182A	MY47420962	05/16/2011	05/16/2012
Agilent	Dual Directional Coupler	778D	50334	NCR	
Mini-Circuits	Power Amplifier	ZHL-42W-SMA	D111103#5	NCR	
Mini-Circuits	Power Amplifier	ZVE-8G-SMA	D042005 671800514	NCR	

Table 13. Test Equipment List

8. Measurement Uncertainty

Measurement uncertainties in SAR measurements are difficult to quantify due to several variables including biological, physiological, and environmental. However, we estimate the measurement uncertainties in SAR to be less than ±20.10 %〔8〕. The frequency range of the measurement uncertainty is 750 ~ 5800MHz ±10.1 %

According to Std. C95.3〔9〕, the overall uncertainties are difficult to assess and will vary with the type of meter and usage situation. However, accuracy's of ±1 to 3 dB can be expected in practice, with greater uncertainties in near-field situations and at higher frequencies (shorter wavelengths), or areas where large reflecting objects are present. Under optimum measurement conditions, SAR measurement uncertainties of at least ±2dB can be expected.

According to CENELEC〔10〕, typical worst-case uncertainty of field measurements is ±5 dB. For well-defined modulation characteristics the uncertainty can be reduced to ±3 dB.

Item	Uncertainty Component	Uncertainty Value	Prob. Dist	Div.	c_i (1g)	c_i (10g)	Std. Unc. (1-g)	Std. Unc. (10-g)	v_i or V_{eff}
Measurement System									
u1	Probe Calibration (k=1)	±5.05%	Normal	1	1	1	±5.05%	±5.05%	∞
u2	Probe Isotropy	±7.6%	Rectangular	$\sqrt{3}$	0.7	0.7	±3.1%	±3.1%	∞
u3	Boundary Effect	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
u4	Linearity	±4.7%	Rectangular	$\sqrt{3}$	1	1	±2.7%	±2.7%	∞
u5	System Detection Limit	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.58%	±0.58%	∞
u6	Readout Electronics	±0.3%	Normal	1	1	1	±0.3%	±0.3%	∞
u7	Response Time	±0.8%	Rectangular	$\sqrt{3}$	1	1	±0.5%	±0.5%	∞
u8	Integration Time	±2.6%	Rectangular	$\sqrt{3}$	1	1	±1.5%	±1.5%	∞
u9	RF Ambient Conditions	±0%	Rectangular	$\sqrt{3}$	1	1	±0%	±0%	∞
u10	RF Ambient Reflections	±0%	Rectangular	$\sqrt{3}$	1	1	±0%	±0%	∞
u11	Probe Positioner Mechanical Tolerance	±0.4%	Rectangular	$\sqrt{3}$	1	1	±0.2%	±0.2%	∞
u12	Probe Positioning with respect to Phantom Shell	±2.9%	Rectangular	$\sqrt{3}$	1	1	±1.7%	±1.7%	∞
u13	Extrapolation, interpolation and integration Algorithms for Max. SAR Evaluation	±1.0%	Rectangular	$\sqrt{3}$	1	1	±0.6%	±0.6%	∞
Test sample Related									
u14	Test sample Positioning	±3.6%	Normal	1	1	1	±3.6%	±3.6%	89
u15	Device Holder Uncertainty	±3.5%	Normal	1	1	1	±3.5%	±3.5%	5
u16	Output Power Variation - SAR drift measurement	±5.0%	Rectangular	$\sqrt{3}$	1	1	±2.9%	±2.9%	∞
Phantom and Tissue Parameters									
u17	Phantom Uncertainty (shape and thickness tolerances)	±4.0%	Rectangular	$\sqrt{3}$	1	1	±2.3%	±2.3%	∞
u18	Liquid Conductivity - deviation from target values	±5.0%	Rectangular	$\sqrt{3}$	0.64	0.43	±1.8%	±1.2%	∞
u19	Liquid Conductivity - measurement uncertainty	±1.93%	Normal	1	0.64	0.43	±1.24%	±0.83%	69
u20	Liquid Permittivity - deviation from target values	±5.0%	Rectangular	$\sqrt{3}$	0.6	0.49	±1.7%	±1.4%	∞
u21	Liquid Permittivity - measurement uncertainty	±1.4%	Normal	1	0.6	0.49	±0.84%	±1.69%	69
Combined standard uncertainty			RSS				±10.05%	±9.98%	313
Expanded uncertainty (95% CONFIDENCE LEVEL)			k=2				±20.10%	±19.96%	

Table 14. Uncertainty Budget of DASY

9. Measurement Procedure

The measurement procedures are as follows:

1. For WLAN function, engineering testing software installed on Notebook can provide continuous transmitting signal.
2. Measure output power through RF cable and power meter
3. Set scan area, grid size and other setting on the DASY software
4. Find out the largest SAR result on these testing positions of each band
5. Measure SAR results for other channels in worst SAR testing position if the SAR of highest power channel is larger than 0.8 W/kg

According to the test standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

1. Power reference measurement
2. Area scan
3. Zoom scan
4. Power drift measurement

9.1 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

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 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages

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

9.2 Area & Zoom Scan Procedures

First Area Scan is used to locate the approximate location(s) of the local peak SAR value(s). The measurement grid within an Area Scan is defined by the grid extent, grid step size and grid offset. For above 4.5 GHz, area scan step size X: 10, Y: 10. For below 4.5 GHz, area scan step size X: 15 or 10, Y: 15 or 10. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 7x7x9 points with step size 5, 5 and 3 mm for 300 MHz to 3 GHz, and 7x7x9 points with step size 4, 4 and 2.5 mm for 3 GHz to 6 GHz. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 10 g.

9.3 Volume Scan Procedures

The volume scan is used for assess overlapping SAR distributions for antennas transmitting in different frequency bands. It is equivalent to an oversized zoom scan used in standalone measurements. The measurement volume will be used to enclose all the simultaneous transmitting antennas. For antennas transmitting simultaneously in different frequency bands, the volume scan is measured separately in each frequency band. In order to sum correctly to compute the 1g aggregate SAR, the DUT remain in the same test position for all measurements and all volume scan use the same spatial resolution and grid spacing (step size 5, 5 and 3 mm or step-size is 4, 4 and 2.5 mm). When all volume scan were completed, the software, SEMCAD postprocessor can combine and subsequently superpose these measurement data to
calculating the multiband SAR.

9.4 SAR Averaged Methods

In DASY, the interpolation and extrapolation are both based on the modified Quadratic Shepard's method. The interpolation scheme combines a least-square fitted function method and a weighted average method which are the two basic types of computational interpolation and approximation. Extrapolation routines are used to obtain SAR values between the lowest measurement points and the inner phantom surface. The extrapolation distance is determined by the surface detection distance and the probe sensor offset. 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.

9.5 Power Drift Monitoring

All SAR testing is under the DUT install full charged battery and transmit maximum output power. In DASY measurement software, the power reference measurement and power drift measurement procedures are used for monitoring the power drift of DUT during SAR test. Both these procedures measure the field at a specified reference position before and after the SAR testing. The software will calculate the field difference in dB. If the power drift more than 5%, the SAR will be retested.

10. SAR Test Results Summary

10.1 Head SAR

Measurement Results								
Band	Frequency		Power (dBm)	Phantom Position	Spacing (mm)	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
	CH	MHz						
GSM 850 1Down1Up	251	848.8	33.24	Right-cheek	0	0.153	0.033	---
	251	848.8	33.24	Right-Tilted	0	0.096	0.084	---
	251	848.8	33.24	Left-cheek	0	0.202	0.148	---
	251	848.8	33.24	Left-Tilted	0	0.107	0.047	---
GPRS 850 1Down4Up	128	824.2	31.32	Right-cheek	0	0.184	-0.032	---
	128	824.2	31.32	Right-Tilted	0	0.117	0.106	---
	128	824.2	31.32	Left-cheek	0	0.316	0.017	---
	128	824.2	31.32	Left-Tilted	0	0.179	0.172	---
DTM 850 GSM + GPRS 2Down3Up	128	824.2	32.45	Right-cheek	0	0.183	-0.045	---
	128	824.2	32.45	Right-Tilted	0	0.123	0.114	---
	128	824.2	32.45	Left-cheek	0	0.301	-0.129	---
	128	824.2	32.45	Left-Tilted	0	0.093	-0.173	---
GSM 1900 1Down1Up	810	1909.8	30.33	Right-cheek	0	0.128	-0.054	---
	810	1909.8	30.33	Right-Tilted	0	0.096	0.012	---
	810	1909.8	30.33	Left-cheek	0	0.179	0.017	---
	810	1909.8	30.33	Left-Tilted	0	0.083	0.049	---
GPRS 1900 1Down4Up	810	1909.8	28.35	Right-cheek	0	0.295	0.004	---
	810	1909.8	28.35	Right-Tilted	0	0.161	0.014	---
	810	1909.8	28.35	Left-cheek	0	0.502	0.011	---
	810	1909.8	28.35	Left-Tilted	0	0.227	0.050	---
DTM 1900 GSM + GPRS 2Down3Up	512	1850.2	29.40	Right-cheek	0	0.310	-0.053	---
	512	1850.2	29.40	Right-Tilted	0	0.191	-0.016	---
	512	1850.2	29.40	Left-cheek	0	**0.598**	-0.017	---
	512	1850.2	29.40	Left-Tilted	0	0.176	-0.021	---
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram			

Measurement Results								
Band	Frequency		Power (dBm)	Phantom Position	Spacing (mm)	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
	CH	MHz						
WCDMA Band II	9538	1907.6	23.29	Right-cheek	0	0.178	0.166	---
	9538	1907.6	23.29	Right-Tilted	0	0.115	0.033	---
	9538	1907.6	23.29	Left-cheek	0	0.329	0.076	---
	9538	1907.6	23.29	Left-Tilted	0	0.111	0.049	---
WCDMA Band V	4183	836.6	23.56	Right-cheek	0	0.120	0.106	---
	4183	836.6	23.56	Right-Tilted	0	0.078	0.092	---
	4183	836.6	23.56	Left-cheek	0	0.185	0.059	---
	4183	836.6	23.56	Left-Tilted	0	0.100	0.125	---
IEEE 802.11b Rate 1M	11	2462.0	18.22	Right-cheek	0	0.154	-0.021	---
	11	2462.0	18.22	Right-Tilted	0	0.190	0.014	---
	11	2462.0	18.22	Left-cheek	0	0.255	-0.015	---
	11	2462.0	18.22	Left-Tilted	0	0.193	0.035	---
IEEE 802.11a Rate 6M	36	5180.0	12.64	Right-cheek	0	0.056	-0.196	---
	40	5200.0	12.62	Right-cheek	0	0.070	-0.119	---
	52	5260.0	12.52	Right-cheek	0	0.055	-0.064	---
	64	5320.0	12.54	Right-cheek	0	0.058	0.131	---
	100	5500.0	12.12	Right-cheek	0	0.063	-0.148	---
	104	5520.0	12.12	Right-cheek	0	0.075	0.130	---
	116	5580.0	12.00	Right-cheek	0	0.075	-0.125	---
	124	5620.0	11.93	Right-cheek	0	0.087	0.169	---
	149	5745.0	11.44	Right-cheek	0	0.075	-0.002	---
	153	5765.0	11.43	Right-cheek	0	0.067	0.158	---
	157	5785.0	11.46	Right-cheek	0	0.072	0.158	---
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram			

Measurement Results								
Band	Frequency		Power (dBm)	Phantom Position	Spacing (mm)	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
	CH	MHz						
IEEE 802.11a Rate 6M	36	5180.0	12.64	Right-Tilted	0	0.022	-0.125	---
	40	5200.0	12.62	Right-Tilted	0	0.018	-0.079	---
	52	5260.0	12.52	Right-Tilted	0	0.017	-0.005	---
	64	5320.0	12.54	Right-Tilted	0	0.019	-0.135	---
	100	5500.0	12.12	Right-Tilted	0	0.021	-0.003	---
	104	5520.0	12.12	Right-Tilted	0	0.024	0.096	---
	116	5580.0	12.00	Right-Tilted	0	0.032	-0.136	---
	124	5620.0	11.93	Right-Tilted	0	0.027	-0.177	---
	149	5745.0	11.44	Right-Tilted	0	0.019	-0.188	---
	153	5765.0	11.43	Right-Tilted	0	0.016	-0.107	---
	157	5785.0	11.46	Right-Tilted	0	0.020	-0.023	---
	36	5180.0	12.64	Left-cheek	0	0.078	0.067	---
	40	5200.0	12.62	Left-cheek	0	0.089	0.014	---
	52	5260.0	12.52	Left-cheek	0	0.099	-0.098	---
	64	5320.0	12.54	Left-cheek	0	0.088	0.069	---
	100	5500.0	12.12	Left-cheek	0	0.117	0.053	---
	104	5520.0	12.12	Left-cheek	0	0.118	0.177	---
	116	5580.0	12.00	Left-cheek	0	0.139	0.170	---
	124	5620.0	11.93	Left-cheek	0	0.116	0.086	---
	149	5745.0	11.44	Left-cheek	0	0.135	0.084	---
	153	5765.0	11.43	Left-cheek	0	0.117	-0.013	---
	157	5785.0	11.46	Left-cheek	0	0.129	0.165	---
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram			

Measurement Results								
Band	Frequency		Power (dBm)	Phantom Position	Spacing (mm)	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
	CH	MHz						
IEEE 802.11a Rate 6M	36	5180.0	12.64	Left-Tilted	0	0.045	-0.011	---
	40	5200.0	12.62	Left-Tilted	0	0.022	-0.109	---
	52	5260.0	12.52	Left-Tilted	0	0.026	0.107	---
	64	5320.0	12.54	Left-Tilted	0	0.029	-0.181	---
	100	5500.0	12.12	Left-Tilted	0	0.041	-0.028	---
	104	5520.0	12.12	Left-Tilted	0	0.037	-0.130	---
	116	5580.0	12.00	Left-Tilted	0	0.040	-0.031	---
	124	5620.0	11.93	Left-Tilted	0	0.041	0.000	---
	149	5745.0	11.44	Left-Tilted	0	0.032	-0.191	---
	153	5765.0	11.43	Left-Tilted	0	0.027	0.014	---
	157	5785.0	11.46	Left-Tilted	0	0.028	-0.179	---
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population					1.6 W/kg (mW/g) Averaged over 1 gram			

10.2 Body SAR

Measurement Results									
Band	Frequency		Power (dBm)	Phantom Position	Spacing (mm)	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
	CH	MHz							
GSM 850 1Down1Up	251	848.8	33.24	Flat	10	Headset	0.401	-0.003	Back Surface to Phantom
	251	848.8	33.24	Flat	10	Headset	0.325	0.019	Front Surface to Phantom
GPRS 850 1Down4Up	128	824.2	31.32	Flat	10	N/A	0.433	0.028	Back Surface to Phantom
	128	824.2	31.32	Flat	10	N/A	0.424	-0.130	Front Surface to Phantom
	128	824.2	31.32	Flat	10	N/A	0.131	0.015	Edge Bottom to Phantom
	128	824.2	31.32	Flat	10	N/A	0.318	-0.045	Edge Right to Phantom
	128	824.2	31.32	Flat	10	N/A	0.625	-0.038	Edge Left to Phantom
DTM 850 GSM + GPRS 2Down3Up	128	824.2	32.45	Flat	10	Headset	0.432	-0.020	Back Surface to Phantom
	128	824.2	32.45	Flat	10	Headset	0.423	0.044	Front Surface to Phantom
GSM 1900 1Down1Up	810	1909.8	30.33	Flat	10	Headset	0.346	0.158	Back Surface to Phantom
	810	1909.8	30.33	Flat	10	Headset	0.162	-0.116	Front Surface to Phantom
GPRS 1900 1Down4Up	512	1850.2	28.33	Flat	10	N/A	0.955	-0.018	Back Surface to Phantom
	661	1880.0	28.30	Flat	10	N/A	0.981	0.054	Back Surface to Phantom
	810	1909.8	28.35	Flat	10	N/A	**1.010**	-0.020	Back Surface to Phantom
	810	1909.8	28.35	Flat	10	N/A	0.493	-0.052	Front Surface to Phantom
	810	1909.8	28.35	Flat	10	N/A	0.485	0.051	Edge Bottom to Phantom
	810	1909.8	28.35	Flat	10	N/A	0.106	0.051	Edge Right to Phantom
	810	1909.8	28.35	Flat	10	N/A	0.228	-0.047	Edge Left to Phantom
DTM 1900 GSM + GPRS 2Down3Up	512	1850.2	29.40	Flat	10	Headset	0.872	0.068	Back Surface to Phantom
	512	1850.2	29.40	Flat	10	Headset	0.621	0.078	Front Surface to Phantom
	661	1880.0	29.30	Flat	10	Headset	0.835	0.156	Back Surface to Phantom
	810	1909.8	29.30	Flat	10	Headset	0.818	0.022	Back Surface to Phantom
WCDMA Band II	9538	1907.6	23.29	Flat	10	N/A	0.726	-0.034	Back Surface to Phantom
	9538	1907.6	23.29	Flat	10	N/A	0.340	-0.034	Front Surface to Phantom
	9538	1907.6	23.29	Flat	10	N/A	0.309	0.019	Edge Bottom to Phantom
	9538	1907.6	23.29	Flat	10	N/A	0.066	0.027	Edge Right to Phantom
	9538	1907.6	23.29	Flat	10	N/A	0.152	-0.009	Edge Left to Phantom
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population						1.6 W/kg (mW/g) Averaged over 1 gram			

Measurement Results									
Band	Frequency		Power (dBm)	Phantom Position	Spacing (mm)	Accessory	SAR_{1g} [mW/g]	Power Drift (dB)	Remark
	CH	MHz							
WCDMA Band V	4183	836.6	23.56	Flat	10	N/A	0.267	0.002	Back Surface to Phantom
	4183	836.6	23.56	Flat	10	N/A	0.261	0.002	Front Surface to Phantom
	4183	836.6	23.56	Flat	10	N/A	0.073	0.030	Edge Bottom to Phantom
	4183	836.6	23.56	Flat	10	N/A	0.173	0.025	Edge Right to Phantom
	4183	836.6	23.56	Flat	10	N/A	0.313	-0.008	Edge Left to Phantom
IEEE 802.11b Rate 1M	11	2462.0	18.22	Flat	10	N/A	0.118	-0.090	Back Surface to Phantom
	11	2462.0	18.22	Flat	10	N/A	0.067	-0.086	Front Surface to Phantom
	11	2462.0	18.22	Flat	10	N/A	0.081	-0.019	Edge Top to Phantom
	11	2462.0	18.22	Flat	10	N/A	0.072	-0.119	Edge Right to Phantom
IEEE 802.11a Rate 6M	36	5180.0	12.64	Flat	10	Headset	0.099	-0.038	Back Surface to Phantom
	40	5200.0	12.62	Flat	10	Headset	0.071	-0.024	Back Surface to Phantom
	52	5260.0	12.52	Flat	10	Headset	0.075	-0.036	Back Surface to Phantom
	64	5320.0	12.54	Flat	10	Headset	0.077	-0.013	Back Surface to Phantom
	100	5500.0	12.12	Flat	10	Headset	0.111	-0.146	Back Surface to Phantom
	104	5520.0	12.12	Flat	10	Headset	0.138	0.026	Back Surface to Phantom
	116	5580.0	12.00	Flat	10	Headset	0.179	-0.046	Back Surface to Phantom
	124	5620.0	11.93	Flat	10	Headset	0.213	-0.183	Back Surface to Phantom
	124	5620.0	11.93	Flat	10	Headset	0.076	-0.099	Front Surface to Phantom
	149	5745.0	11.44	Flat	10	Headset	0.144	0.077	Back Surface to Phantom
	153	5765.0	11.43	Flat	10	Headset	0.144	-0.132	Back Surface to Phantom
	157	5785.0	11.46	Flat	10	Headset	0.131	-0.013	Back Surface to Phantom
Bluetooth 3.0	78	2480.0	-1.69	Flat	10	N/A	0.028	0.000	Back Surface to Phantom
	78	2480.0	-1.69	Flat	10	N/A	0.004	0.000	Front Surface to Phantom
Bluetooth 4.0	40	2480.0	-2.49	Flat	10	N/A	0.018	0.121	Back Surface to Phantom
	40	2480.0	-2.49	Flat	10	N/A	0.003	0.000	Front Surface to Phantom
Std. C95.1-1999 - Safety Limit Spatial Peak Uncontrolled Exposure/General Population						1.6 W/kg (mW/g) Averaged over 1 gram			

Notes:

1. The test data reported are the worst-case SAR value with the position set in a typical configuration. Test procedures used were according to FCC/OET Bulletin 65, Supplement C [June 2001], IEEE1528-2003 and RSS-102.
2. All modes of operation were investigated, and worst-case results are reported.
3. Tissue parameters and temperatures are listed on the SAR plots.
4. Batteries are fully charged for all readings.
5. If the Channel's SAR 1g of maximum conducted power is > 0.8 mW/g, low, middle and high channel are supposed to be tested.
6. If the conducted power of (802.11g and 802.11n) are higher than 802.11b 0.25dB, (802.11g and 802.11n) are supposed to be tested.
7. For hot-spot mode, the main antenna location to edge >2.5 cm, therefore test Edge Top is not required.
8. For hot-spot mode, the Wi-Fi antenna location to edge >2.5 cm, therefore test (Edge Left and Edge Bottom) are not required.

10.3 Std. C95.1-1999 RF Exposure Limit

Human Exposure	Population Uncontrolled Exposure (W/kg) or (mW/g)	Occupational Controlled Exposure (W/kg) or (mW/g)
Spatial Peak SAR* (head)	1.60	8.00
Spatial Peak SAR** (Whole Body)	0.08	0.40
Spatial Peak SAR*** (Partial-Body)	1.60	8.00
Spatial Peak SAR**** (Hands / Feet / Ankle / Wrist)	4.00	20.00

Table 15. Safety Limits for Partial Body Exposure

Notes：

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

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

******* The Spatial Average value of the SAR averaged over the partial – body.

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

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

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

11. Conclusion

The SAR test values found for the portable mobile phone **HTC Corporation Trade Name：HTC Model(s)：PJ46100** is below the maximum recommended level of 1.6 W/kg (mW/g).

12. References

[1] Std. C95.1-1999, "*American National Standard safety levels with respect to human exposure to radio frequency electromagnetic fields, 300KHz to 100GHz",* New York.

[2] NCRP, National Council on Radiation Protection and Measurements, "*Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields"*, NCRP report NO. 86, 1986.

[3] T. Schmid, O. Egger, and N. Kuster, "*Automatic E-field scanning system for dosimetric assessments*", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp, 105-113, Jan. 1996.

[4] K. Pokovi ć, T. Schmid, and N. Kuster, "*Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequency*", in ICECOM'97, Dubrovnik, October 15-17, 1997, pp.120-124.

[5] K. Pokovi ć, T. Schmid, and N. Kuster, "*E-field probe with improved isotropy in brain simulating liquids*", in Proceedings of the ELMAR, Zadar, Croatia, 23-25 June, 1996, pp.172-175.

[6] N. Kuster, and Q. Balzano, "*Energy absorption mechanism by biological bodies in the near field of dipole antennas above 300MHz"*, IEEE Transaction on Vehicular Technology, vol. 41, no. 1, Feb. 1992, pp. 17-23.

[7] Robert J. Renka, "*Multivariate Interpolation Of Large Sets Of Scattered Data*", University of North Texas ACM Transactions on Mathematical Software, vol. 14, no. 2, June 1988 , pp. 139-148.

[8] N. Kuster, R. Kastle, T. Schmid, *Dosimetric evaluation of mobile communications equipment with known precision*, IEEE Transaction on Communications, vol. E80-B, no. 5, May 1997, pp. 645-652.

[9] Std. C95.3-1991, "*IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields – RF and Microwave,* New York: IEEE, Aug. 1992.

[10] CENELEC CLC/SC111B, European Prestandard (prENV 50166-2), *Human Exposure to Electromagnetic Fields High-frequency*: 10KHz-300GHz, Jan. 1995.

[11] KDB248227 D01 SAR meas for 802 11 a b g v01r02.

[12] KDB 648474 D01 SAR Handsets Multi Xmiter and Ant v01r05

[13] KDB 941225 D01 SAR Test for 3G Devices 3G-SAR

[14] KDB 941225 D03 SAR Test Reduction GSM GPRS EDGE

[15] KDB 941225 D04 SAR for GSM E GPRS Dual Xfer Mode v01

[16] KDB 941225 D06 Hot Spot SAR v01

Appendix A - System Performance Check

Date/Time: 2012/2/11 PM 01:46:52

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 835MHz_20120211_Head

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

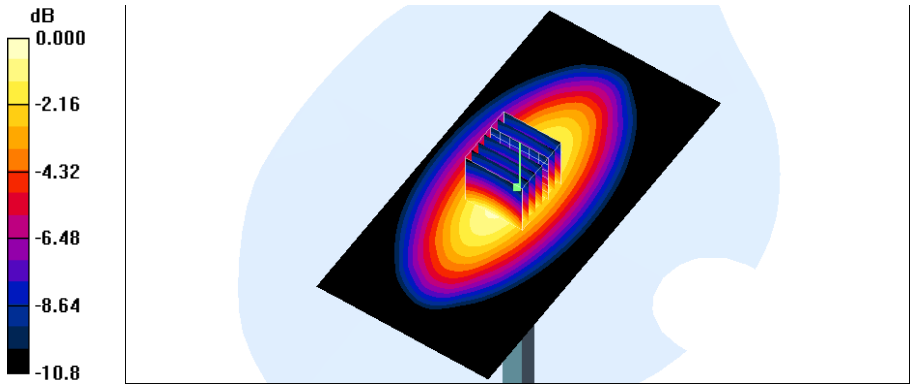
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.904 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 835MHz/Area Scan (61x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.79 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.5 V/m; Power Drift = 0.055 dB
Peak SAR (extrapolated) = 3.71 W/kg
SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.56 mW/g
Maximum value of SAR (measured) = 2.81 mW/g



0 dB = 2.81mW/g

Date/Time: 2012/2/12 AM 09:29:12

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 1900MHz_20120212_Head

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

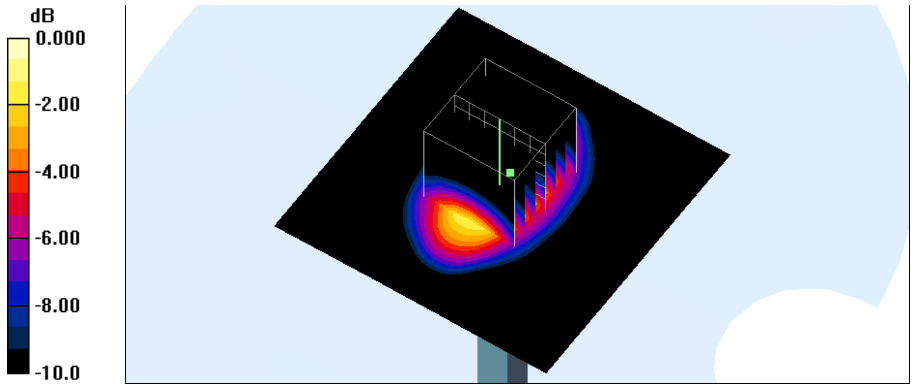
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.37 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 1900MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.4 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 100.4 V/m; Power Drift = -0.003 dB
Peak SAR (extrapolated) = 18.4 W/kg
SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.26 mW/g
Maximum value of SAR (measured) = 12.8 mW/g



0 dB = 12.8mW/g

Date/Time: 2012/2/12 PM 10:26:03

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 2450MHz_20120212_Head

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:712

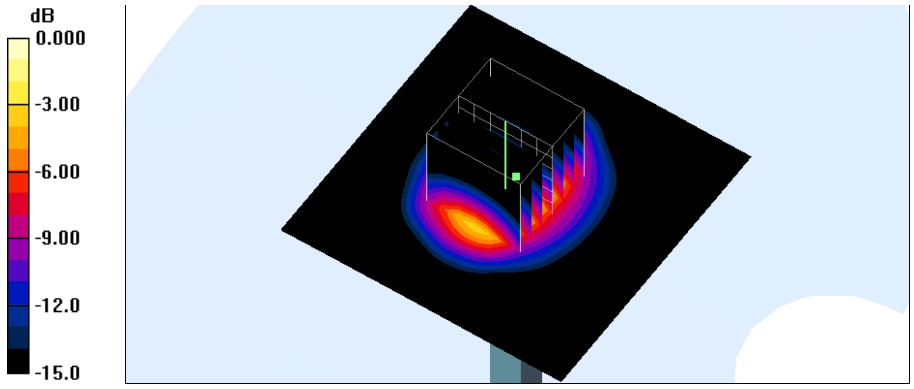
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.8 mho/m; ε_r = 39.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.52, 4.52, 4.52); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 2450MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 18.0 mW/g

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 97.3 V/m; Power Drift = -0.006 dB
Peak SAR (extrapolated) = 27.2 W/kg
SAR(1 g) = 13 mW/g; SAR(10 g) = 5.97 mW/g
Maximum value of SAR (measured) = 17.1 mW/g



0 dB = 17.1mW/g

Date/Time: 2012/2/13 PM 01:44:46

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5200MHz_20120213_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

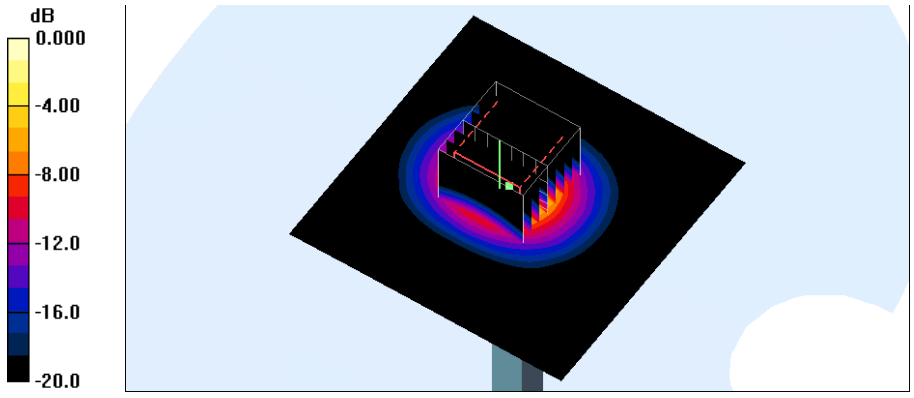
Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5200MHz/Area Scan (91x91x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 16.7 mW/g

System Performance Check at 5200MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 55.9 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 33.2 W/kg
SAR(1 g) = 8.14 mW/g; SAR(10 g) = 2.35 mW/g
Maximum value of SAR (measured) = 15.7 mW/g



0 dB = 15.7mW/g

Date/Time: 2012/2/14 PM 02:55:48

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5200MHz_20120214_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

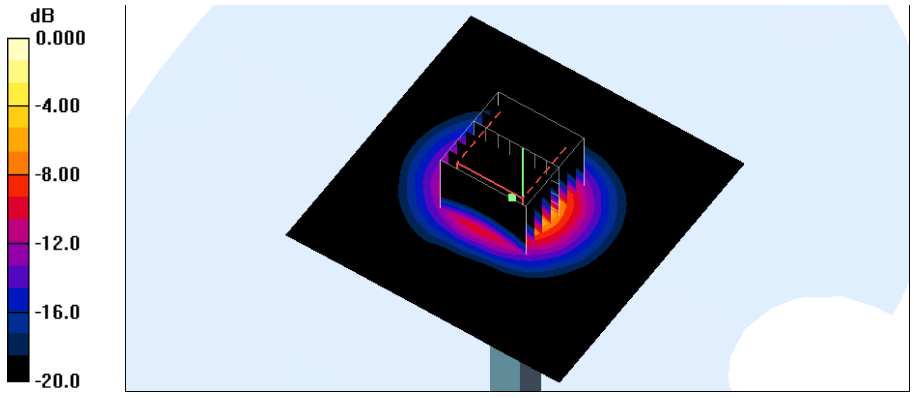
Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5200MHz/Area Scan (91x91x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.8 mW/g

System Performance Check at 5200MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 66.0 V/m; Power Drift = 0.020 dB
Peak SAR (extrapolated) = 34.4 W/kg
SAR(1 g) = 8.44 mW/g; SAR(10 g) = 2.46 mW/g
Maximum value of SAR (measured) = 16.5 mW/g



0 dB = 16.5mW/g

Date/Time: 2012/2/15 PM 10:11:56

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5200MHz_20120215_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

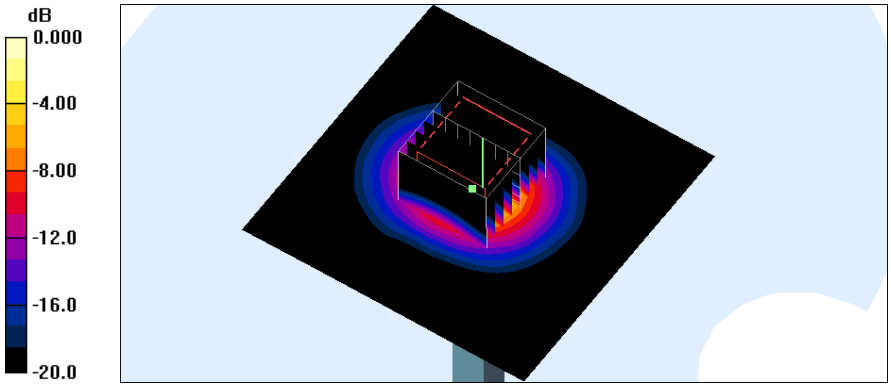
Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5200MHz/Area Scan (91x91x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.2 mW/g

System Performance Check at 5200MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 62.8 V/m; Power Drift = 0.186 dB
Peak SAR (extrapolated) = 34.7 W/kg
SAR(1 g) = 8.44 mW/g; SAR(10 g) = 2.47 mW/g
Maximum value of SAR (measured) = 16.9 mW/g



0 dB = 16.9mW/g

Date/Time: 2012/2/13 PM 02:34:25

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5500MHz_20120213_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

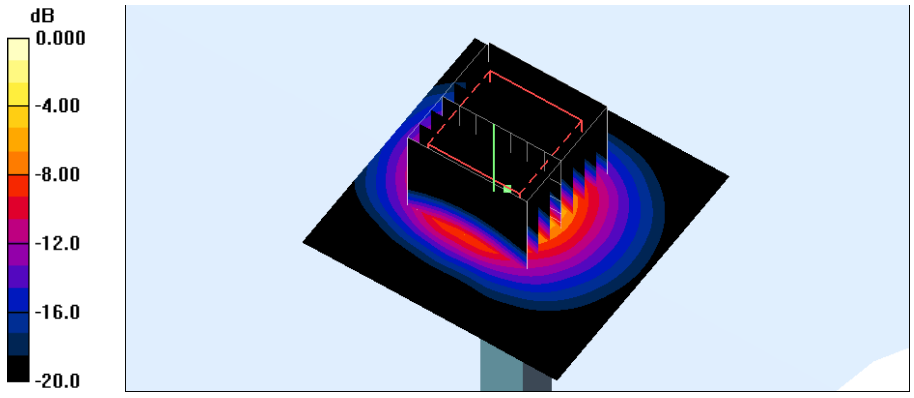
Communication System: CW; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5500MHz/Area Scan (61x61x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 19.4 mW/g

System Performance Check at 5500MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 57.7 V/m; Power Drift = 0.034 dB
Peak SAR (extrapolated) = 37.6 W/kg
SAR(1 g) = 8.6 mW/g; SAR(10 g) = 2.46 mW/g
Maximum value of SAR (measured) = 17.1 mW/g



0 dB = 17.1mW/g

Date/Time: 2012/2/14 PM 04:46:59

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5500MHz_20120214_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

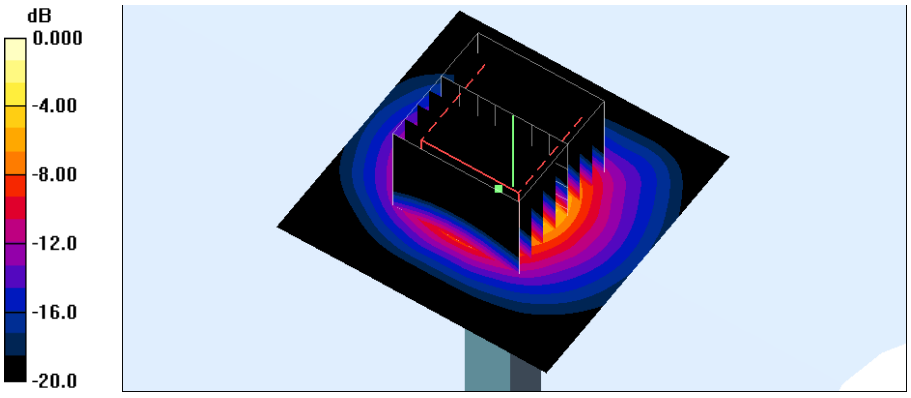
Communication System: CW; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5500MHz/Area Scan (61x61x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.0 mW/g

System Performance Check at 5500MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 64.6 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 36.5 W/kg
SAR(1 g) = 8.51 mW/g; SAR(10 g) = 2.44 mW/g
Maximum value of SAR (measured) = 16.9 mW/g



0 dB = 16.9mW/g

Date/Time: 2012/2/15 PM 08:07:54

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5500MHz_20120215_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

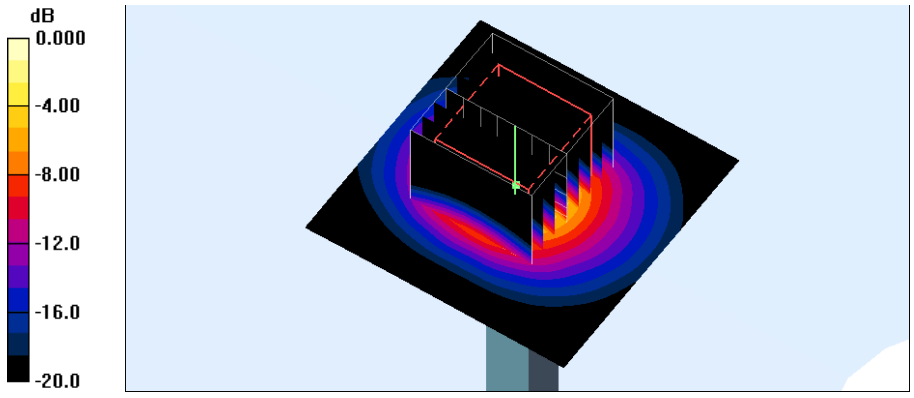
Communication System: CW; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5500MHz/Area Scan (61x61x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.4 mW/g

System Performance Check at 5500MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 63.0 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 38.4 W/kg
SAR(1 g) = 8.73 mW/g; SAR(10 g) = 2.5 mW/g
Maximum value of SAR (measured) = 18.0 mW/g



0 dB = 18.0mW/g

Date/Time: 2012/2/13 PM 02:57:05

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5800MHz_20120213_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

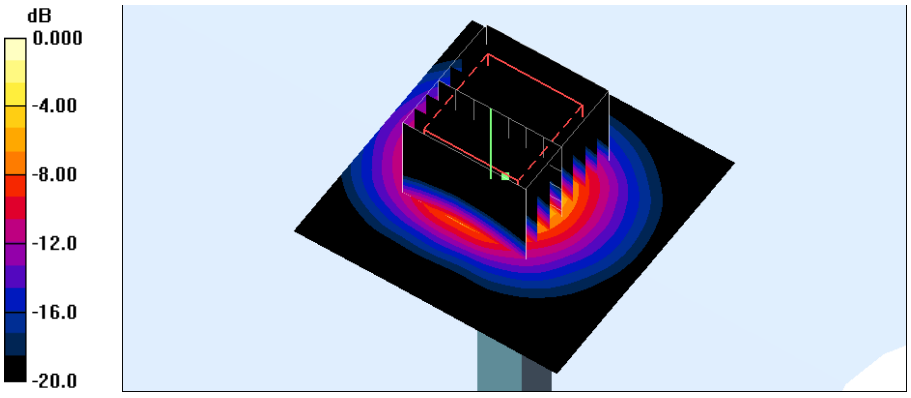
Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.24 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5800MHz/Area Scan (61x61x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.7 mW/g

System Performance Check at 5800MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 56.4 V/m; Power Drift = 0.046 dB
Peak SAR (extrapolated) = 36.3 W/kg
SAR(1 g) = 8.36 mW/g; SAR(10 g) = 2.4 mW/g
Maximum value of SAR (measured) = 16.7 mW/g



0 dB = 16.7mW/g

Date/Time: 2012/2/14 PM 05:08:33

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5800MHz_20120214_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

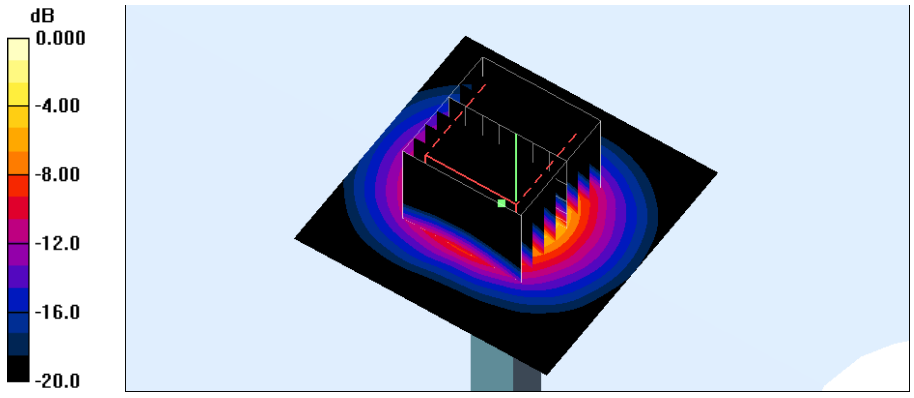
Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.24 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5800MHz/Area Scan (61x61x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.8 mW/g

System Performance Check at 5800MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 63.5 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 35.2 W/kg
SAR(1 g) = 8.2 mW/g; SAR(10 g) = 2.34 mW/g
Maximum value of SAR (measured) = 16.4 mW/g



0 dB = 16.4mW/g

Date/Time: 2012/2/15 PM 07:43:53

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5800MHz_20120215_Head

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1021

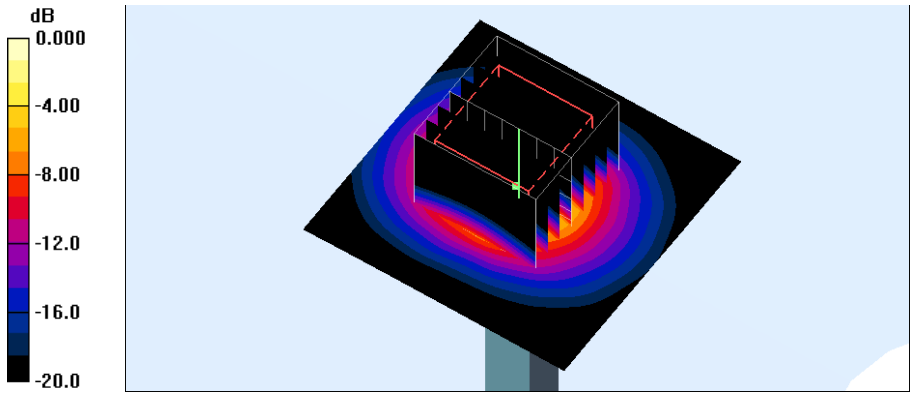
Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 5.24 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5800MHz/Area Scan (61x61x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 17.0 mW/g

System Performance Check at 5800MHz/Zoom Scan (8x8x6)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2mm
Reference Value = 61.7 V/m; Power Drift = 0.149 dB
Peak SAR (extrapolated) = 35.0 W/kg
SAR(1 g) = 8.19 mW/g; SAR(10 g) = 2.37 mW/g
Maximum value of SAR (measured) = 16.2 mW/g



0 dB = 16.2mW/g

Date/Time: 2012/2/10 PM 07:38:33

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 835MHz_20120210_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

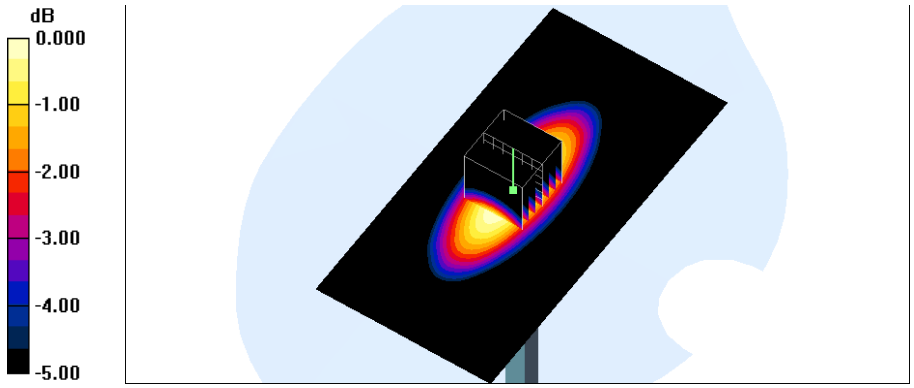
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.985 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 835MHz/Area Scan (61x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.98 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.7 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 3.62 W/kg
SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.55 mW/g
Maximum value of SAR (measured) = 2.78 mW/g



0 dB = 2.78mW/g

Date/Time: 2012/2/29 PM 07:53:22

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 835MHz_20120229_Body

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d082

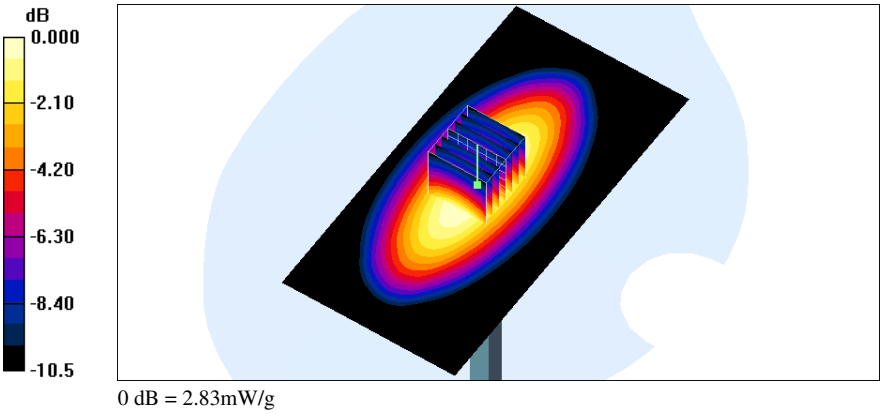
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.985 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 835MHz/Area Scan (61x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.04 mW/g

System Performance Check at 835MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.2 V/m; Power Drift = -0.110 dB
Peak SAR (extrapolated) = 3.70 W/kg
SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.56 mW/g
Maximum value of SAR (measured) = 2.83 mW/g



0 dB = 2.83mW/g

Date/Time: 2012/2/9 PM 03:05:18

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 1900MHz_20120209_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

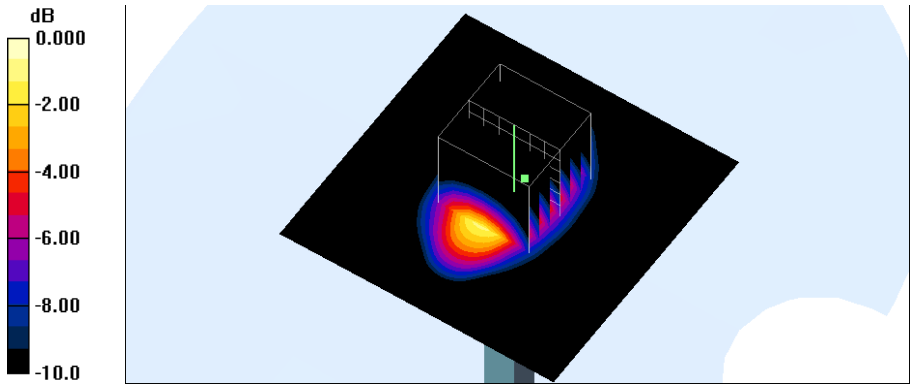
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.5 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 1900MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.2 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.6 V/m; Power Drift = 0.073 dB
Peak SAR (extrapolated) = 18.2 W/kg
SAR(1 g) = 10 mW/g; SAR(10 g) = 5.19 mW/g
Maximum value of SAR (measured) = 12.9 mW/g



0 dB = 12.9mW/g

Date/Time: 2012/2/10 PM 03:03:20

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 1900MHz_20120210_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

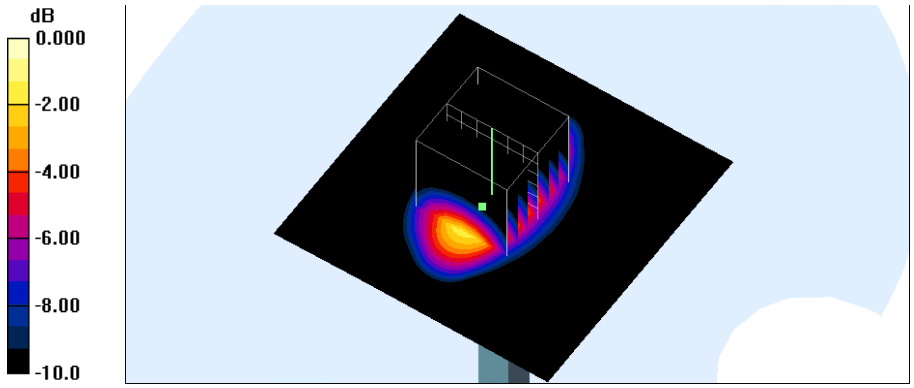
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.5 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 1900MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.4 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.2 V/m; Power Drift = -0.104 dB
Peak SAR (extrapolated) = 18.3 W/kg
SAR(1 g) = 10 mW/g; SAR(10 g) = 5.15 mW/g
Maximum value of SAR (measured) = 12.8 mW/g



0 dB = 12.8mW/g

Date/Time: 2012/2/29 PM 01:43:20

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 1900MHz_20120229_Body

DUT: Dipole D1900V2_SN5d111; Type: D1900V2; Serial: D1900V2 - SN:5d111

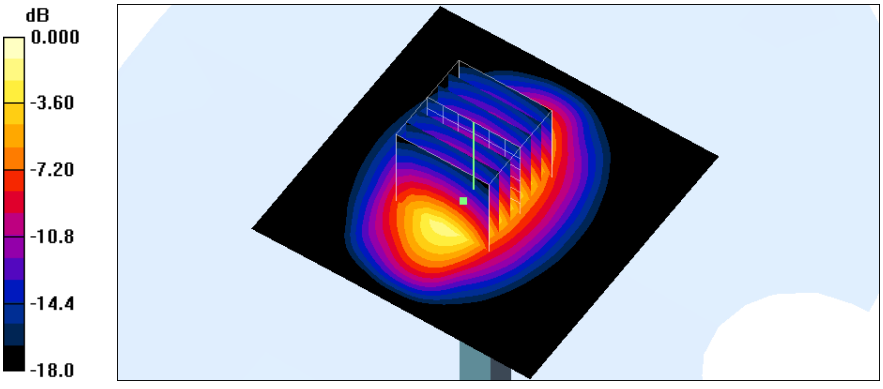
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.5 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 1900MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 13.8 mW/g

System Performance Check at 1900MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.7 V/m; Power Drift = -0.107 dB
Peak SAR (extrapolated) = 19.1 W/kg
SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.26 mW/g
Maximum value of SAR (measured) = 13.3 mW/g



0 dB = 13.3mW/g

Date/Time: 2012/2/13 AM 03:03:14

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 2450MHz_20120213_Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:712

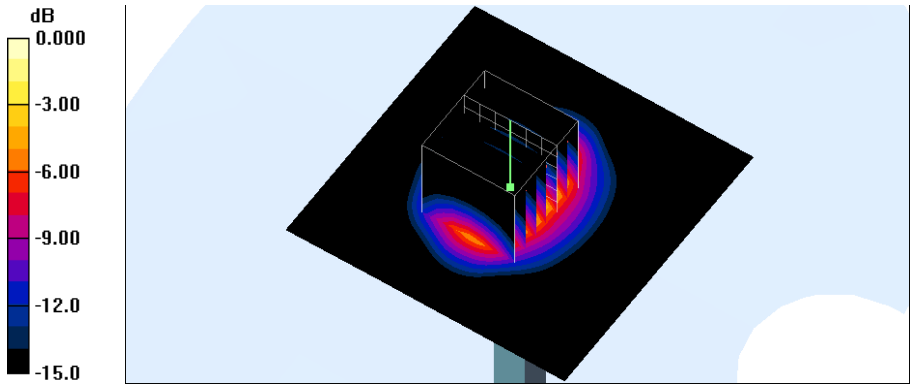
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.94 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 2450MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.4 mW/g

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.4 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 28.7 W/kg
SAR(1 g) = 13 mW/g; SAR(10 g) = 5.89 mW/g
Maximum value of SAR (measured) = 17.2 mW/g



0 dB = 17.2mW/g

Date/Time: 2012/2/19 PM 10:14:33

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 2450MHz_20120219_Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:712

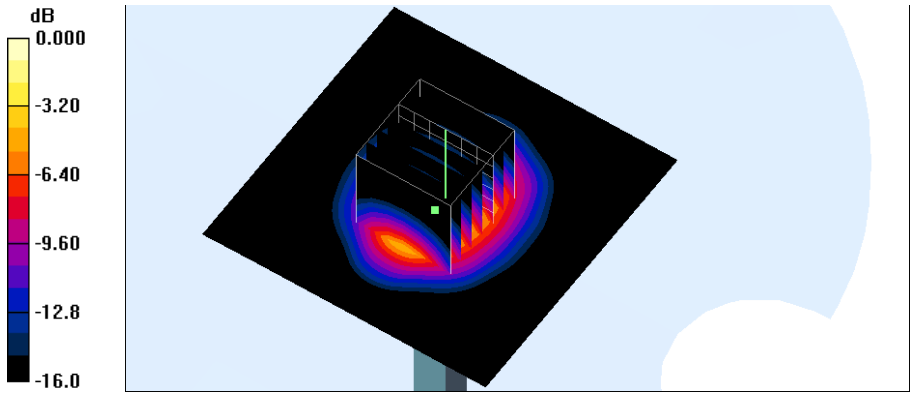
Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2450 MHz; σ = 1.94 mho/m; ε_r = 51.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 2450MHz/Area Scan (61x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 17.6 mW/g

System Performance Check at 2450MHz/Zoom Scan (7x7x7)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 94.8 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 29.0 W/kg
SAR(1 g) = 12.8 mW/g; SAR(10 g) = 5.69 mW/g
Maximum value of SAR (measured) = 17.0 mW/g



0 dB = 17.0mW/g

Date/Time: 2012/3/01 PM 01:48:29

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5200MHz_20120301_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1023

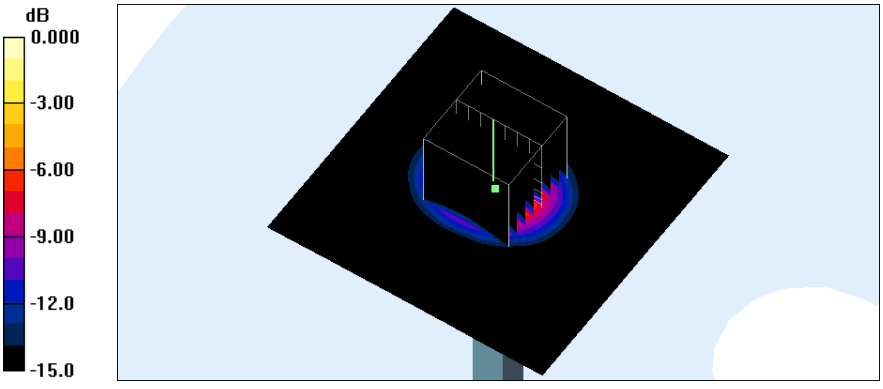
Communication System: CW; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 5.52 mho/m; ε_r = 47.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.3, 4.3, 4.3); Calibrated: 2012/1/4
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5200MHz/Area Scan (91x91x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.7 mW/g

System Performance Check at 5200MHz/Zoom Scan (8x8x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 57.5 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 31.5 W/kg
SAR(1 g) = 7.42 mW/g; SAR(10 g) = 2.1 mW/g
Maximum value of SAR (measured) = 18.1 mW/g



0 dB = 18.1mW/g

Date/Time: 2012/3/1 PM 02:21:23

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5500MHz_20120301_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1023

Communication System: CW; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 5.9 mho/m; ε_r = 47.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

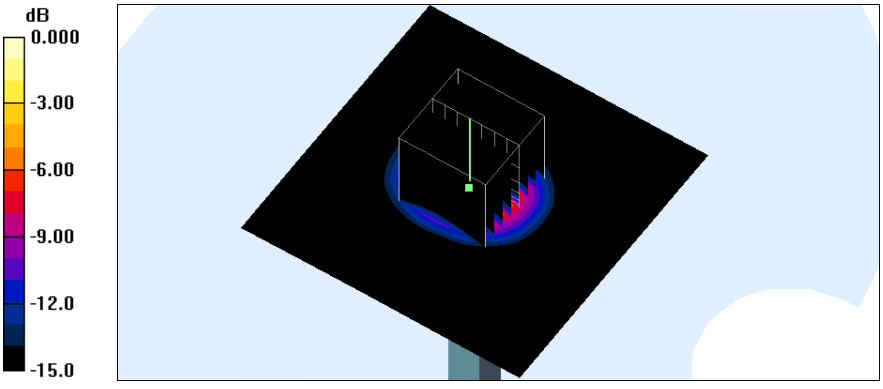
- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.67, 3.67, 3.67); Calibrated: 2012/1/4
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5500MHz/Area Scan (91x91x1):

Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.8 mW/g

System Performance Check at 5500MHz/Zoom Scan (8x8x7)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 67.1 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 33.1 W/kg
SAR(1 g) = 7.72 mW/g; SAR(10 g) = 2.17 mW/g
Maximum value of SAR (measured) = 18.8 mW/g



0 dB = 18.8mW/g

Date/Time: 2012/3/01 PM 04:38:36

Test Laboratory: A Test Lab Techno Corp.

System Performance Check at 5800MHz_20120301_Body

DUT: Dipole 5GHzV2; Type: D5GHz; Serial: 1023

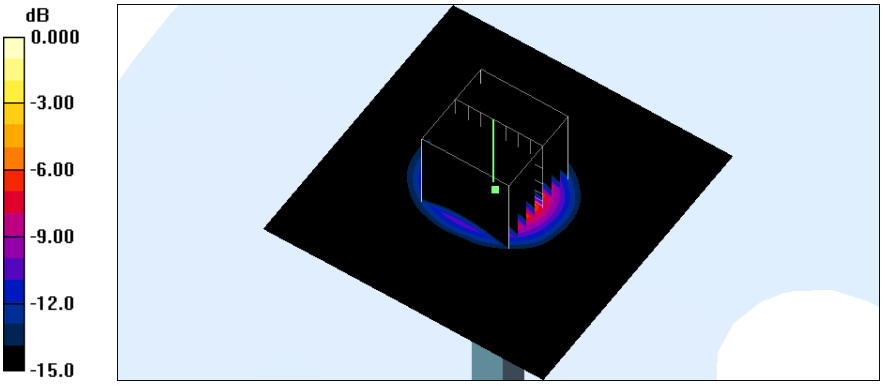
Communication System: CW; Frequency: 5800 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5800 MHz; σ = 6.27 mho/m; ε_r = 46.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.86, 3.86, 3.86); Calibrated: 2012/1/4
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

System Performance Check at 5800MHz/Area Scan (91x91x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 18.3 mW/g

System Performance Check at 5800MHz/Zoom Scan (8x8x7)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 63.5 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 32.8 W/kg
SAR(1 g) = 7.23 mW/g; SAR(10 g) = 2.06 mW/g
Maximum value of SAR (measured) = 17.3 mW/g



0 dB = 17.3mW/g

Appendix B - SAR Measurement Data

Date/Time: 2012/2/11 PM 09:30:36

Test Laboratory: A Test Lab Techno Corp.

RC_GSM850 CH251

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

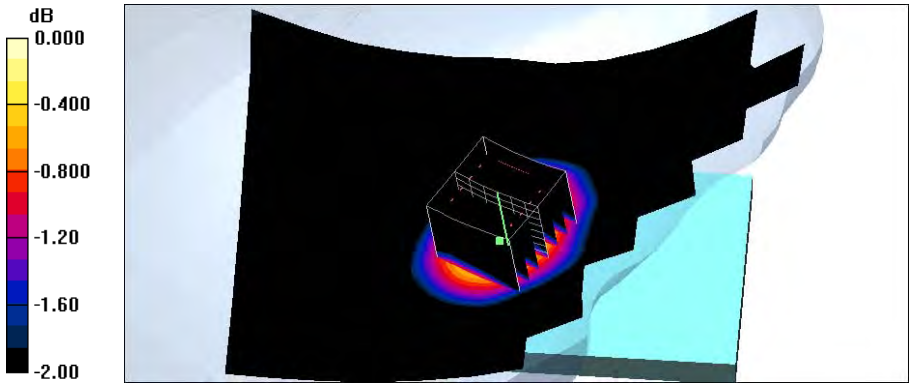
Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.918 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.168 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.52 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.199 W/kg
SAR(1 g) = 0.153 mW/g; SAR(10 g) = 0.115 mW/g
Maximum value of SAR (measured) = 0.167 mW/g



0 dB = 0.167mW/g

Date/Time: 2012/2/11 PM 09:56:20

Test Laboratory: A Test Lab Techno Corp.

RT_GSM850 CH251

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

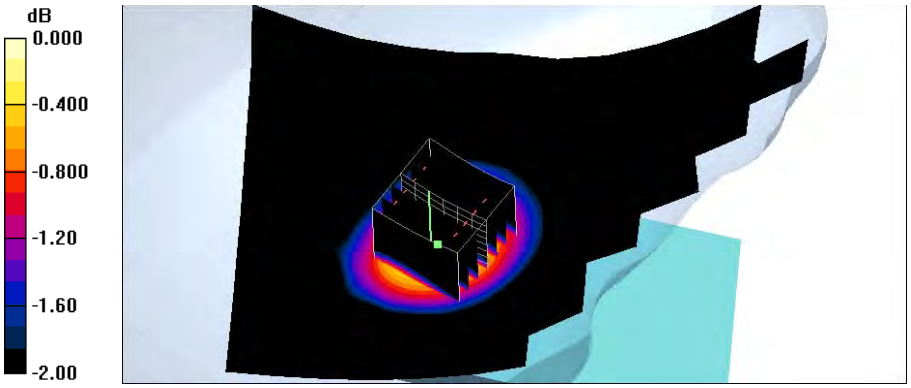
Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.918 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.104 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.08 V/m; Power Drift = 0.084 dB
Peak SAR (extrapolated) = 0.123 W/kg
SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.073 mW/g
Maximum value of SAR (measured) = 0.105 mW/g



0 dB = 0.105mW/g

Date/Time: 2012/2/12 AM 12:59:31

Test Laboratory: A Test Lab Techno Corp.

LC_GSM850 CH251

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

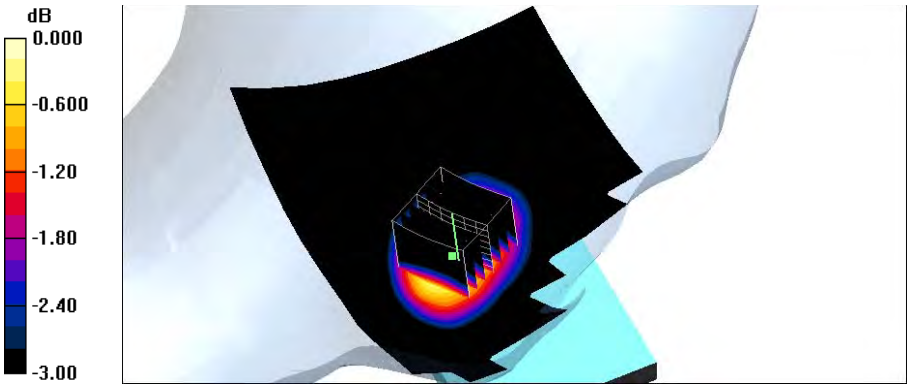
Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.918 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.224 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 5.08 V/m; Power Drift = 0.148 dB
Peak SAR (extrapolated) = 0.271 W/kg
SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.150 mW/g
Maximum value of SAR (measured) = 0.226 mW/g



0 dB = 0.226mW/g

Date/Time: 2012/2/12 AM 12:33:33

Test Laboratory: A Test Lab Techno Corp.

LT_GSM850 CH251

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

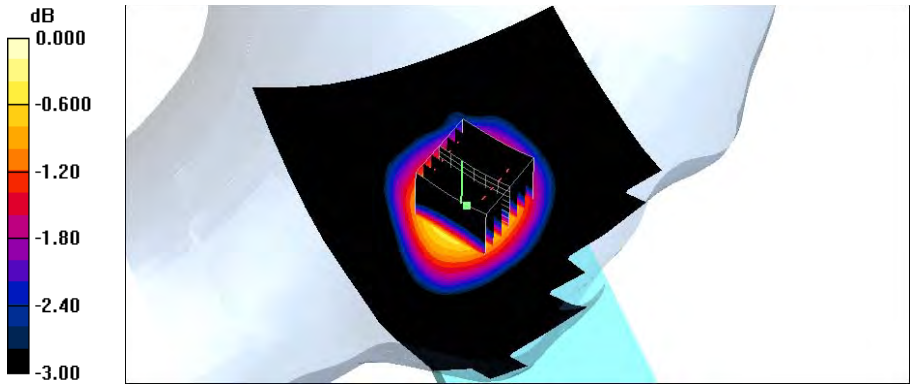
Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 0.918 mho/m; ε_r = 41; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.117 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.61 V/m; Power Drift = 0.047 dB
Peak SAR (extrapolated) = 0.139 W/kg
SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.081 mW/g
Maximum value of SAR (measured) = 0.118 mW/g



0 dB = 0.118mW/g

Date/Time: 2012/2/11 PM 02:19:42

Test Laboratory: A Test Lab Techno Corp.

RC_GPRS 850 CH128_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

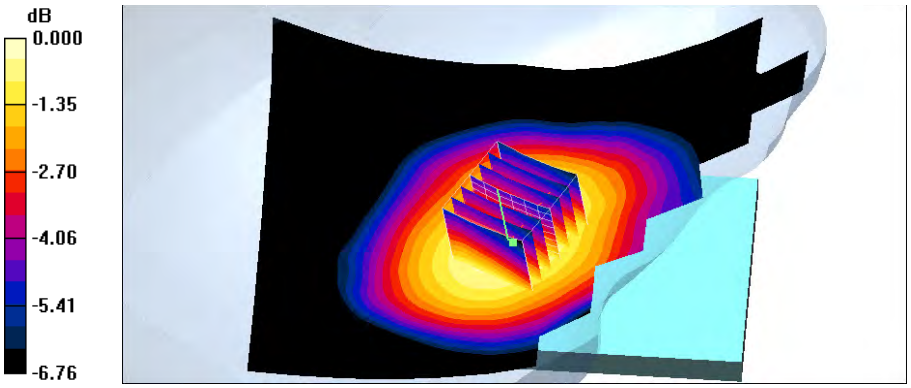
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.201 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.09 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 0.242 W/kg
SAR(1 g) = 0.184 mW/g; SAR(10 g) = 0.140 mW/g
Maximum value of SAR (measured) = 0.202 mW/g



0 dB = 0.202mW/g

Date/Time: 2012/2/11 PM 03:54:48

Test Laboratory: A Test Lab Techno Corp.

RT_GPRS 850 CH128_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

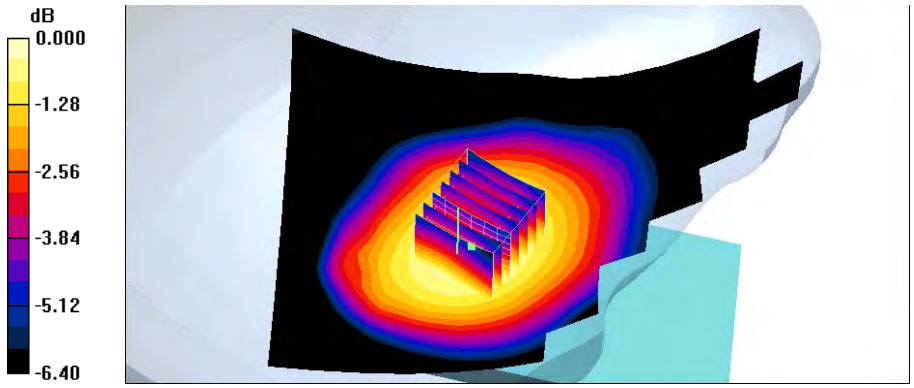
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.128 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.19 V/m; Power Drift = 0.106 dB
Peak SAR (extrapolated) = 0.149 W/kg
SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.092 mW/g
Maximum value of SAR (measured) = 0.128 mW/g



0 dB = 0.128mW/g

Date/Time: 2012/2/11 PM 05:10:16

Test Laboratory: A Test Lab Techno Corp.

LC_GPRS 850 CH128_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

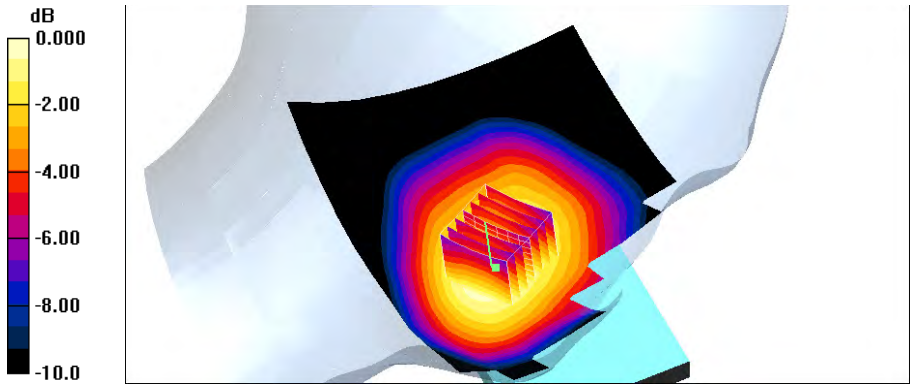
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.345 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.89 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.439 W/kg
SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.233 mW/g
Maximum value of SAR (measured) = 0.345 mW/g



0 dB = 0.345mW/g

Date/Time: 2012/2/11 PM 05:37:19

Test Laboratory: A Test Lab Techno Corp.

LT_GPRS 850 CH128_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

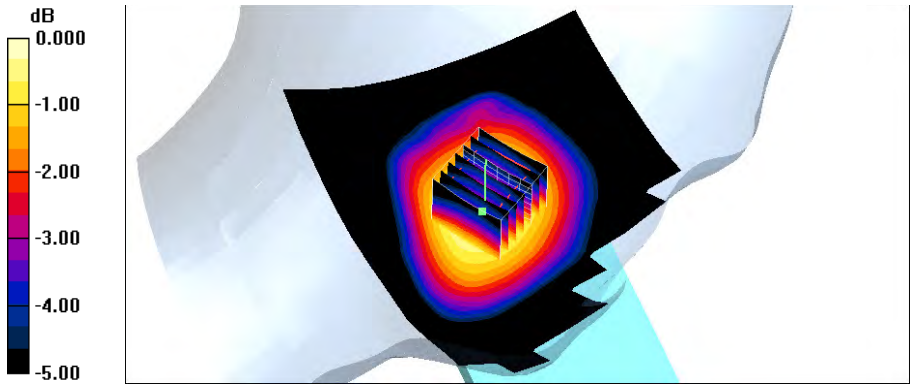
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.196 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 10.1 V/m; Power Drift = 0.172 dB
Peak SAR (extrapolated) = 0.233 W/kg
SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.138 mW/g
Maximum value of SAR (measured) = 0.197 mW/g



0 dB = 0.197mW/g

Date/Time: 2012/2/11 PM 06:23:33

Test Laboratory: A Test Lab Techno Corp.

RC_DTM 850 CH128_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

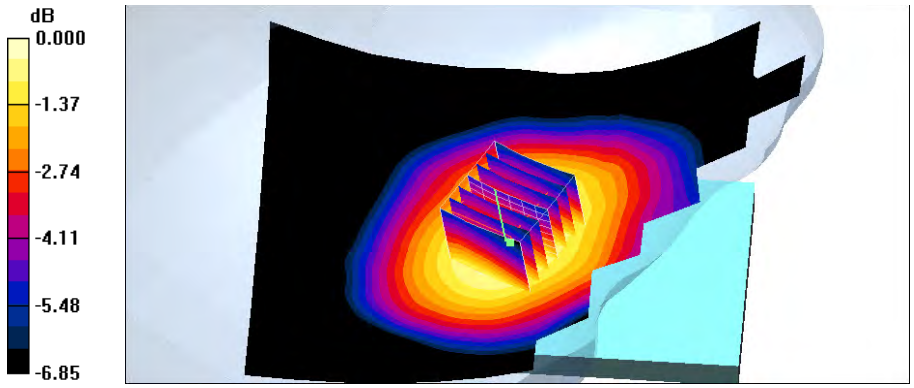
Communication System: DTM 850 (2Down, 3Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.200 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 5.63 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.377 W/kg
SAR(1 g) = 0.183 mW/g; SAR(10 g) = 0.137 mW/g
Maximum value of SAR (measured) = 0.199 mW/g



0 dB = 0.199mW/g

Date/Time: 2012/2/11 PM 06:50:14

Test Laboratory: A Test Lab Techno Corp.

RT_DTM 850 CH128_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

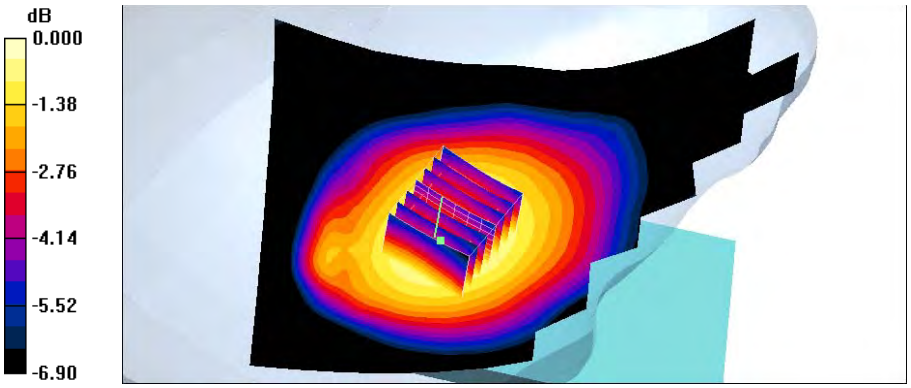
Communication System: DTM 850 (2Down, 3Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.134 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.70 V/m; Power Drift = 0.114 dB
Peak SAR (extrapolated) = 0.159 W/kg
SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.095 mW/g
Maximum value of SAR (measured) = 0.136 mW/g



0 dB = 0.136mW/g

Date/Time: 2012/2/11 PM 07:47:43

Test Laboratory: A Test Lab Techno Corp.

LC_DTM 850 CH128_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

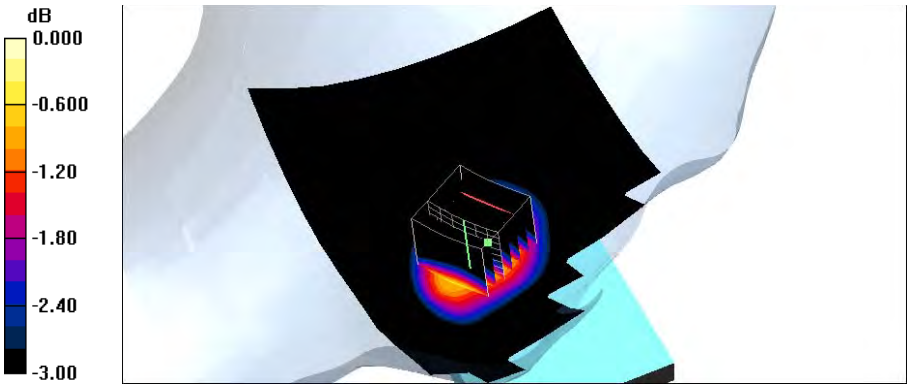
Communication System: DTM 850 (2Down, 3Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.311 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.28 V/m; Power Drift = -0.129 dB
Peak SAR (extrapolated) = 0.402 W/kg
SAR(1 g) = 0.301 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.334 mW/g



0 dB = 0.334mW/g

Date/Time: 2012/2/11 PM 10:55:53

Test Laboratory: A Test Lab Techno Corp.

LT_DTM 850 CH128_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

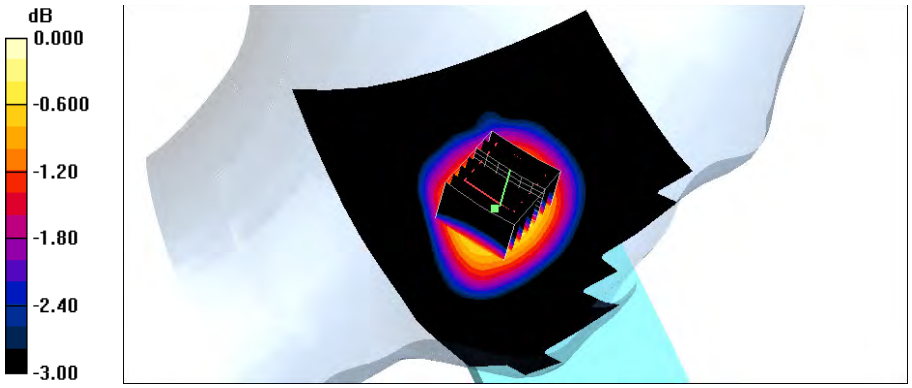
Communication System: DTM 850 (2Down, 3Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.894 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.103 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.53 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 0.120 W/kg
SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.072 mW/g
Maximum value of SAR (measured) = 0.102 mW/g



0 dB = 0.102mW/g

Date/Time: 2012/2/12 PM 03:26:37

Test Laboratory: A Test Lab Techno Corp.

RC_GSM PCS CH810

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

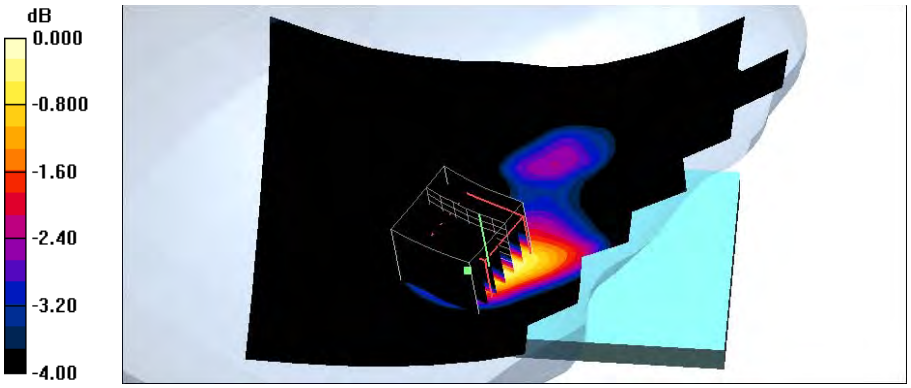
Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.156 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.53 V/m; Power Drift = -0.054 dB
Peak SAR (extrapolated) = 0.200 W/kg
SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.078 mW/g
Maximum value of SAR (measured) = 0.154 mW/g



0 dB = 0.154mW/g

Date/Time: 2012/2/12 PM 04:31:08

Test Laboratory: A Test Lab Techno Corp.

RT_GSM PCS CH810

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

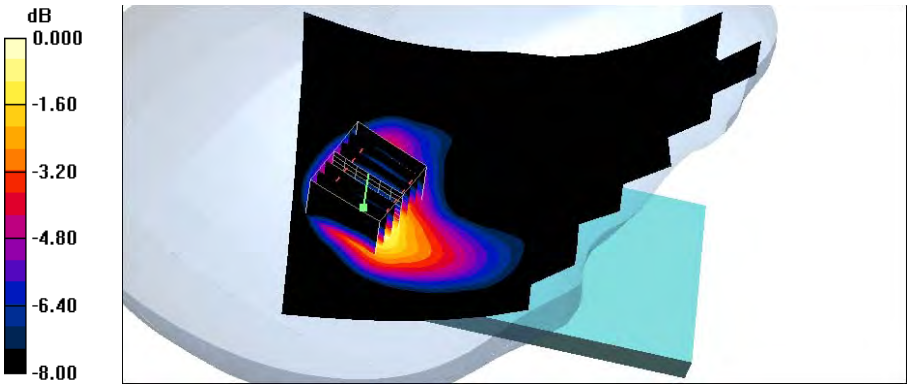
Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.119 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.82 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 0.145 W/kg
SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.056 mW/g
Maximum value of SAR (measured) = 0.117 mW/g



0 dB = 0.117mW/g

Date/Time: 2012/2/12 PM 05:03:01

Test Laboratory: A Test Lab Techno Corp.

LC_GSM PCS CH810

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

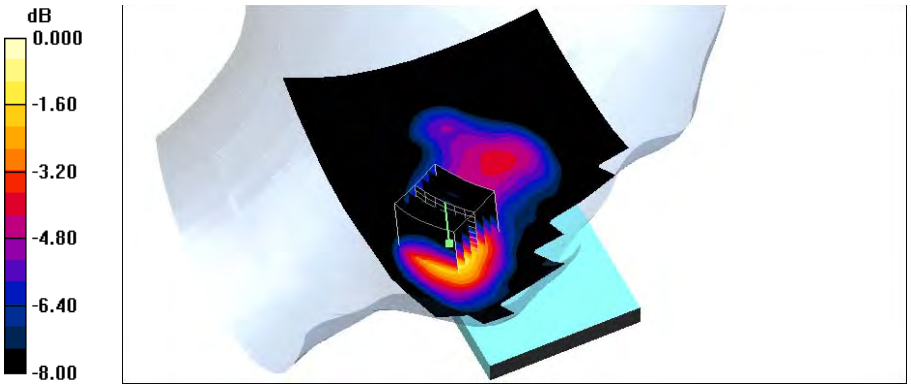
Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.222 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.68 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.274 W/kg
SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.106 mW/g
Maximum value of SAR (measured) = 0.216 mW/g



0 dB = 0.216mW/g

Date/Time: 2012/2/12 PM 05:29:44

Test Laboratory: A Test Lab Techno Corp.

LT_GSM PCS CH810

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

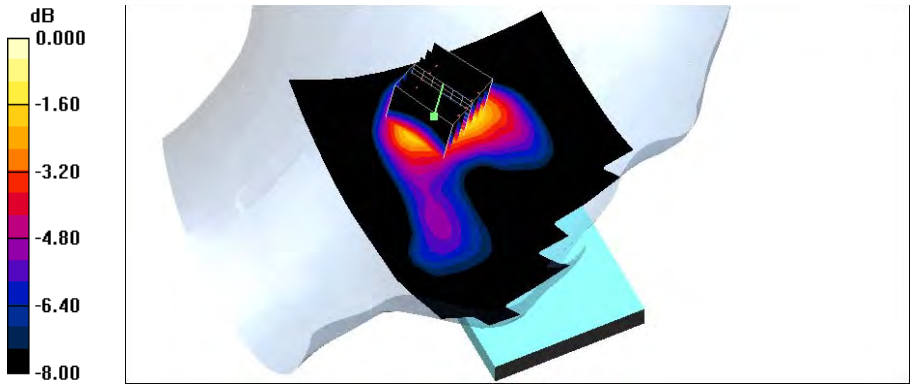
Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.102 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.09 V/m; Power Drift = 0.049 dB
Peak SAR (extrapolated) = 0.124 W/kg
SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.048 mW/g
Maximum value of SAR (measured) = 0.100 mW/g



0 dB = 0.100mW/g

Date/Time: 2012/2/12 AM 10:07:40

Test Laboratory: A Test Lab Techno Corp.

RC_GPRS PCS CH810_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

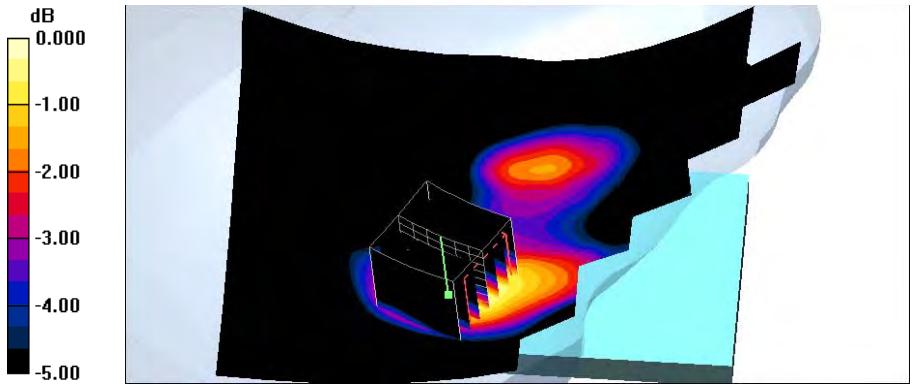
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.365 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.13 V/m; Power Drift = 0.004 dB
Peak SAR (extrapolated) = 0.436 W/kg
SAR(1 g) = 0.295 mW/g; SAR(10 g) = 0.180 mW/g
Maximum value of SAR (measured) = 0.351 mW/g



0 dB = 0.351mW/g

Date/Time: 2012/2/12 AM 10:34:47

Test Laboratory: A Test Lab Techno Corp.

RT_GPRS PCS CH810_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

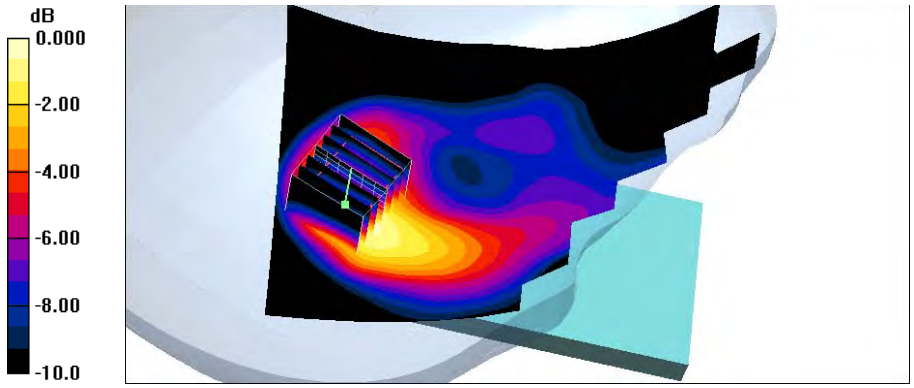
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.195 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 11.9 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 0.250 W/kg
SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.095 mW/g
Maximum value of SAR (measured) = 0.195 mW/g



0 dB = 0.195mW/g

Date/Time: 2012/2/12 PM 12:05:13

Test Laboratory: A Test Lab Techno Corp.

LC_GPRS PCS CH810_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

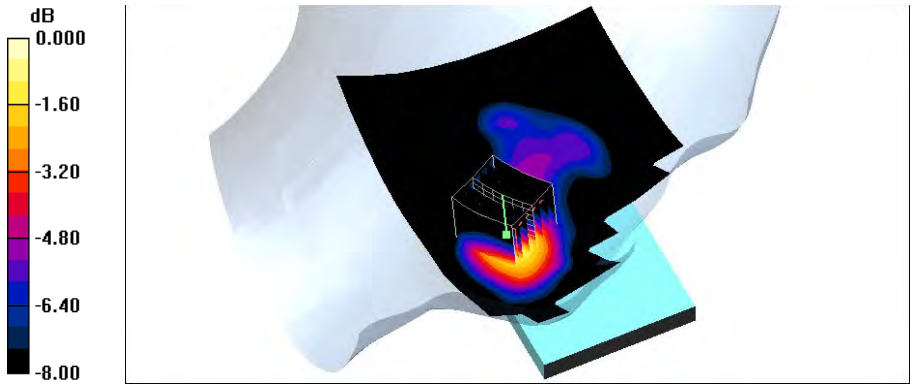
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.625 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.73 V/m; Power Drift = 0.011 dB
Peak SAR (extrapolated) = 0.789 W/kg
SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.291 mW/g
Maximum value of SAR (measured) = 0.613 mW/g



0 dB = 0.613mW/g

Date/Time: 2012/2/12 PM 12:32:45

Test Laboratory: A Test Lab Techno Corp.

LT_GPRS PCS CH810_1D4U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

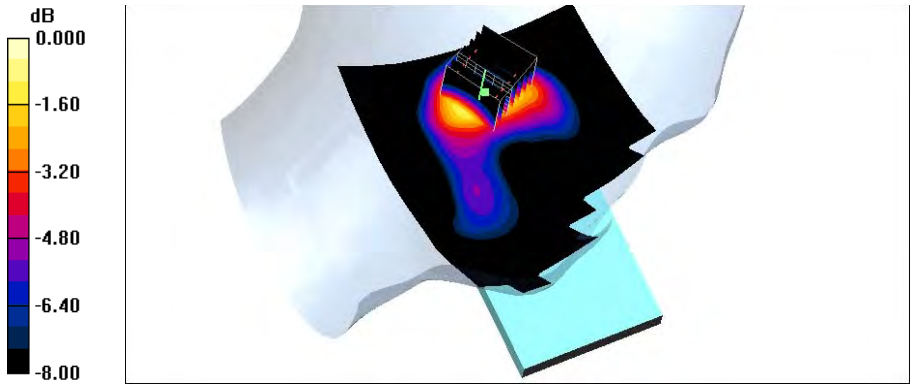
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.281 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 13.9 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.341 W/kg
SAR(1 g) = 0.227 mW/g; SAR(10 g) = 0.132 mW/g
Maximum value of SAR (measured) = 0.274 mW/g



0 dB = 0.274mW/g

Date/Time: 2012/2/12 PM 01:22:01

Test Laboratory: A Test Lab Techno Corp.

RC_DTM PCS CH512_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

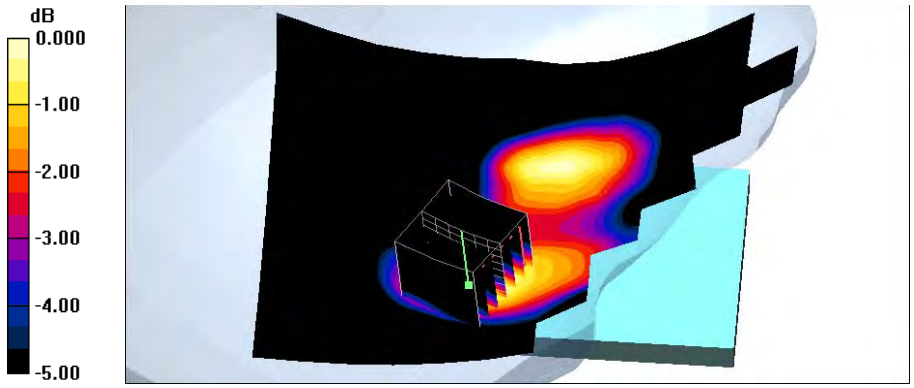
Communication System: DTM PCS (2Down,3Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.35 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.379 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.02 V/m; Power Drift = -0.053 dB
Peak SAR (extrapolated) = 0.456 W/kg
SAR(1 g) = 0.310 mW/g; SAR(10 g) = 0.191 mW/g
Maximum value of SAR (measured) = 0.372 mW/g



0 dB = 0.372mW/g

Date/Time: 2012/2/12 PM 01:47:48

Test Laboratory: A Test Lab Techno Corp.

RT_DTM PCS CH512_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

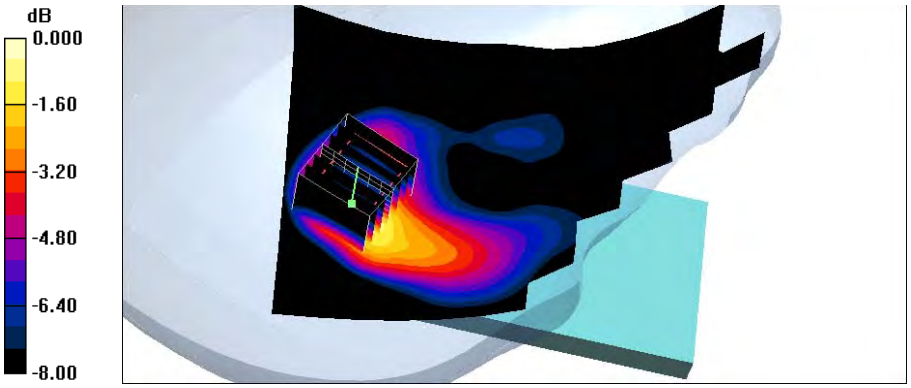
Communication System: DTM PCS (2Down,3Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.35 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.226 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 13.1 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.288 W/kg
SAR(1 g) = 0.191 mW/g; SAR(10 g) = 0.112 mW/g
Maximum value of SAR (measured) = 0.230 mW/g



0 dB = 0.230mW/g

Date/Time: 2012/2/12 PM 02:20:04

Test Laboratory: A Test Lab Techno Corp.

LC_DTM PCS CH512_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

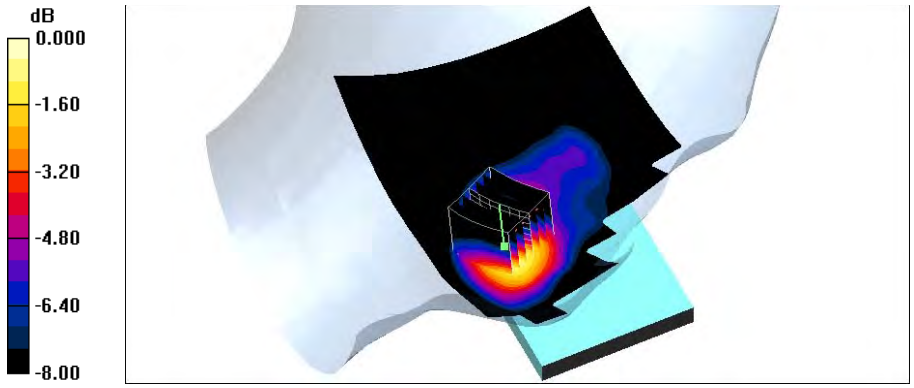
Communication System: DTM PCS (2Down,3Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.35 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

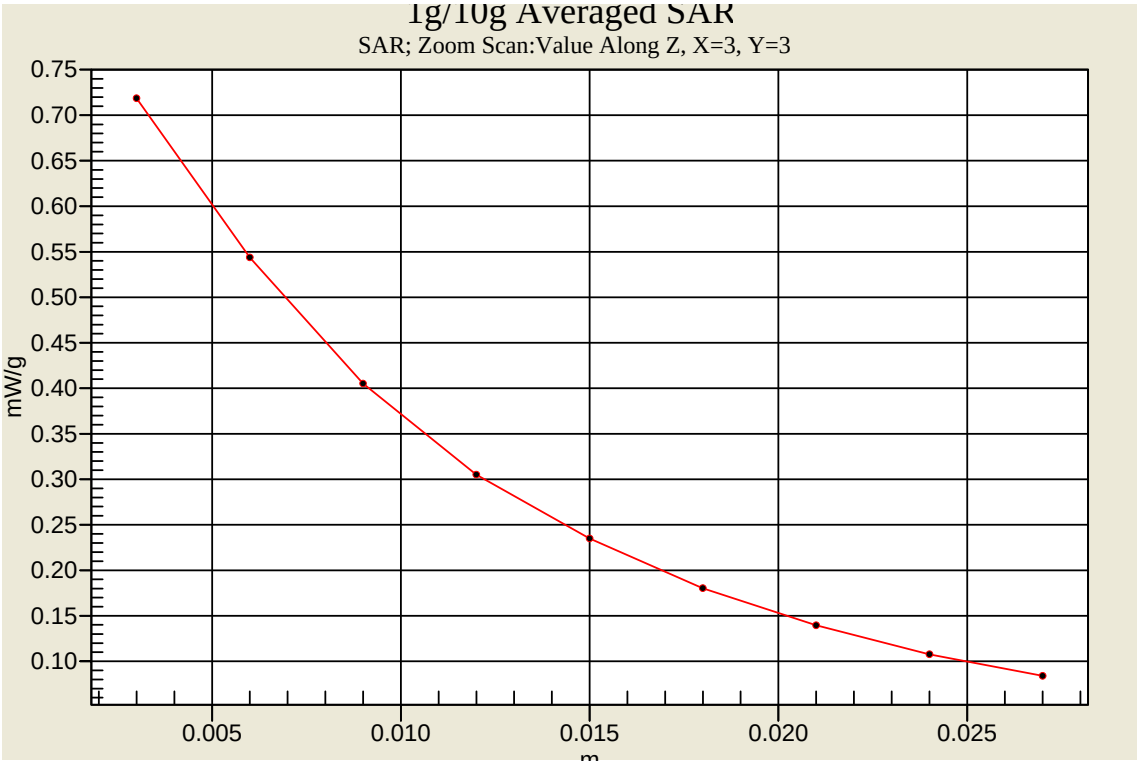
- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.742 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.57 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 0.926 W/kg
SAR(1 g) = 0.598 mW/g; SAR(10 g) = 0.357 mW/g
Maximum value of SAR (measured) = 0.719 mW/g



0 dB = 0.719mW/g



Date/Time: 2012/2/12 PM 02:47:42

Test Laboratory: A Test Lab Techno Corp.

LT_DTM PCS CH512_2D3U

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

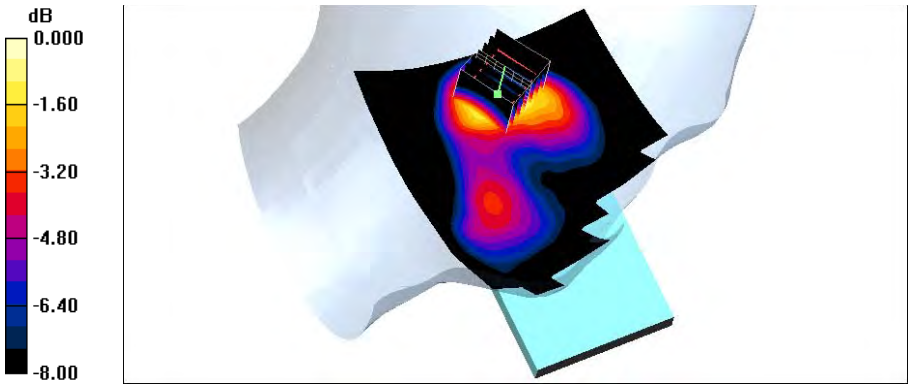
Communication System: DTM PCS (2Down,3Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.35 mho/m; ε_r = 38.4; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.208 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 12.8 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 0.264 W/kg
SAR(1 g) = 0.176 mW/g; SAR(10 g) = 0.104 mW/g
Maximum value of SAR (measured) = 0.212 mW/g



0 dB = 0.212mW/g

Date/Time: 2012/2/12 PM 07:52:08

Test Laboratory: A Test Lab Techno Corp.

RC_WCDMA Band II CH9538

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

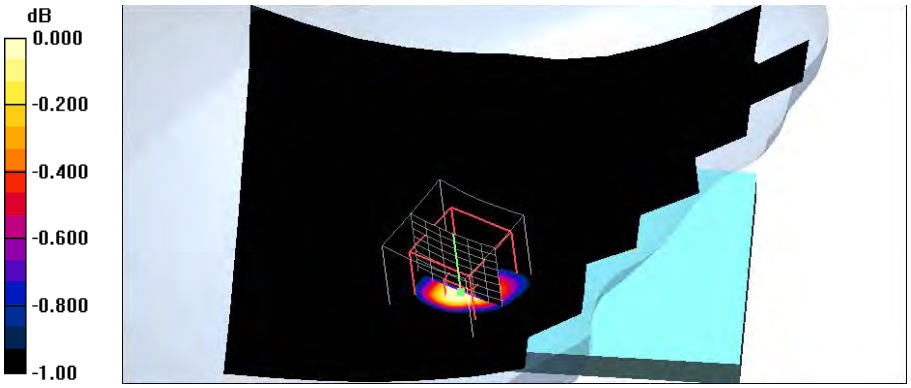
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.217 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 5.18 V/m; Power Drift = 0.166 dB
Peak SAR (extrapolated) = 0.263 W/kg
SAR(1 g) = 0.178 mW/g; SAR(10 g) = 0.110 mW/g
Maximum value of SAR (measured) = 0.213 mW/g



0 dB = 0.213mW/g

Date/Time: 2012/2/12 PM 07:25:51

Test Laboratory: A Test Lab Techno Corp.

RT_WCDMA Band II CH9538

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

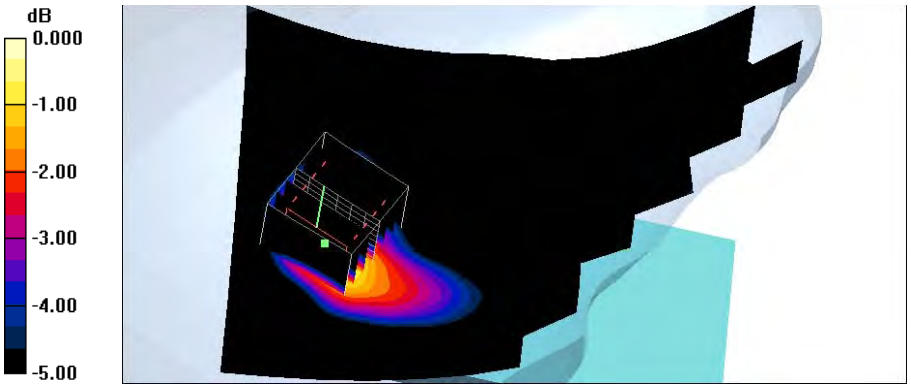
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.137 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 9.69 V/m; Power Drift = 0.033 dB
Peak SAR (extrapolated) = 0.174 W/kg
SAR(1 g) = 0.115 mW/g; SAR(10 g) = 0.067 mW/g
Maximum value of SAR (measured) = 0.138 mW/g



0 dB = 0.138mW/g

Date/Time: 2012/2/12 PM 08:24:11

Test Laboratory: A Test Lab Techno Corp.

LC_WCDMA Band II CH9538

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

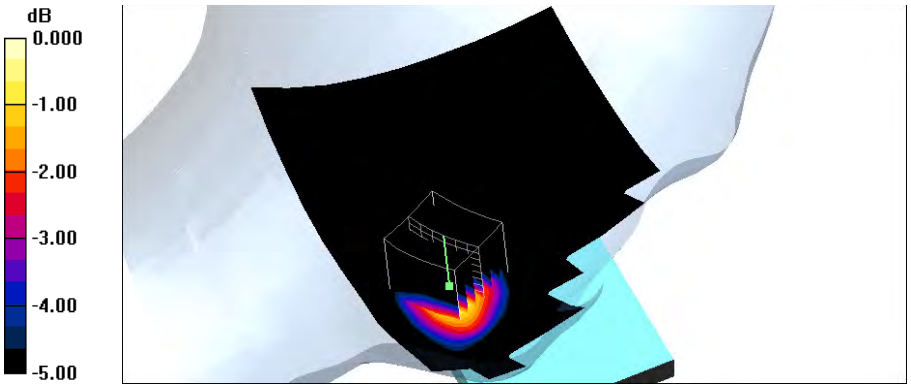
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.411 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.16 V/m; Power Drift = 0.076 dB
Peak SAR (extrapolated) = 0.501 W/kg
SAR(1 g) = 0.329 mW/g; SAR(10 g) = 0.198 mW/g
Maximum value of SAR (measured) = 0.395 mW/g



0 dB = 0.395mW/g

Date/Time: 2012/2/12 PM 08:50:24

Test Laboratory: A Test Lab Techno Corp.

LT_WCDMA Band II CH9538

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

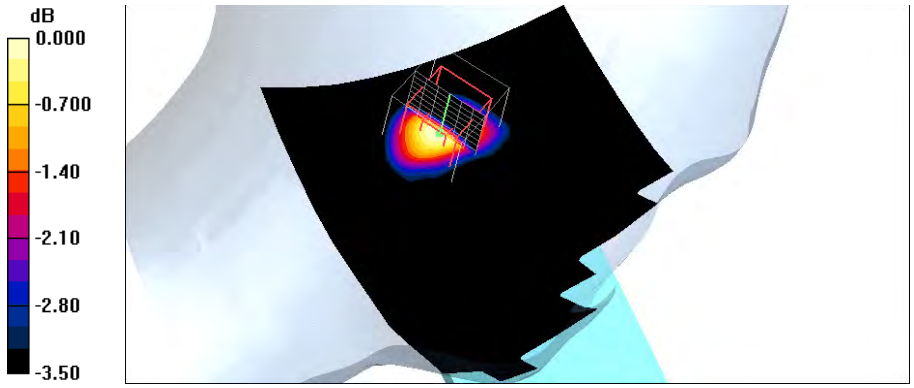
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.38 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(5.14, 5.14, 5.14); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.134 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 9.57 V/m; Power Drift = 0.049 dB
Peak SAR (extrapolated) = 0.169 W/kg
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.065 mW/g
Maximum value of SAR (measured) = 0.135 mW/g



0 dB = 0.135mW/g

Date/Time: 2012/2/12 AM 03:54:23

Test Laboratory: A Test Lab Techno Corp.

RC_WCDMA Band V CH4183

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

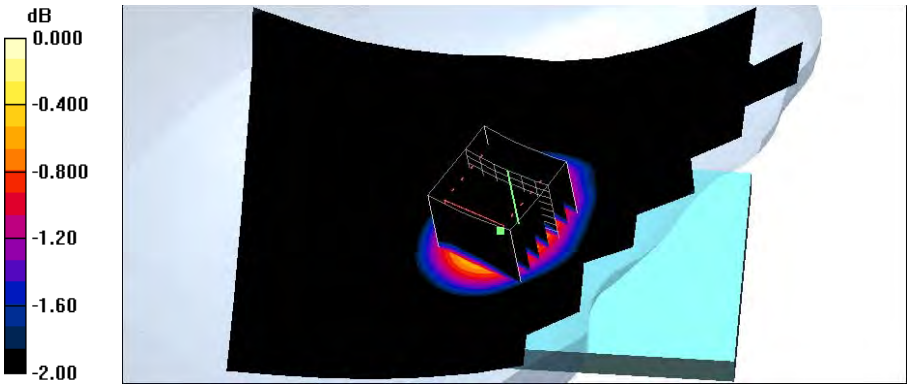
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.906 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.132 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.48 V/m; Power Drift = 0.106 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.120 mW/g; SAR(10 g) = 0.090 mW/g
Maximum value of SAR (measured) = 0.132 mW/g



0 dB = 0.132mW/g

Date/Time: 2012/2/12 AM 03:19:18

Test Laboratory: A Test Lab Techno Corp.

RT_WCDMA Band V CH4183

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

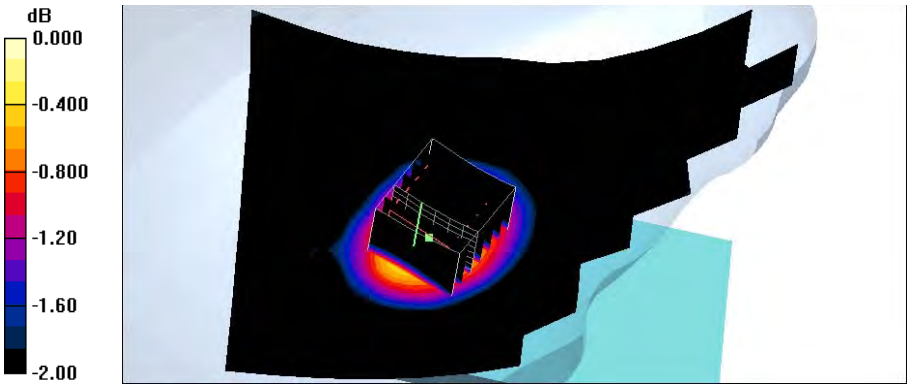
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.906 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.085 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.92 V/m; Power Drift = 0.092 dB
Peak SAR (extrapolated) = 0.101 W/kg
SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.060 mW/g
Maximum value of SAR (measured) = 0.086 mW/g



0 dB = 0.086mW/g

Date/Time: 2012/2/12 AM 04:27:26

Test Laboratory: A Test Lab Techno Corp.

LC_WCDMA Band V CH4183

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

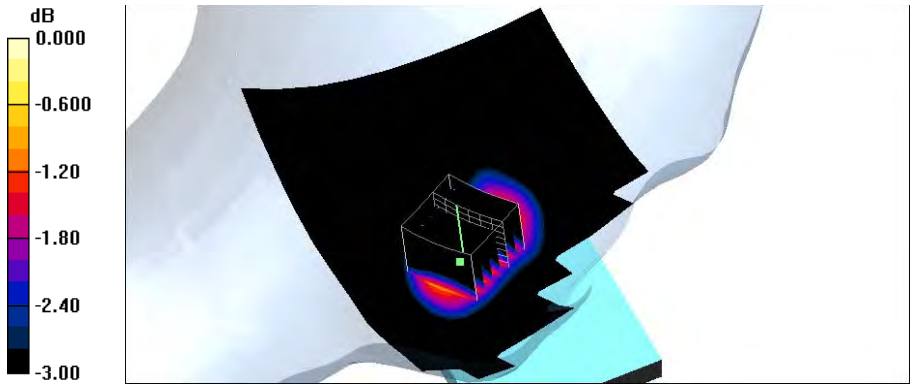
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.906 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.171 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.71 V/m; Power Drift = 0.059 dB
Peak SAR (extrapolated) = 0.244 W/kg
SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.138 mW/g
Maximum value of SAR (measured) = 0.204 mW/g



0 dB = 0.204mW/g

Date/Time: 2012/2/12 AM 04:56:30

Test Laboratory: A Test Lab Techno Corp.

LT_WCDMA Band V CH4183

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

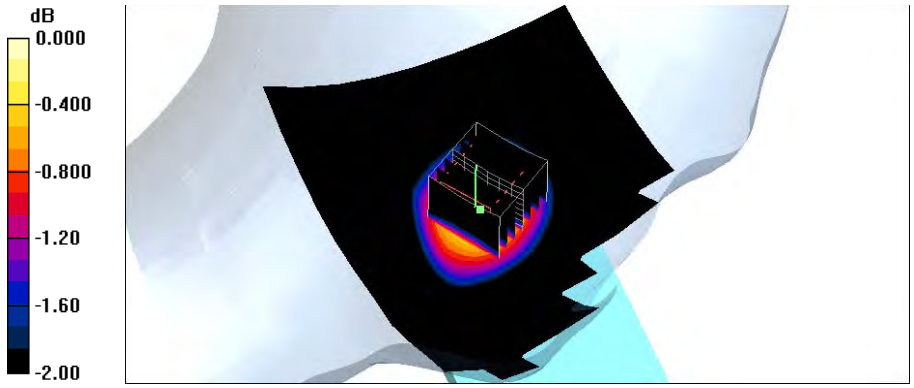
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.906 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.04, 6.04, 6.04); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.109 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.87 V/m; Power Drift = 0.125 dB
Peak SAR (extrapolated) = 0.129 W/kg
SAR(1 g) = 0.100 mW/g; SAR(10 g) = 0.077 mW/g
Maximum value of SAR (measured) = 0.110 mW/g



0 dB = 0.110mW/g

Date/Time: 2012/2/12 PM 11:01:35

Test Laboratory: A Test Lab Techno Corp.

RC_802.11b CH11_1M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

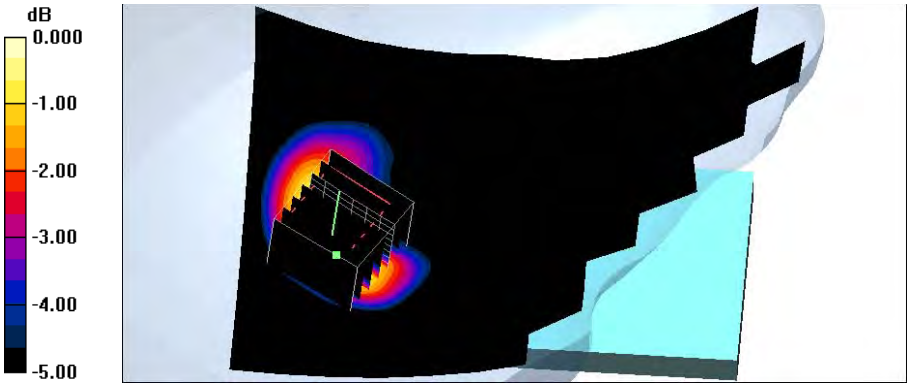
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.82 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.52, 4.52, 4.52); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.200 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 11.2 V/m; Power Drift = -0.021 dB
Peak SAR (extrapolated) = 0.268 W/kg
SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.085 mW/g
Maximum value of SAR (measured) = 0.190 mW/g



0 dB = 0.190mW/g

Date/Time: 2012/2/12 PM 11:27:42

Test Laboratory: A Test Lab Techno Corp.

RT_802.11b CH11_1M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

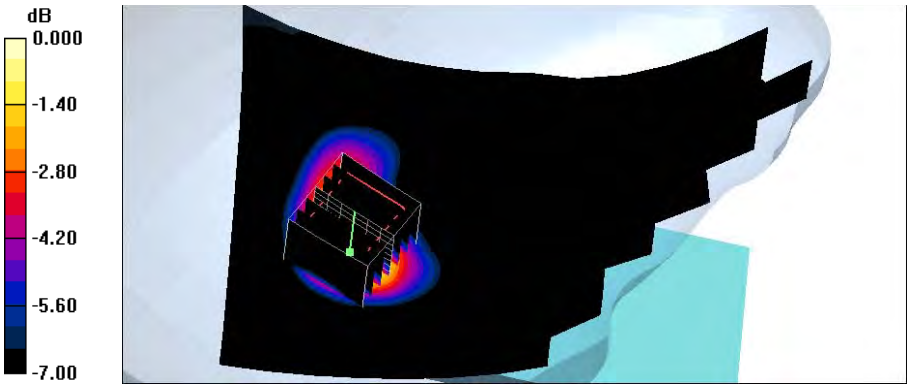
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.82 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.52, 4.52, 4.52); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.266 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 12.3 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 0.343 W/kg
SAR(1 g) = 0.190 mW/g; SAR(10 g) = 0.098 mW/g
Maximum value of SAR (measured) = 0.237 mW/g



0 dB = 0.237mW/g

Date/Time: 2012/2/13 AM 01:39:59

Test Laboratory: A Test Lab Techno Corp.

LC_802.11b CH11_1M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

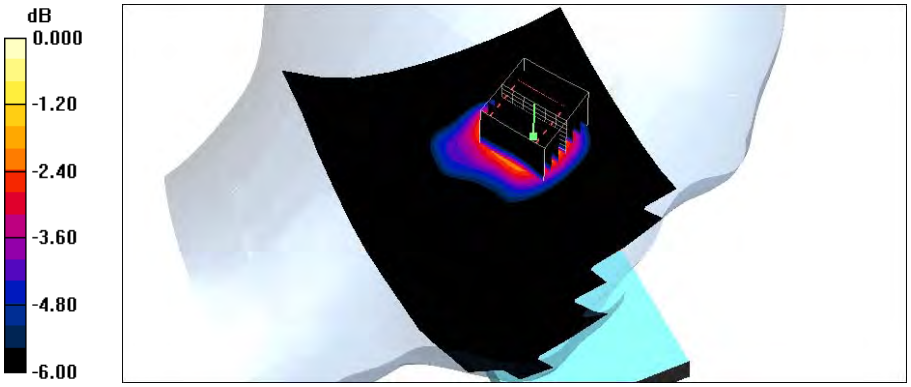
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.82 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.52, 4.52, 4.52); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.329 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 9.27 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 0.484 W/kg
SAR(1 g) = 0.255 mW/g; SAR(10 g) = 0.130 mW/g
Maximum value of SAR (measured) = 0.333 mW/g



0 dB = 0.333mW/g

Date/Time: 2012/2/13 AM 02:07:46

Test Laboratory: A Test Lab Techno Corp.

LT_802.11b CH11_1M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

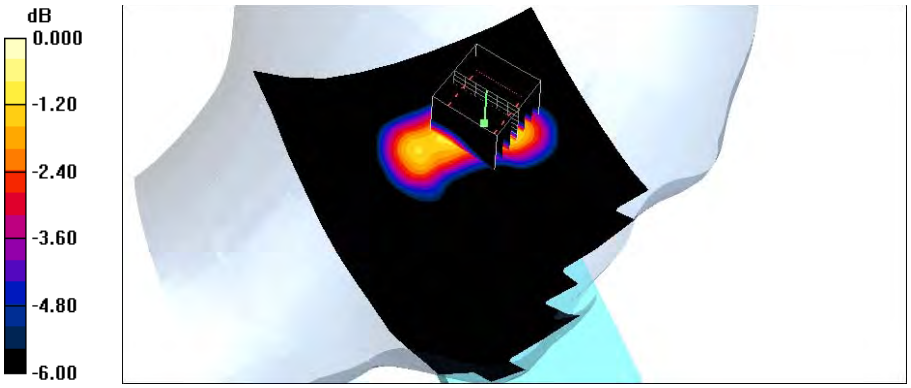
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.82 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.52, 4.52, 4.52); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.256 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 10.5 V/m; Power Drift = 0.035 dB
Peak SAR (extrapolated) = 0.397 W/kg
SAR(1 g) = 0.193 mW/g; SAR(10 g) = 0.097 mW/g
Maximum value of SAR (measured) = 0.250 mW/g



0 dB = 0.250mW/g

Date/Time: 2012/2/13 PM 08:49:43

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH36_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

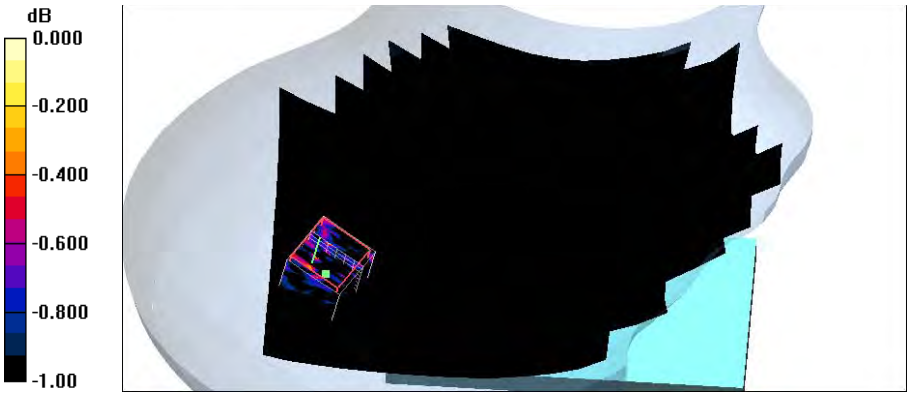
Communication System: IEEE 802.11a; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5180 MHz; σ = 4.59 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (151x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.058 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.82 V/m; Power Drift = -0.196 dB
Peak SAR (extrapolated) = 0.067 W/kg
SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.052 mW/g
Maximum value of SAR (measured) = 0.067 mW/g



0 dB = 0.067mW/g

Date/Time: 2012/2/13 PM 10:32:32

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH40_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

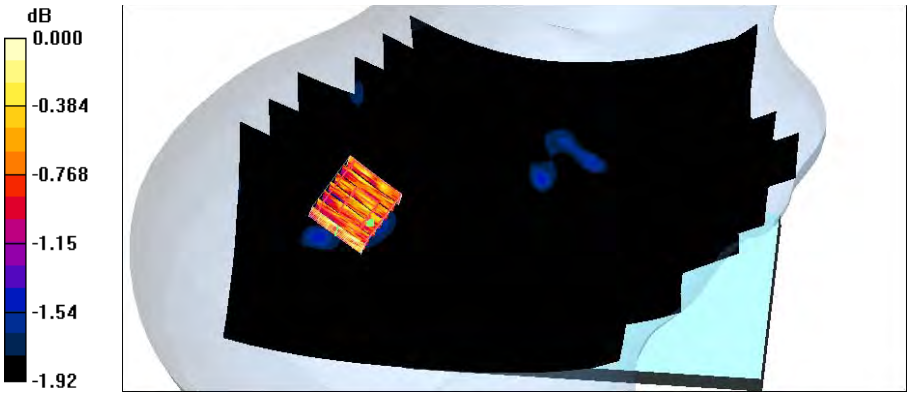
Communication System: IEEE 802.11a; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.056 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.45 V/m; Power Drift = -0.119 dB
Peak SAR (extrapolated) = 0.079 W/kg
SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.066 mW/g
Maximum value of SAR (measured) = 0.079 mW/g



0 dB = 0.079mW/g

Date/Time: 2012/2/14 AM 12:16:19

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH52_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

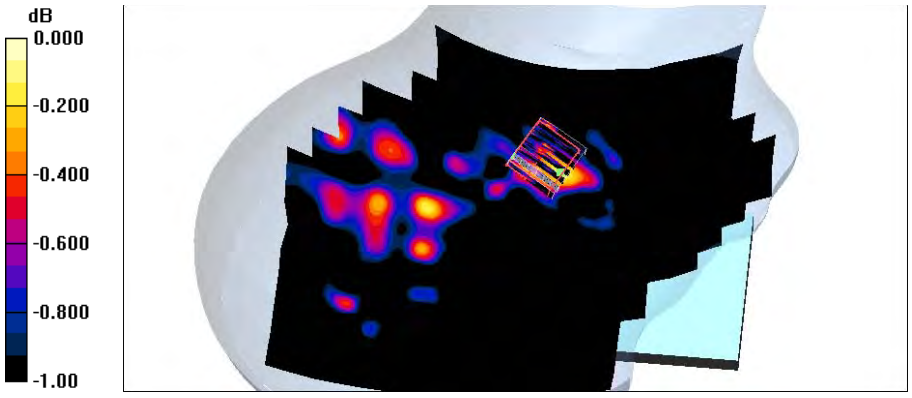
Communication System: IEEE 802.11a; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 4.67 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (161x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.063 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.84 V/m; Power Drift = -0.064 dB
Peak SAR (extrapolated) = 0.075 W/kg
SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.053 mW/g
Maximum value of SAR (measured) = 0.065 mW/g



0 dB = 0.065mW/g

Date/Time: 2012/2/14 AM 01:14:47

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH64_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

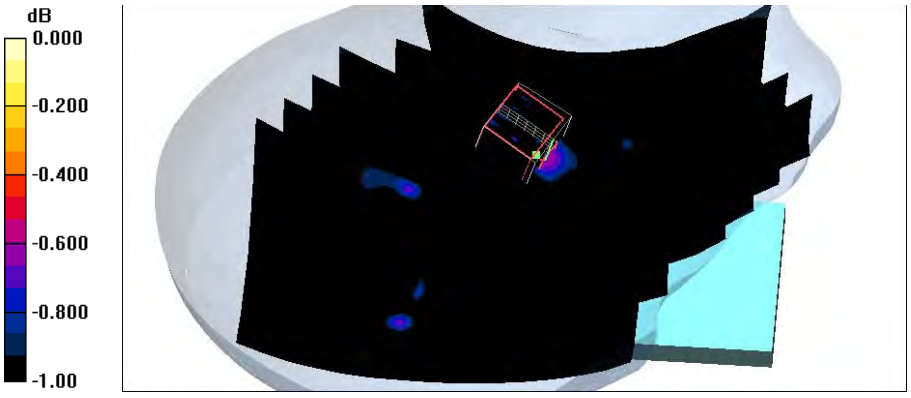
Communication System: IEEE 802.11a; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5320 MHz; σ = 4.73 mho/m; ε_r = 36.2; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (161x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.064 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.75 V/m; Power Drift = 0.131 dB
Peak SAR (extrapolated) = 0.099 W/kg
SAR(1 g) = 0.058 mW/g; SAR(10 g) = 0.055 mW/g
Maximum value of SAR (measured) = 0.074 mW/g



0 dB = 0.074mW/g

Date/Time: 2012/2/14 AM 04:05:02

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH100_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

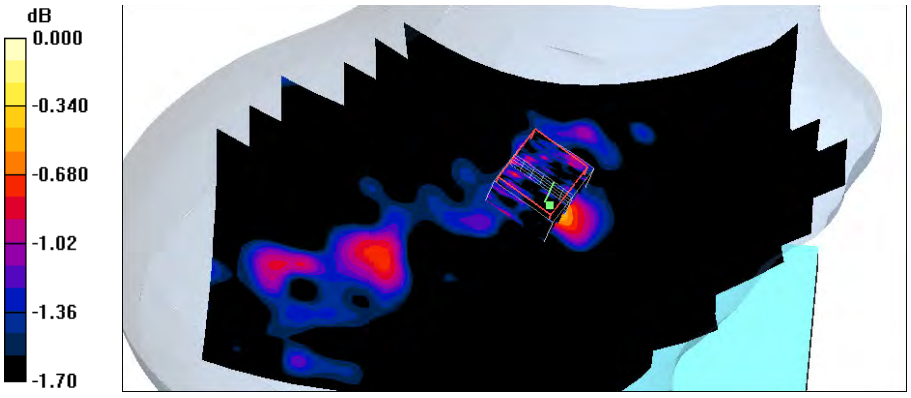
Communication System: IEEE 802.11a; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.070 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.52 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 0.160 W/kg
SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.056 mW/g
Maximum value of SAR (measured) = 0.075 mW/g



0 dB = 0.075mW/g

Date/Time: 2012/2/14 AM 02:06:57

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH104_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

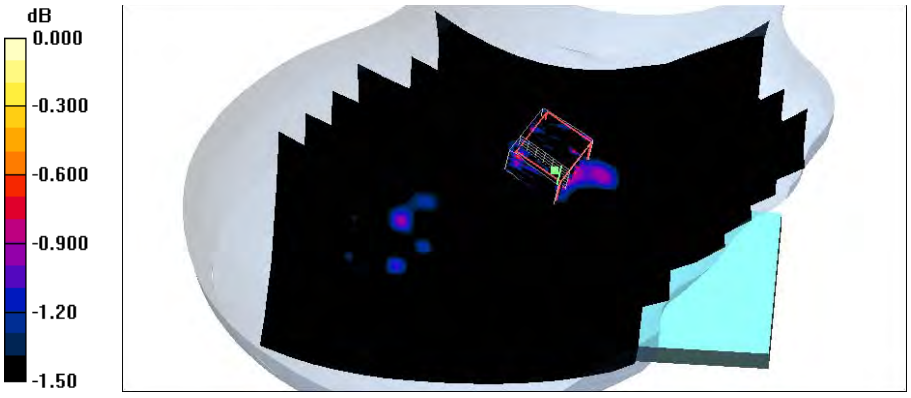
Communication System: IEEE 802.11a; Frequency: 5520 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5520 MHz; σ = 4.93 mho/m; ε_r = 35.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (161x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.078 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.53 V/m; Power Drift = 0.130 dB
Peak SAR (extrapolated) = 0.304 W/kg
SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.064 mW/g
Maximum value of SAR (measured) = 0.087 mW/g



0 dB = 0.087mW/g

Date/Time: 2012/2/14 AM 03:20:01

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH116_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

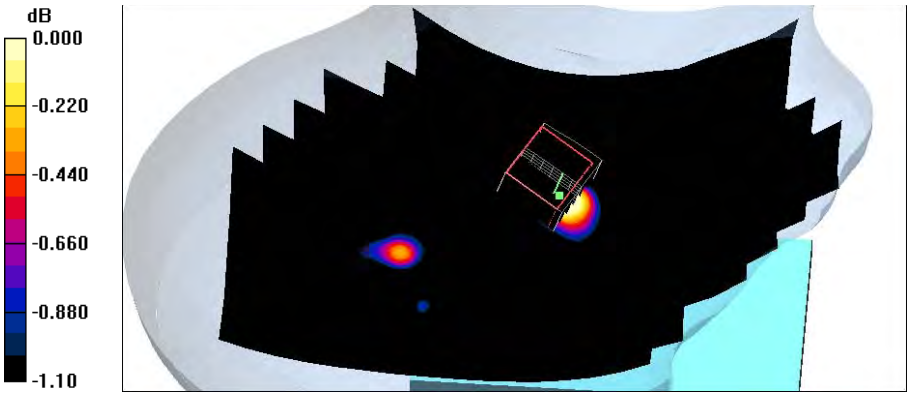
Communication System: IEEE 802.11a; Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5580 MHz; σ = 5 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.100 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.10 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 0.359 W/kg
SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.063 mW/g
Maximum value of SAR (measured) = 0.089 mW/g



0 dB = 0.089mW/g

Date/Time: 2012/2/14 AM 05:05:26

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH124_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

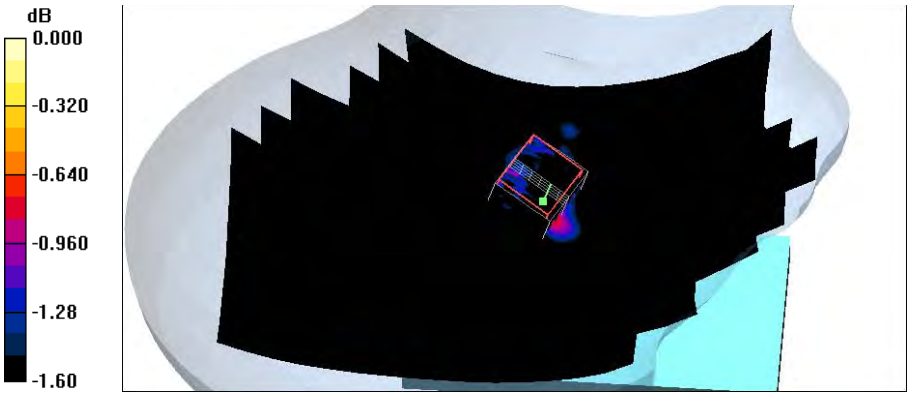
Communication System: IEEE 802.11a; Frequency: 5620 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5620 MHz; σ = 5.04 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.094 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.46 V/m; Power Drift = 0.169 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.076 mW/g
Maximum value of SAR (measured) = 0.102 mW/g



0 dB = 0.102mW/g

Date/Time: 2012/2/14 AM 06:19:12

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH149_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

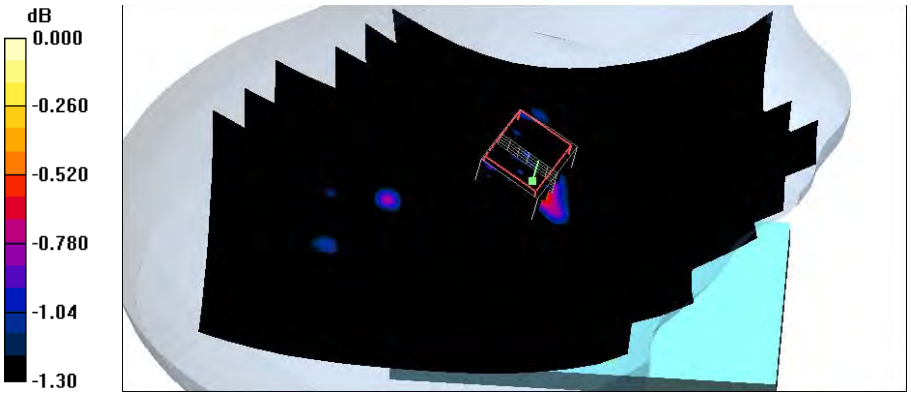
Communication System: IEEE 802.11a; Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5745 MHz; σ = 5.17 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.084 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.84 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.064 mW/g
Maximum value of SAR (measured) = 0.089 mW/g



0 dB = 0.089mW/g

Date/Time: 2012/2/14 AM 08:07:57

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH153_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

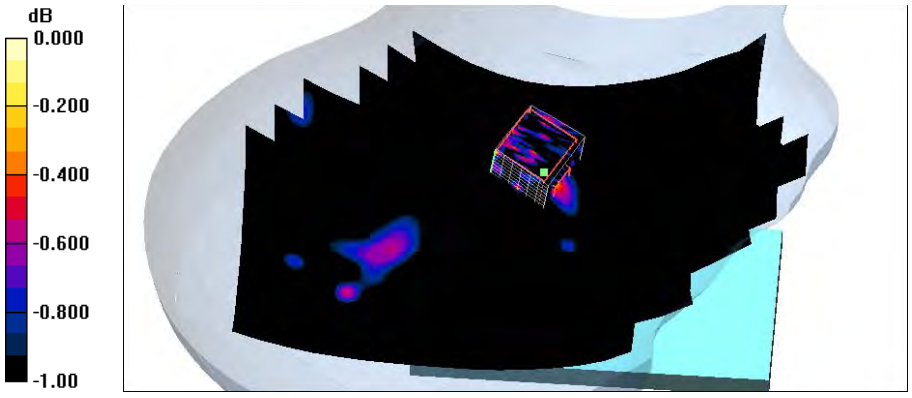
Communication System: IEEE 802.11a; Frequency: 5765 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5765 MHz; σ = 5.2 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.078 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.54 V/m; Power Drift = 0.158 dB
Peak SAR (extrapolated) = 0.088 W/kg
SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.062 mW/g
Maximum value of SAR (measured) = 0.078 mW/g



0 dB = 0.078mW/g

Date/Time: 2012/2/14 AM 07:14:34

Test Laboratory: A Test Lab Techno Corp.

RC_802.11a CH157_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

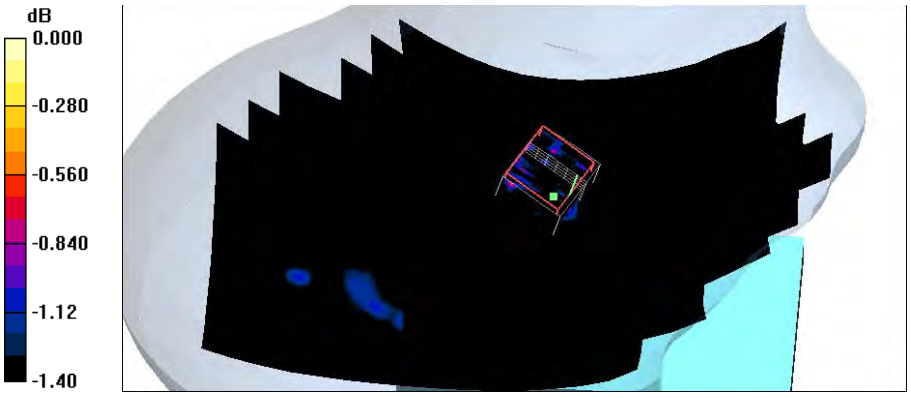
Communication System: IEEE 802.11a; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.22 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.077 mW/g

Right Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.51 V/m; Power Drift = 0.158 dB
Peak SAR (extrapolated) = 0.104 W/kg
SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.066 mW/g
Maximum value of SAR (measured) = 0.090 mW/g



0 dB = 0.090mW/g

Date/Time: 2012/2/14 PM 06:48:54

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH36_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

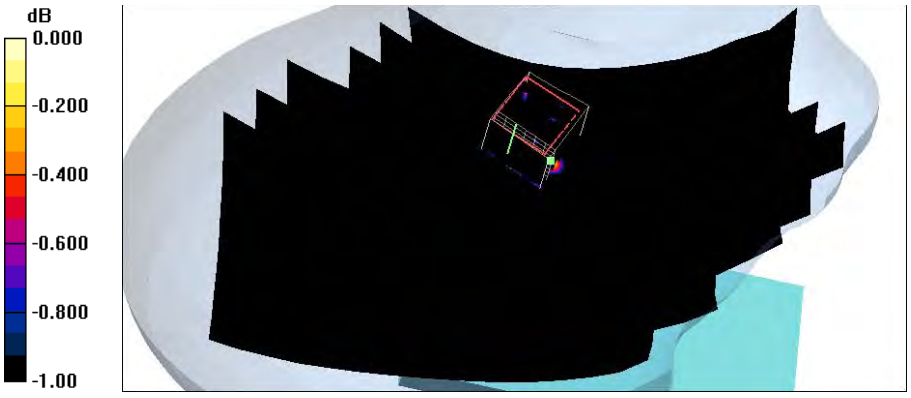
Communication System: IEEE 802.11a; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5180 MHz; σ = 4.59 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.029 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.03 V/m; Power Drift = -0.125 dB
Peak SAR (extrapolated) = 0.040 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.020 mW/g
Maximum value of SAR (measured) = 0.030 mW/g



0 dB = 0.030mW/g

Date/Time: 2012/2/14 PM 09:12:28

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH40_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

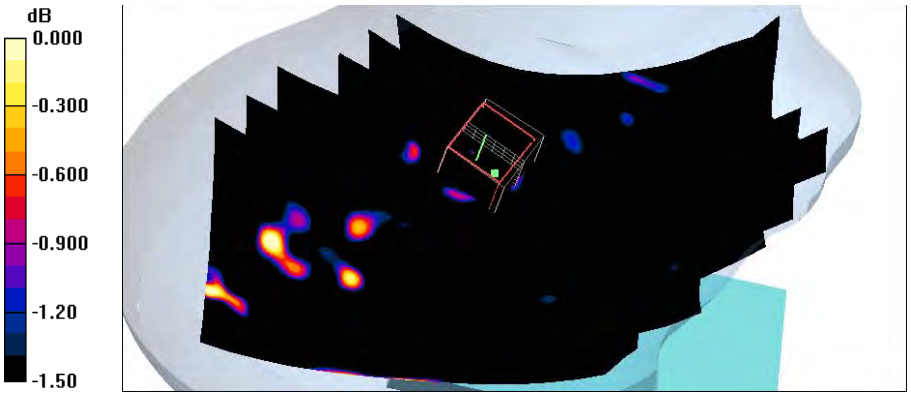
Communication System: IEEE 802.11a; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.036 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.73 V/m; Power Drift = -0.079 dB
Peak SAR (extrapolated) = 0.039 W/kg
SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.015 mW/g
Maximum value of SAR (measured) = 0.027 mW/g



0 dB = 0.027mW/g

Date/Time: 2012/2/14 PM 10:17:47

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH52_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

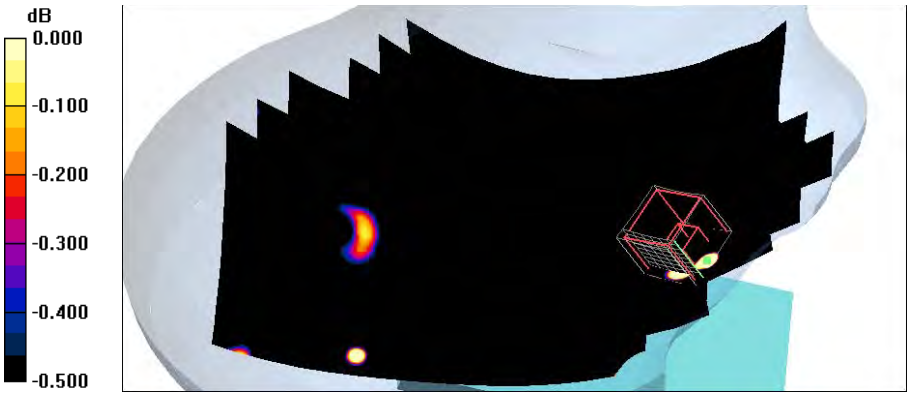
Communication System: IEEE 802.11a; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 4.67 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.032 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.72 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.050 W/kg
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.027 mW/g



0 dB = 0.027mW/g

Date/Time: 2012/2/15 AM 03:35:10

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH64_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

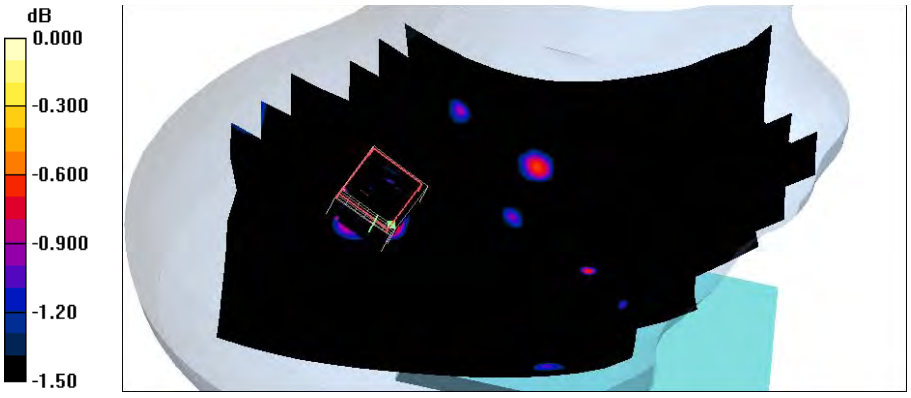
Communication System: IEEE 802.11a; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5320 MHz; σ = 4.73 mho/m; ε_r = 36.2; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.024 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.97 V/m; Power Drift = -0.135 dB
Peak SAR (extrapolated) = 0.052 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.027 mW/g



0 dB = 0.027mW/g

Date/Time: 2012/2/15 AM 02:37:11

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH100_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

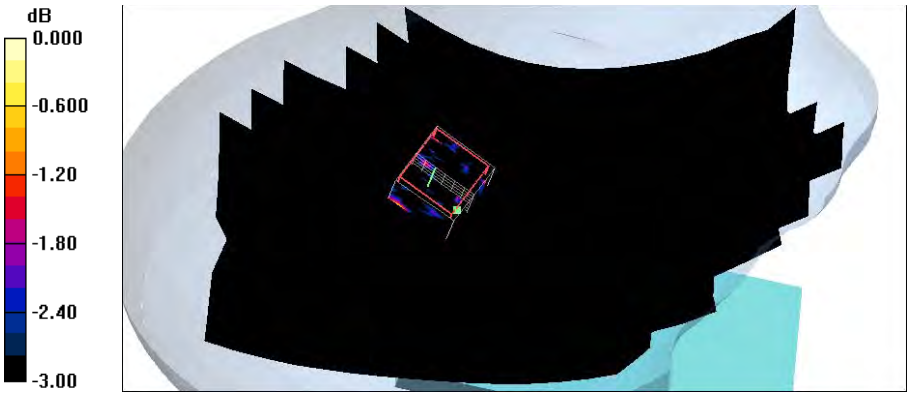
Communication System: IEEE 802.11a; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.021 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.01 V/m; Power Drift = -0.003 dB
Peak SAR (extrapolated) = 0.072 W/kg
SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.015 mW/g
Maximum value of SAR (measured) = 0.031 mW/g



0 dB = 0.031mW/g

Date/Time: 2012/2/15 AM 01:37:04

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH104_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

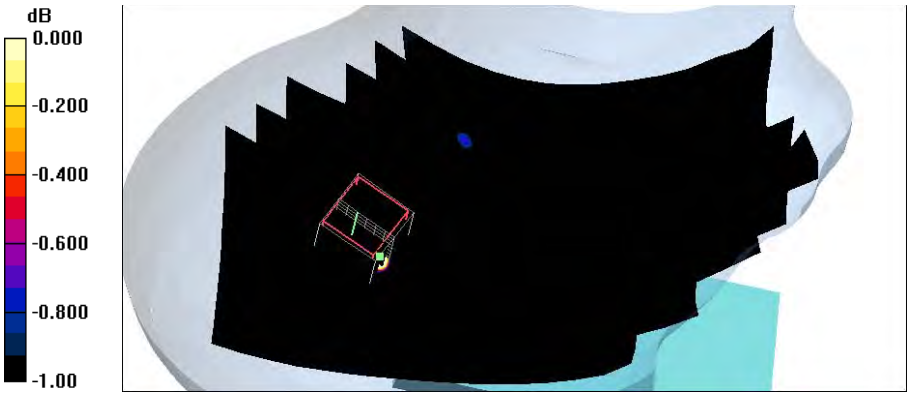
Communication System: IEEE 802.11a; Frequency: 5520 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5520 MHz; σ = 4.93 mho/m; ε_r = 35.8; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.042 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.92 V/m; Power Drift = 0.096 dB
Peak SAR (extrapolated) = 0.081 W/kg
SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.019 mW/g
Maximum value of SAR (measured) = 0.035 mW/g



0 dB = 0.035mW/g

Date/Time: 2012/2/15 AM 12:45:57

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH116_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

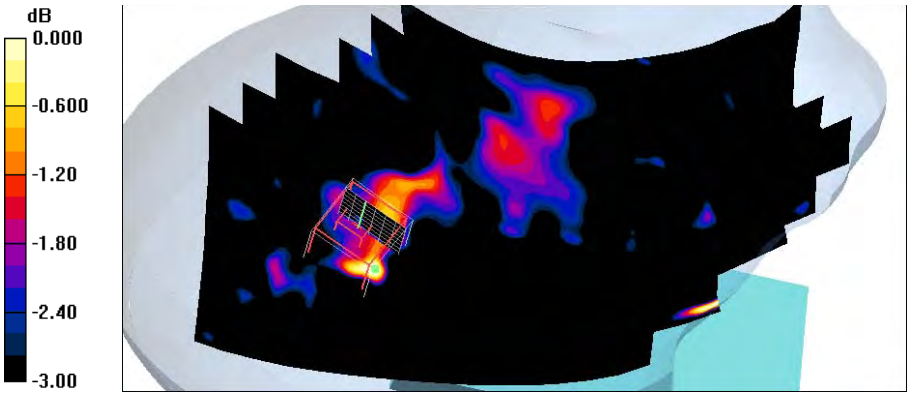
Communication System: IEEE 802.11a; Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5580 MHz; σ = 5 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.054 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.69 V/m; Power Drift = -0.136 dB
Peak SAR (extrapolated) = 0.071 W/kg
SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.048 mW/g



0 dB = 0.048mW/g

Date/Time: 2012/2/14 PM 12:13:07

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH124_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

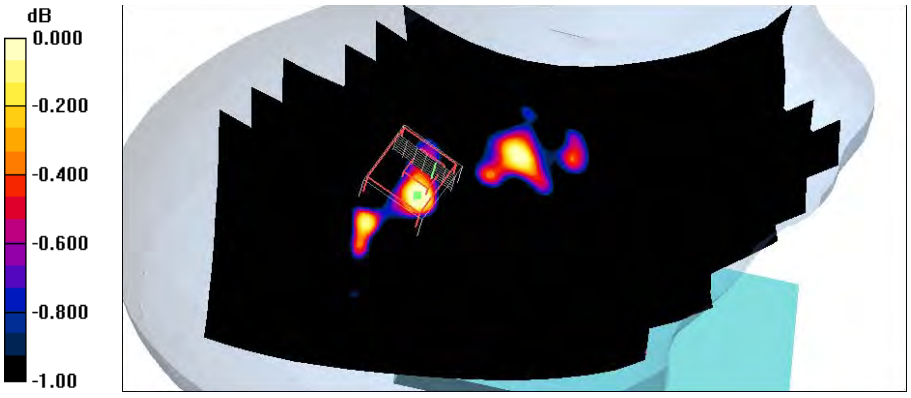
Communication System: IEEE 802.11a; Frequency: 5620 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5620 MHz; σ = 5.04 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.039 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.07 V/m; Power Drift = -0.177 dB
Peak SAR (extrapolated) = 0.066 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.019 mW/g
Maximum value of SAR (measured) = 0.037 mW/g



0 dB = 0.037mW/g

Date/Time: 2012/2/14 AM 11:02:31

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH149_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

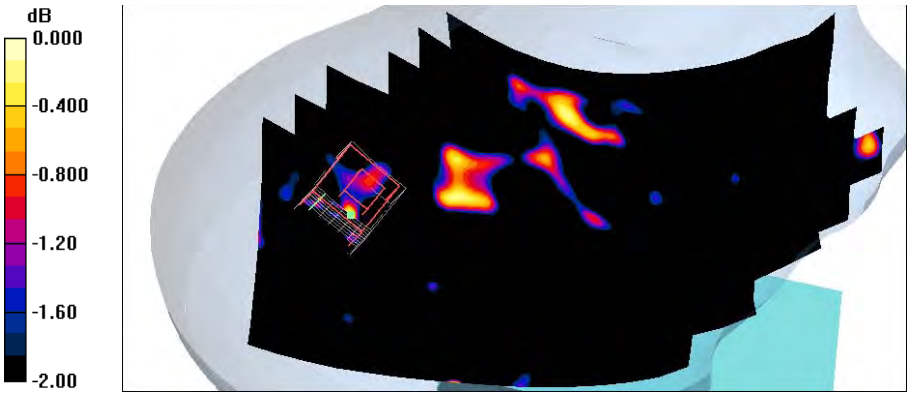
Communication System: IEEE 802.11a; Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5745 MHz; σ = 5.17 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.028 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.83 V/m; Power Drift = -0.188 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.016 mW/g
Maximum value of SAR (measured) = 0.029 mW/g



0 dB = 0.029mW/g

Date/Time: 2012/2/14 AM 09:09:42

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH153_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

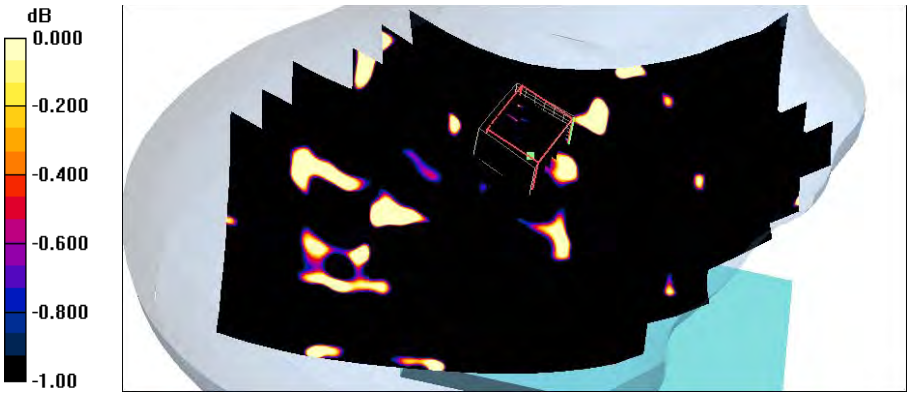
Communication System: IEEE 802.11a; Frequency: 5765 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5765 MHz; σ = 5.2 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.049 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.69 V/m; Power Drift = -0.107 dB
Peak SAR (extrapolated) = 0.037 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.013 mW/g
Maximum value of SAR (measured) = 0.025 mW/g



0 dB = 0.025mW/g

Date/Time: 2012/2/14 AM 10:00:53

Test Laboratory: A Test Lab Techno Corp.

RT_802.11a CH157_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

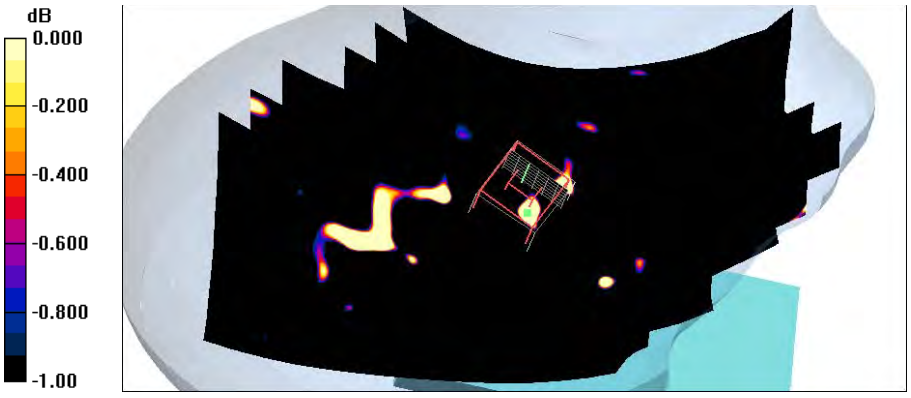
Communication System: IEEE 802.11a; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.22 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Right Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Right Tilted/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.056 mW/g

Right Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.44 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.051 W/kg
SAR(1 g) = 0.020 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.032 mW/g



0 dB = 0.032mW/g

Date/Time: 2012/2/15 AM 04:49:34

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH36_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

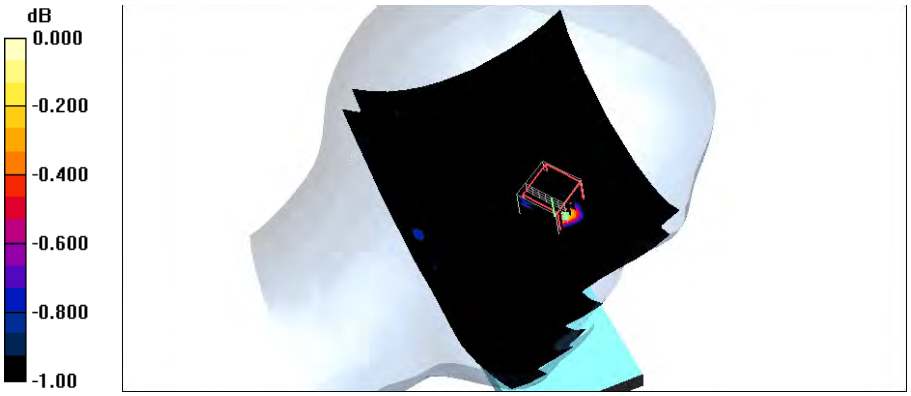
Communication System: IEEE 802.11a; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5180 MHz; σ = 4.59 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (131x211x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.085 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.21 V/m; Power Drift = 0.067 dB
Peak SAR (extrapolated) = 0.276 W/kg
SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.067 mW/g
Maximum value of SAR (measured) = 0.088 mW/g



0 dB = 0.088mW/g

Date/Time: 2012/2/15 AM 06:40:44

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH40_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

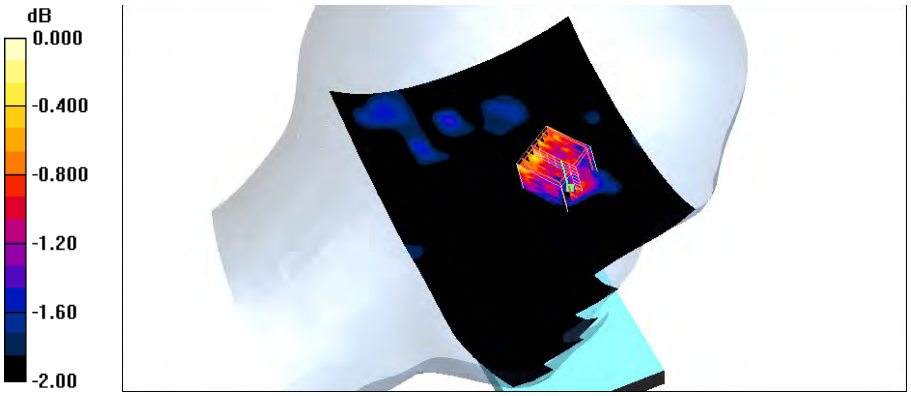
Communication System: IEEE 802.11a; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (121x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.086 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.78 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 0.343 W/kg
SAR(1 g) = 0.089 mW/g; SAR(10 g) = 0.078 mW/g
Maximum value of SAR (measured) = 0.098 mW/g



0 dB = 0.098mW/g

Date/Time: 2012/2/15 AM 07:40:49

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH52_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

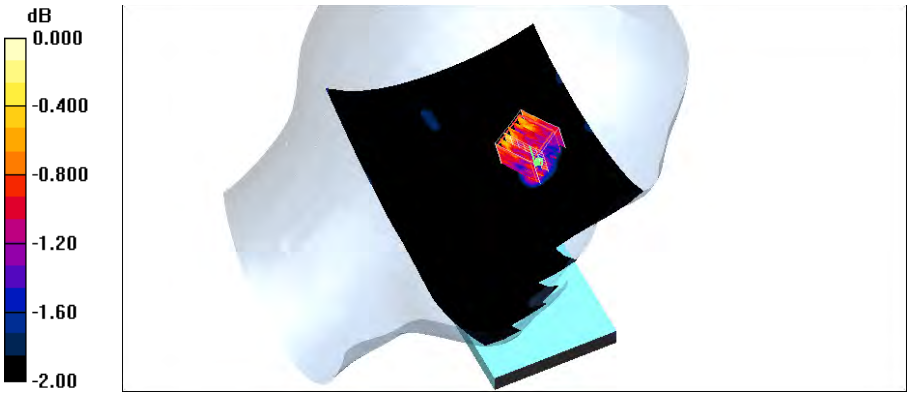
Communication System: IEEE 802.11a; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 4.67 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (121x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.094 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.42 V/m; Power Drift = -0.098 dB
Peak SAR (extrapolated) = 0.136 W/kg
SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.113 mW/g



0 dB = 0.113mW/g

Date/Time: 2012/2/15 AM 09:16:29

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH64_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

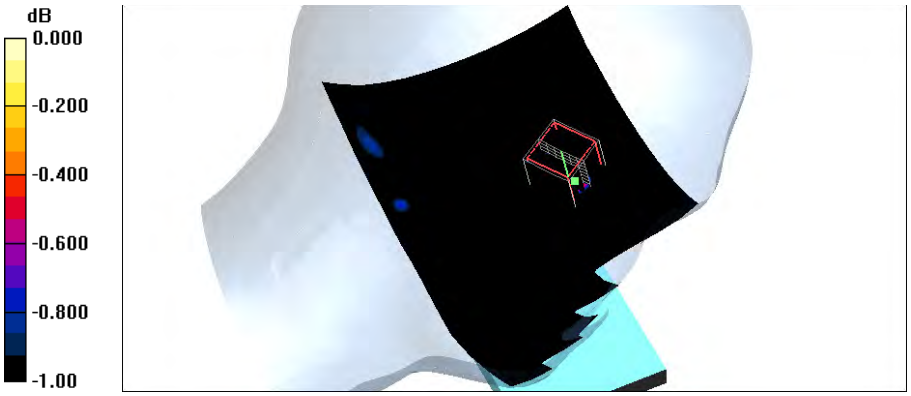
Communication System: IEEE 802.11a; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5320 MHz; σ = 4.73 mho/m; ε_r = 36.2; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (121x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.100 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.78 V/m; Power Drift = 0.069 dB
Peak SAR (extrapolated) = 0.142 W/kg
SAR(1 g) = 0.088 mW/g; SAR(10 g) = 0.077 mW/g
Maximum value of SAR (measured) = 0.104 mW/g



0 dB = 0.104mW/g

Date/Time: 2012/2/15 AM 10:16:50

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH100_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

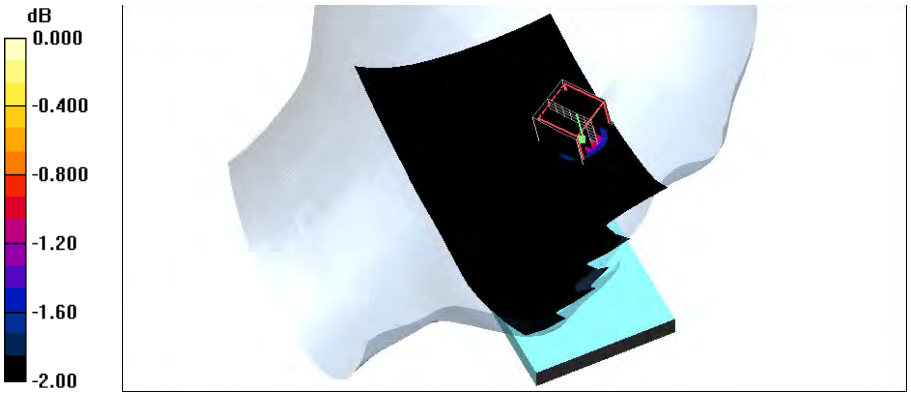
Communication System: IEEE 802.11a; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.128 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.38 V/m; Power Drift = 0.053 dB
Peak SAR (extrapolated) = 0.576 W/kg
SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.088 mW/g
Maximum value of SAR (measured) = 0.142 mW/g



0 dB = 0.142mW/g

Date/Time: 2012/2/15 AM 10:53:47

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH104_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

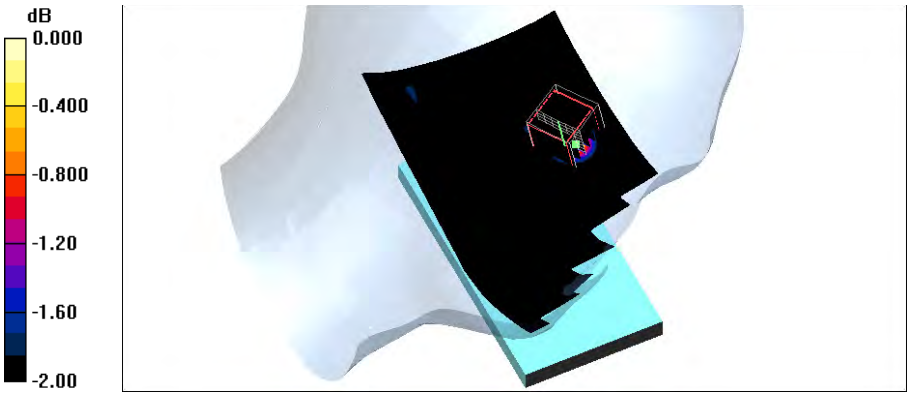
Communication System: IEEE 802.11a; Frequency: 5520 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5520 MHz; σ = 4.93 mho/m; ε_r = 35.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.137 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.25 V/m; Power Drift = 0.177 dB
Peak SAR (extrapolated) = 0.235 W/kg
SAR(1 g) = 0.118 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.152 mW/g



0 dB = 0.152mW/g

Date/Time: 2012/2/15 PM 12:12:56

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH116_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

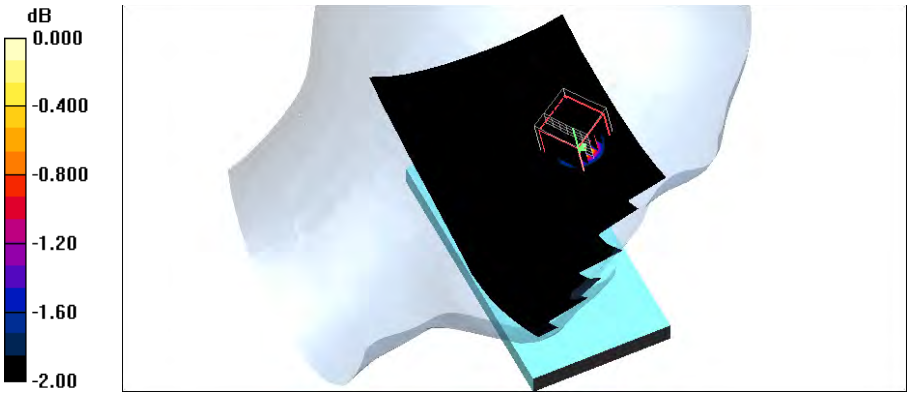
Communication System: IEEE 802.11a; Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5580 MHz; σ = 5 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.169 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.62 V/m; Power Drift = 0.170 dB
Peak SAR (extrapolated) = 0.275 W/kg
SAR(1 g) = 0.139 mW/g; SAR(10 g) = 0.104 mW/g
Maximum value of SAR (measured) = 0.178 mW/g



0 dB = 0.178mW/g

Date/Time: 2012/2/15 PM 01:09:33

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH124_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

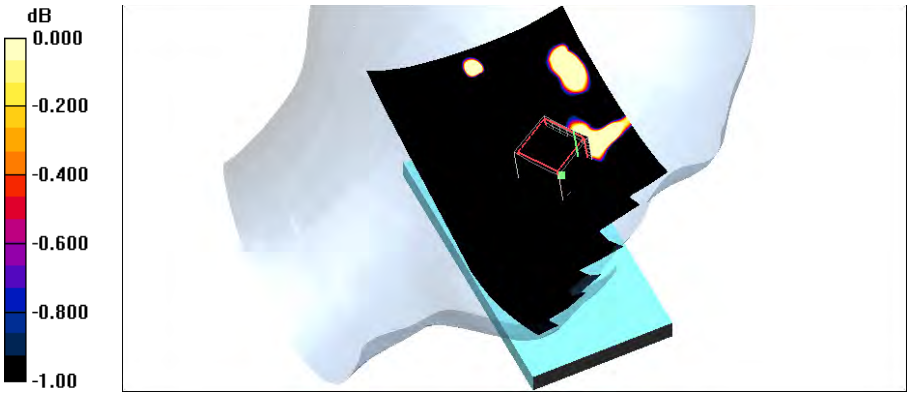
Communication System: IEEE 802.11a; Frequency: 5620 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5620 MHz; σ = 5.04 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.257 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.57 V/m; Power Drift = 0.086 dB
Peak SAR (extrapolated) = 0.318 W/kg
SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.092 mW/g
Maximum value of SAR (measured) = 0.163 mW/g



0 dB = 0.163mW/g

Date/Time: 2012/2/15 PM 02:37:20

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH149_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

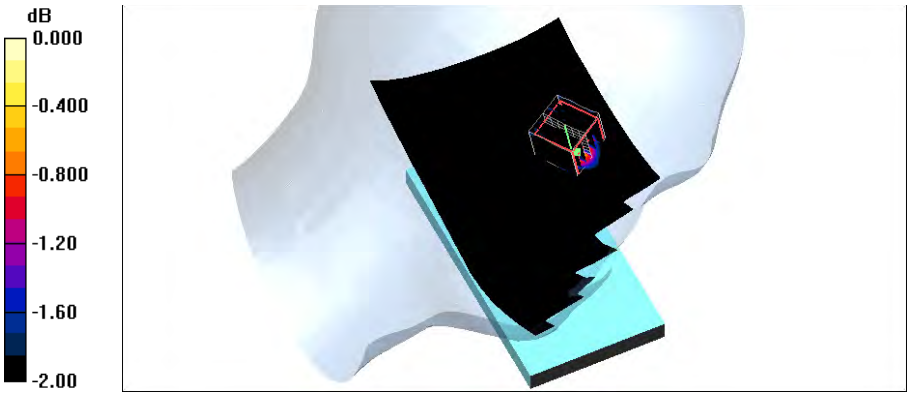
Communication System: IEEE 802.11a; Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5745 MHz; σ = 5.17 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.145 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.53 V/m; Power Drift = 0.084 dB
Peak SAR (extrapolated) = 0.405 W/kg
SAR(1 g) = 0.135 mW/g; SAR(10 g) = 0.106 mW/g
Maximum value of SAR (measured) = 0.161 mW/g



0 dB = 0.161mW/g

Date/Time: 2012/2/15 PM 04:09:42

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH153_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

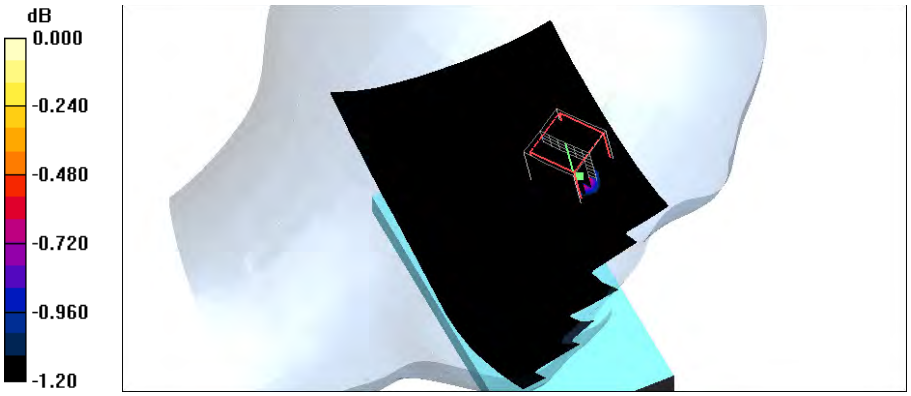
Communication System: IEEE 802.11a; Frequency: 5765 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5765 MHz; σ = 5.2 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.128 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.91 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.188 W/kg
SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.101 mW/g
Maximum value of SAR (measured) = 0.140 mW/g



0 dB = 0.140mW/g

Date/Time: 2012/2/15 PM 03:12:42

Test Laboratory: A Test Lab Techno Corp.

LC_802.11a CH157_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

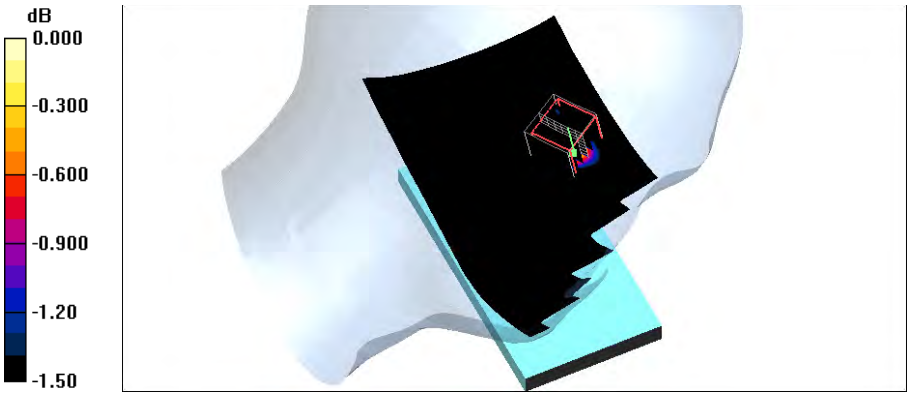
Communication System: IEEE 802.11a; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.22 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Cheek/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.144 mW/g

Left Cheek/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.47 V/m; Power Drift = 0.165 dB
Peak SAR (extrapolated) = 0.422 W/kg
SAR(1 g) = 0.129 mW/g; SAR(10 g) = 0.105 mW/g
Maximum value of SAR (measured) = 0.153 mW/g



0 dB = 0.153mW/g

Date/Time: 2012/2/16 PM 03:43:22

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH36_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

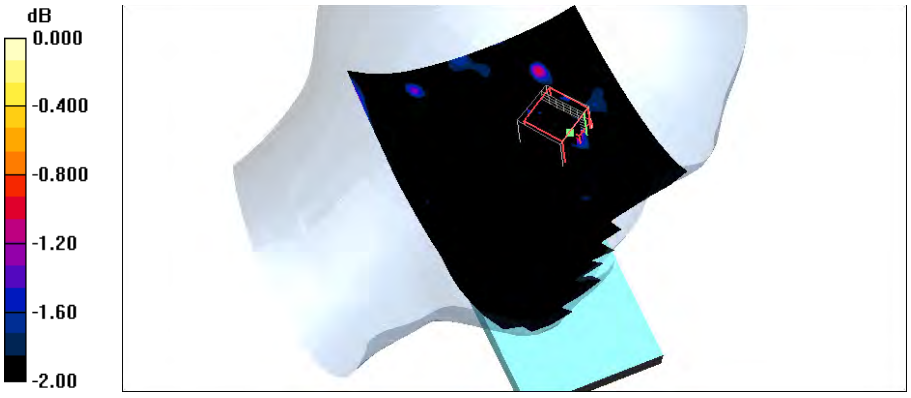
Communication System: IEEE 802.11a; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5180 MHz; σ = 4.59 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (121x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.052 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.19 V/m; Power Drift = -0.011 dB
Peak SAR (extrapolated) = 0.085 W/kg
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.038 mW/g
Maximum value of SAR (measured) = 0.063 mW/g



0 dB = 0.063mW/g

Date/Time: 2012/2/16 AM 09:05:35

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH40_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

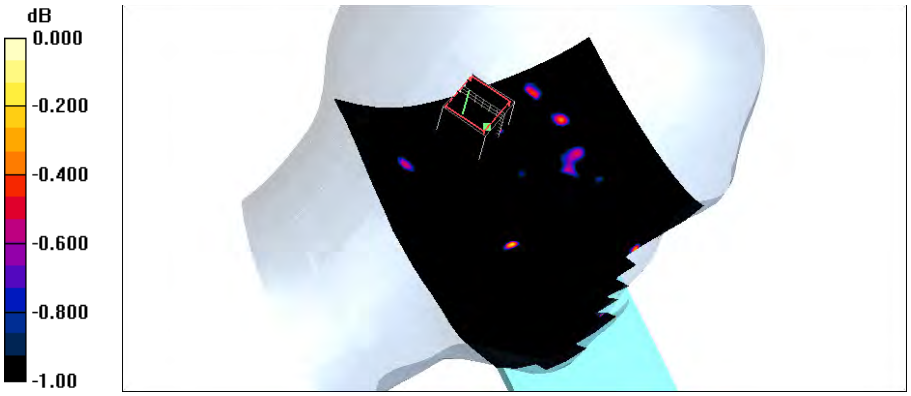
Communication System: IEEE 802.11a; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 4.61 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.83, 4.83, 4.83); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.032 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.28 V/m; Power Drift = -0.109 dB
Peak SAR (extrapolated) = 0.091 W/kg
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.017 mW/g
Maximum value of SAR (measured) = 0.032 mW/g



0 dB = 0.032mW/g

Date/Time: 2012/2/16 AM 07:44:03

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH52_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

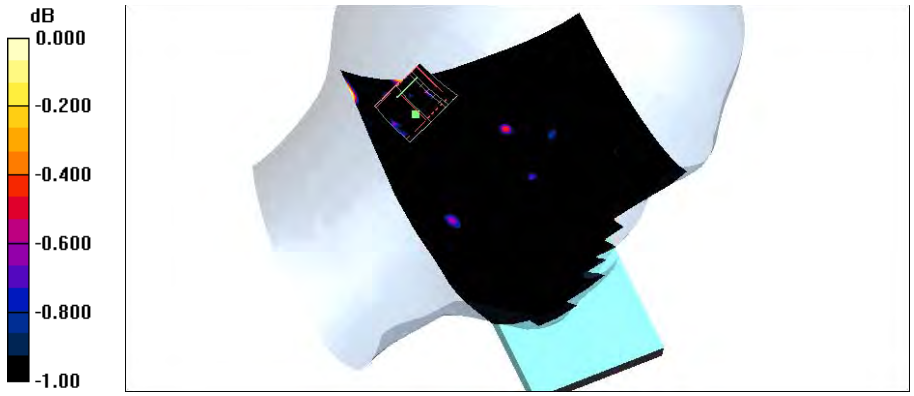
Communication System: IEEE 802.11a; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 4.67 mho/m; ε_r = 36.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.036 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.48 V/m; Power Drift = 0.107 dB
Peak SAR (extrapolated) = 0.061 W/kg
SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g

Date/Time: 2012/2/16 AM 06:03:05

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH64_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

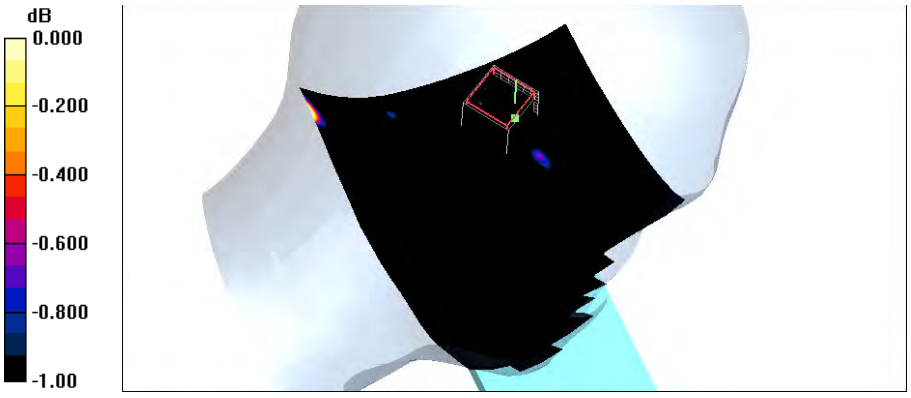
Communication System: IEEE 802.11a; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5320 MHz; σ = 4.73 mho/m; ε_r = 36.2; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.58, 4.58, 4.58); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.044 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.65 V/m; Power Drift = -0.181 dB
Peak SAR (extrapolated) = 0.107 W/kg
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.042 mW/g



0 dB = 0.042mW/g

Date/Time: 2012/2/16 AM 05:06:39

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH100_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

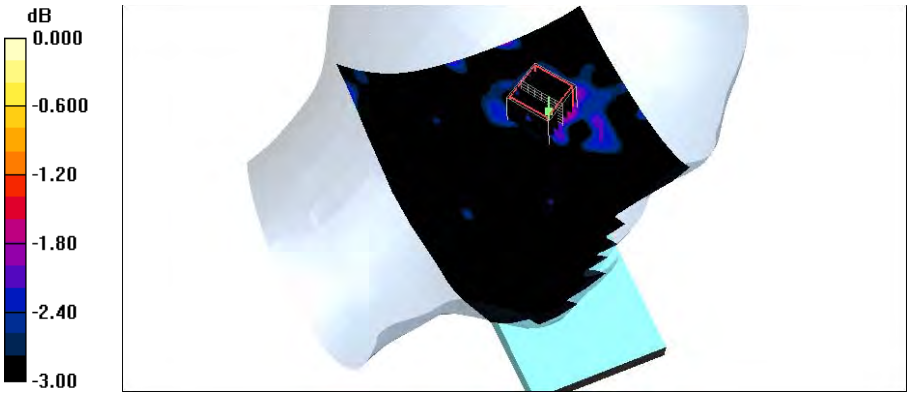
Communication System: IEEE 802.11a; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 4.91 mho/m; ε_r = 35.9; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.041 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.55 V/m; Power Drift = -0.028 dB
Peak SAR (extrapolated) = 0.104 W/kg
SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.030 mW/g
Maximum value of SAR (measured) = 0.061 mW/g



0 dB = 0.061mW/g

Date/Time: 2012/2/16 AM 04:17:16

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH104_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

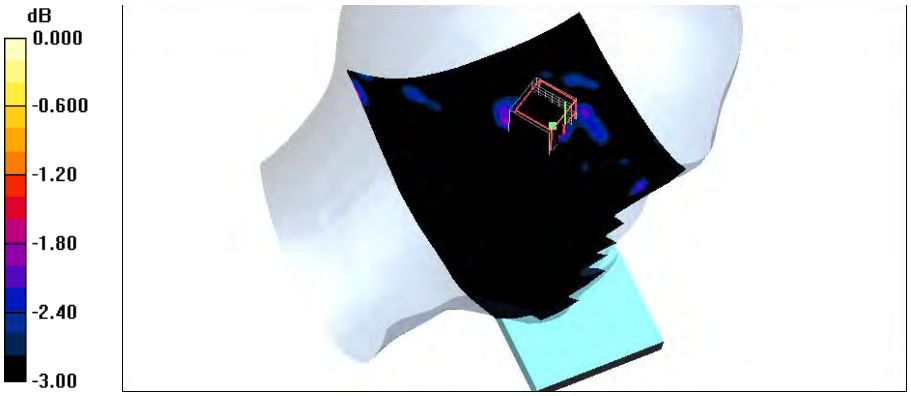
Communication System: IEEE 802.11a; Frequency: 5520 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5520 MHz; σ = 4.93 mho/m; ε_r = 35.8; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.63, 4.63, 4.63); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.059 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.77 V/m; Power Drift = -0.130 dB
Peak SAR (extrapolated) = 0.103 W/kg
SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.025 mW/g
Maximum value of SAR (measured) = 0.060 mW/g



0 dB = 0.060mW/g

Date/Time: 2012/2/16 AM 03:28:07

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH116_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

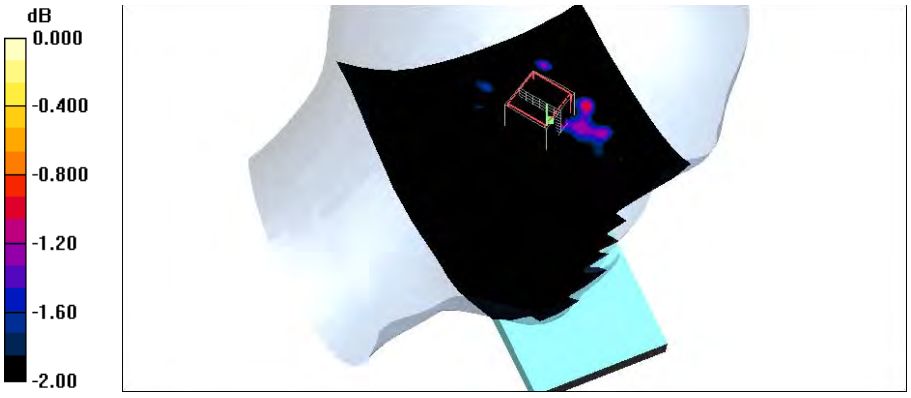
Communication System: IEEE 802.11a; Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5580 MHz; σ = 5 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.052 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.83 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 0.102 W/kg
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.027 mW/g
Maximum value of SAR (measured) = 0.058 mW/g



0 dB = 0.058mW/g

Date/Time: 2012/2/16 AM 02:42:44

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH124_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

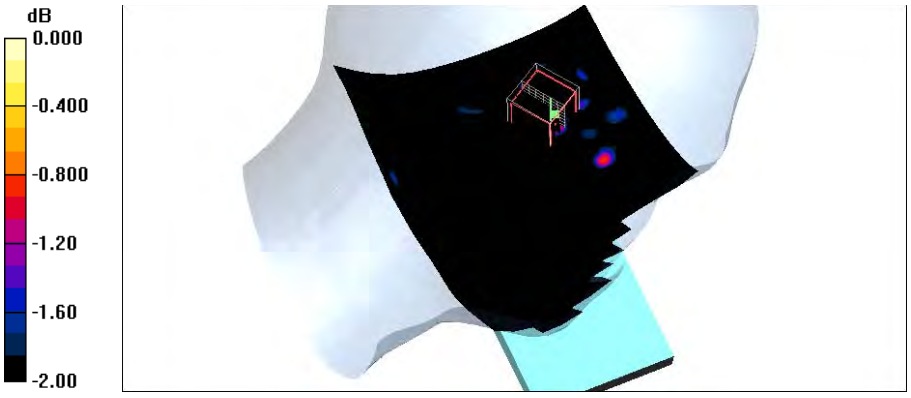
Communication System: IEEE 802.11a; Frequency: 5620 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5620 MHz; σ = 5.04 mho/m; ε_r = 35.7; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.23, 4.23, 4.23); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.058 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.99 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 0.118 W/kg
SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.060 mW/g



0 dB = 0.060mW/g

Date/Time: 2012/2/16 AM 01:45:49

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH149_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

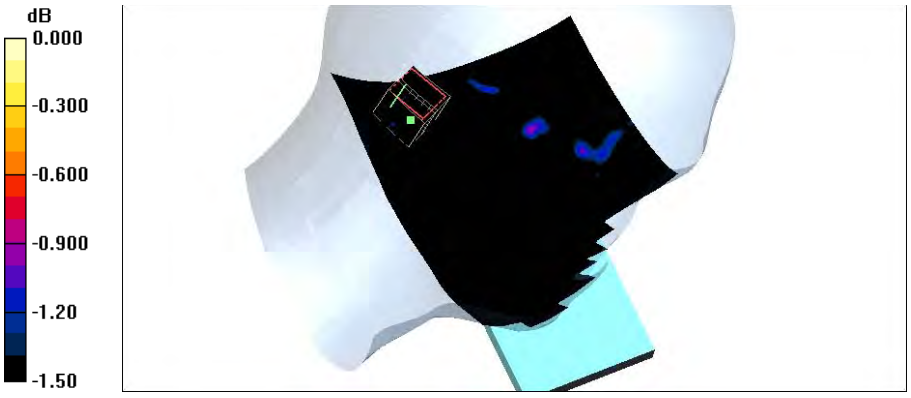
Communication System: IEEE 802.11a; Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5745 MHz; σ = 5.17 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.038 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.56 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 0.056 W/kg
SAR(1 g) = 0.032 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.046 mW/g



0 dB = 0.046mW/g

Date/Time: 2012/2/15 PM 11:33:18

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH153_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

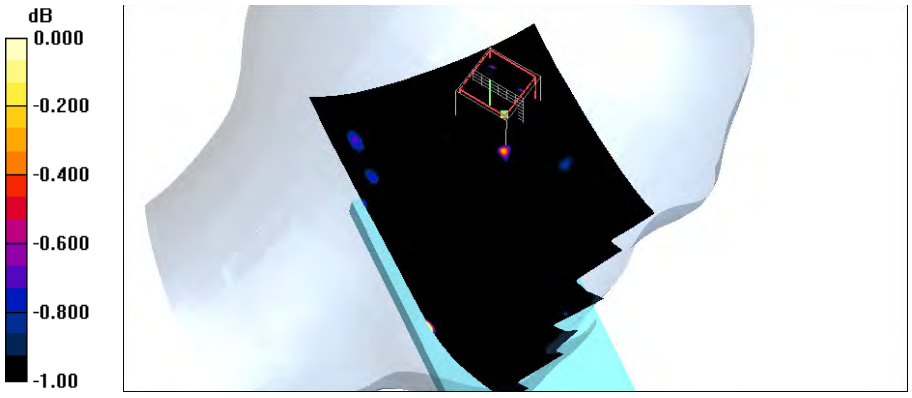
Communication System: IEEE 802.11a; Frequency: 5765 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5765 MHz; σ = 5.2 mho/m; ε_r = 35.4; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (101x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.042 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.17 V/m; Power Drift = 0.014 dB
Peak SAR (extrapolated) = 0.057 W/kg
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.024 mW/g
Maximum value of SAR (measured) = 0.039 mW/g



0 dB = 0.039mW/g

Date/Time: 2012/2/16 AM 12:57:08

Test Laboratory: A Test Lab Techno Corp.

LT_802.11a CH157_6M

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

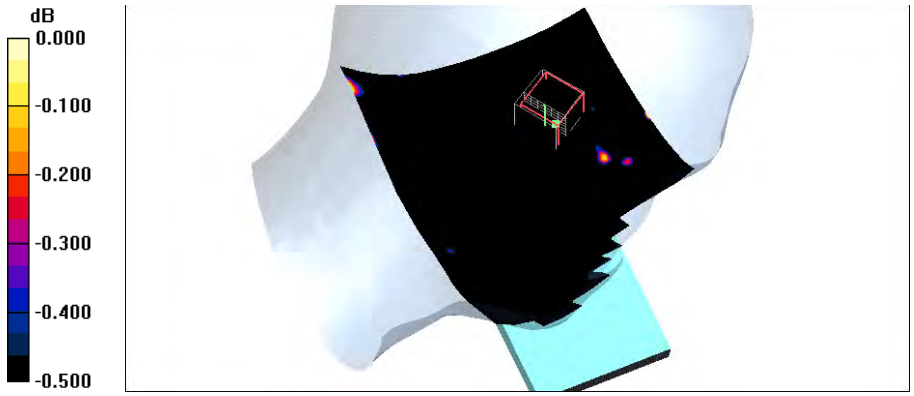
Communication System: IEEE 802.11a; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 5.22 mho/m; ε_r = 35.3; ρ = 1000 kg/m^3
Phantom section: Left Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.26, 4.26, 4.26); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Left Tilted/Area Scan (131x181x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.044 mW/g

Left Tilted/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.37 V/m; Power Drift = -0.179 dB
Peak SAR (extrapolated) = 0.078 W/kg
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.023 mW/g
Maximum value of SAR (measured) = 0.039 mW/g



0 dB = 0.039mW/g

Date/Time: 2012/2/29 PM 08:02:12

Test Laboratory: A Test Lab Techno Corp.

Flat_GSM 850 CH251_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

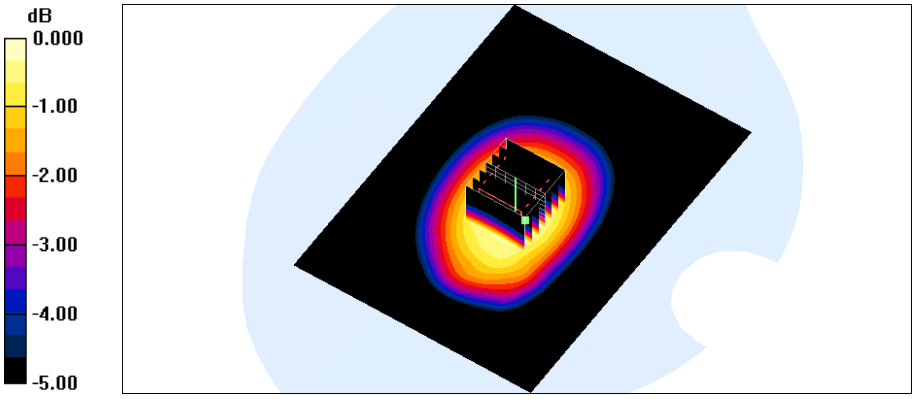
Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 1 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.459 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 21.1 V/m; Power Drift = -0.003 dB
Peak SAR (extrapolated) = 0.636 W/kg
SAR(1 g) = 0.401 mW/g; SAR(10 g) = 0.276 mW/g
Maximum value of SAR (measured) = 0.457 mW/g



0 dB = 0.457mW/g

Date/Time: 2012/2/29 PM 08:32:15

Test Laboratory: A Test Lab Techno Corp.

Flat_GSM 850 CH251_Front Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

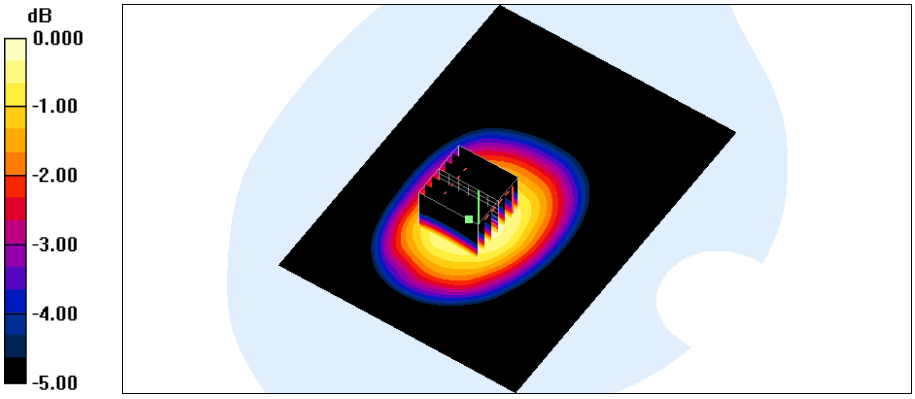
Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 849 MHz; σ = 1 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.371 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 17.6 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 0.515 W/kg
SAR(1 g) = 0.325 mW/g; SAR(10 g) = 0.222 mW/g
Maximum value of SAR (measured) = 0.374 mW/g



0 dB = 0.374mW/g

Date/Time: 2012/2/11 AM 11:38:04

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS 850 CH128_1D4U_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

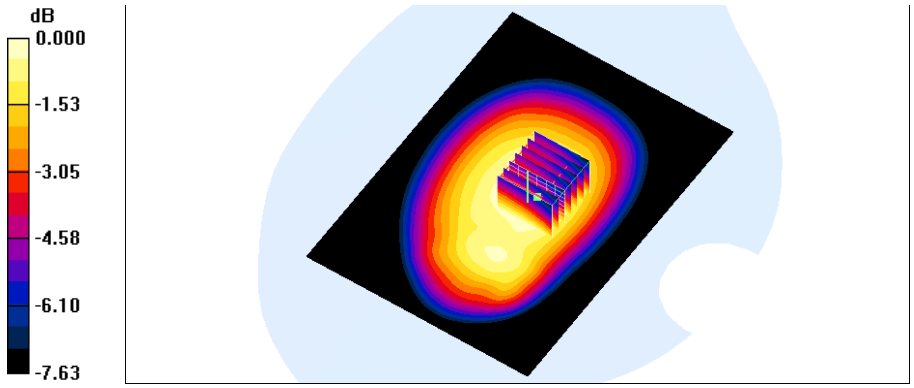
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.486 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 22.6 V/m; Power Drift = 0.028 dB
Peak SAR (extrapolated) = 0.585 W/kg
SAR(1 g) = 0.433 mW/g; SAR(10 g) = 0.324 mW/g
Maximum value of SAR (measured) = 0.480 mW/g



0 dB = 0.480mW/g

Date/Time: 2012/2/11 AM 09:57:11

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS 850 CH128_1D4U_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

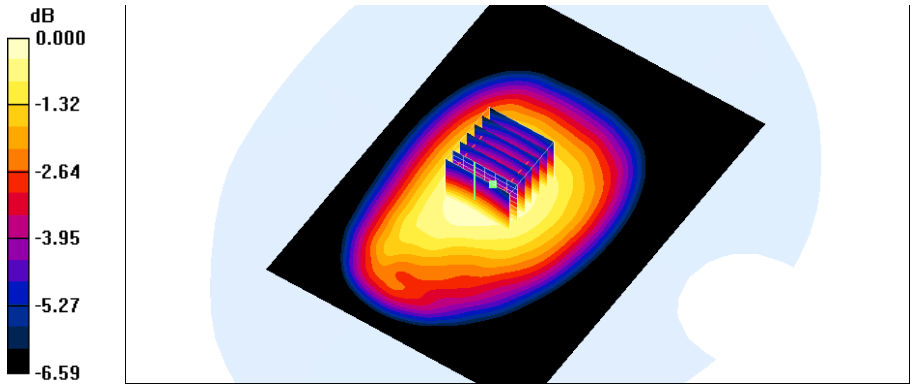
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.470 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 21.8 V/m; Power Drift = -0.130 dB
Peak SAR (extrapolated) = 0.565 W/kg
SAR(1 g) = 0.424 mW/g; SAR(10 g) = 0.322 mW/g
Maximum value of SAR (measured) = 0.467 mW/g



0 dB = 0.467mW/g

Date/Time: 2012/2/11 AM 08:07:19

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS 850 CH128_1D4U_Edge Bottom to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

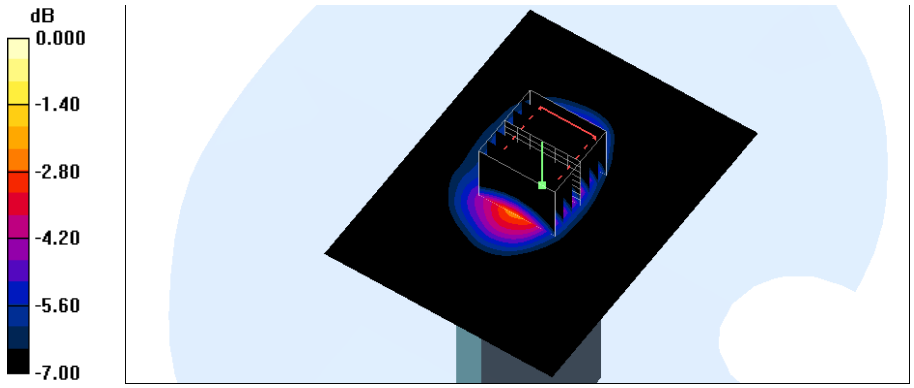
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x81x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.154 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 12.9 V/m; Power Drift = 0.015 dB
Peak SAR (extrapolated) = 0.314 W/kg
SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.064 mW/g
Maximum value of SAR (measured) = 0.166 mW/g



0 dB = 0.166mW/g

Date/Time: 2012/2/11 AM 03:43:50

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS 850 CH128_1D4U_Edge Right to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

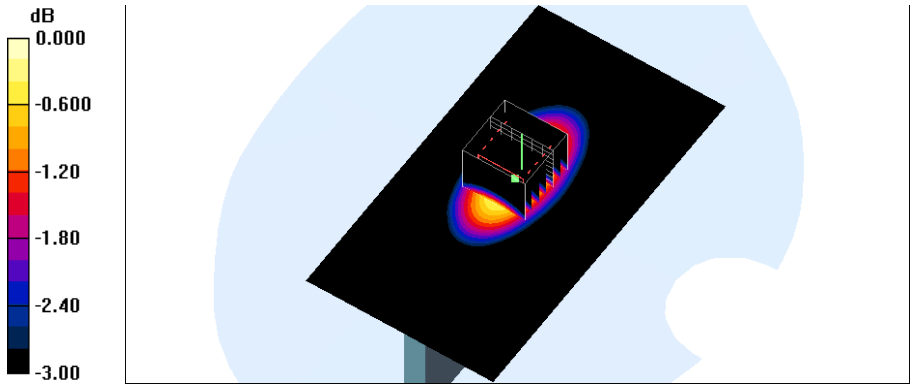
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.363 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 19.4 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.473 W/kg
SAR(1 g) = 0.318 mW/g; SAR(10 g) = 0.217 mW/g
Maximum value of SAR (measured) = 0.363 mW/g



0 dB = 0.363mW/g

Date/Time: 2012/2/11 AM 06:38:59

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS 850 CH128_1D4U_Edge Left to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

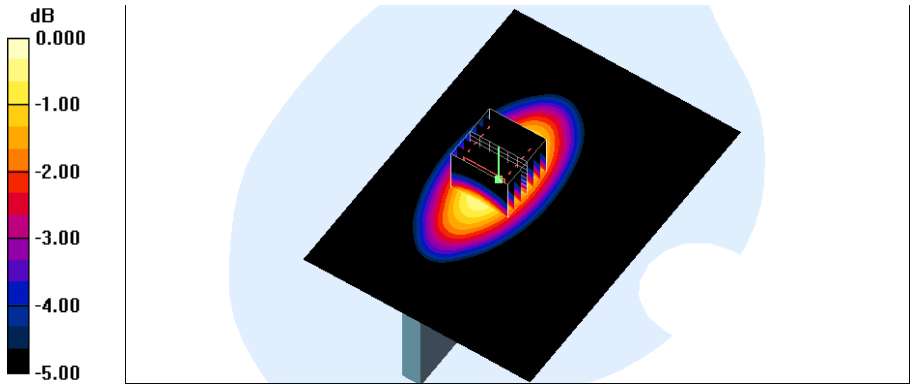
Communication System: GPRS 850 (1Down, 4Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.721 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 27.4 V/m; Power Drift = -0.038 dB
Peak SAR (extrapolated) = 0.921 W/kg
SAR(1 g) = 0.625 mW/g; SAR(10 g) = 0.426 mW/g
Maximum value of SAR (measured) = 0.720 mW/g



0 dB = 0.720mW/g

Date/Time: 2012/2/29 PM 08:59:25

Test Laboratory: A Test Lab Techno Corp.

Flat_DTM 850 CH128_2D3U_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

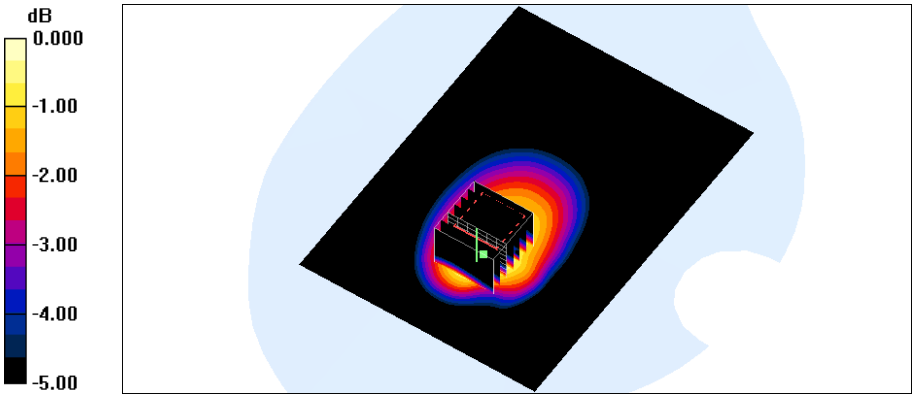
Communication System: DTM 850 (2Down, 3Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.533 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 18.0 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 0.853 W/kg
SAR(1 g) = 0.432 mW/g; SAR(10 g) = 0.270 mW/g
Maximum value of SAR (measured) = 0.514 mW/g



0 dB = 0.514mW/g

Date/Time: 2012/2/29 PM 09:30:18

Test Laboratory: A Test Lab Techno Corp.

Flat_DTM 850 CH128_2D3U_Front Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

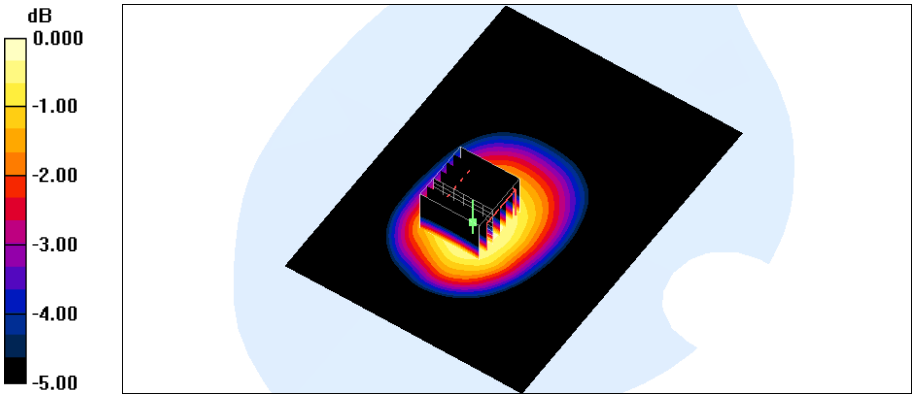
Communication System: DTM 850 (2Down, 3Up); Frequency: 824.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 824.2 MHz; σ = 0.973 mho/m; ε_r = 53.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.492 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 19.5 V/m; Power Drift = 0.044 dB
Peak SAR (extrapolated) = 0.700 W/kg
SAR(1 g) = 0.423 mW/g; SAR(10 g) = 0.281 mW/g
Maximum value of SAR (measured) = 0.489 mW/g



0 dB = 0.489mW/g

Date/Time: 2012/2/29 PM 01:58:20

Test Laboratory: A Test Lab Techno Corp.

Flat_PCS CH810_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

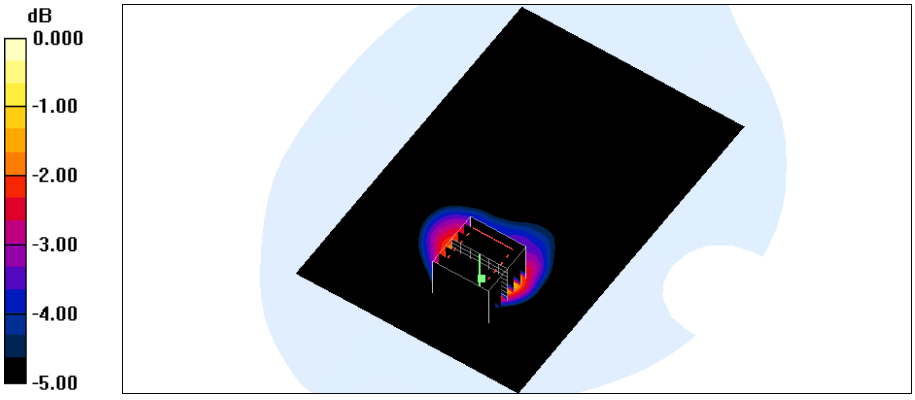
Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.442 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 5.58 V/m; Power Drift = 0.158 dB
Peak SAR (extrapolated) = 0.680 W/kg
SAR(1 g) = 0.346 mW/g; SAR(10 g) = 0.177 mW/g
Maximum value of SAR (measured) = 0.444 mW/g



0 dB = 0.444mW/g

Date/Time: 2012/2/29 PM 02:17:25

Test Laboratory: A Test Lab Techno Corp.

Flat_PCS CH810_Front Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

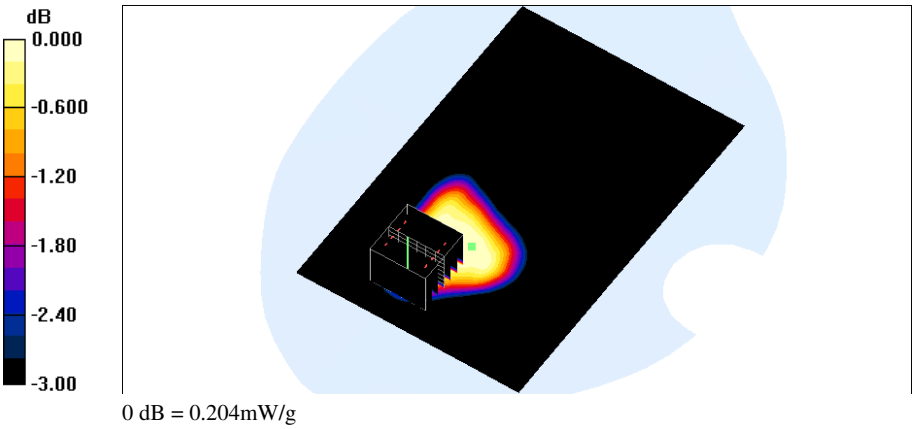
Communication System: PCS; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.211 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 5.06 V/m; Power Drift = -0.116 dB
Peak SAR (extrapolated) = 0.319 W/kg
SAR(1 g) = 0.162 mW/g; SAR(10 g) = 0.090 mW/g
Maximum value of SAR (measured) = 0.204 mW/g



0 dB = 0.204mW/g

Date/Time: 2012/2/9 PM 06:35:59

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH512_1D4U_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

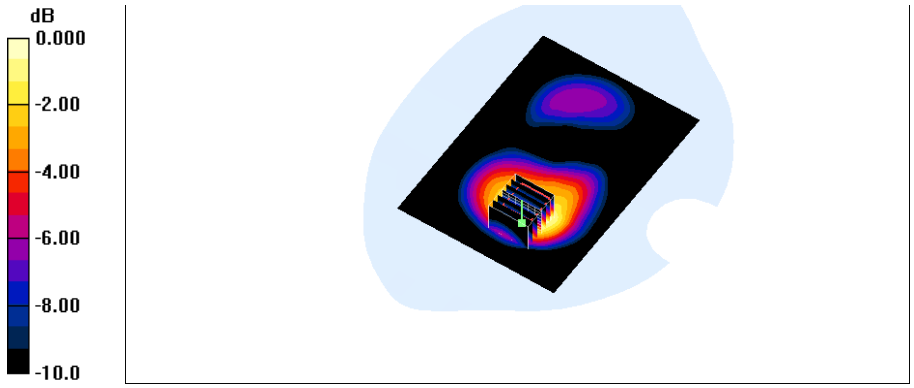
Communication System: GPRS PCS (1Down,4Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.1
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.45 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.28 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.87 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 1.59 W/kg
SAR(1 g) = 0.955 mW/g; SAR(10 g) = 0.541 mW/g
Maximum value of SAR (measured) = 1.19 mW/g



0 dB = 1.19mW/g

Date/Time: 2012/2/9 PM 07:01:42

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH661_1D4U_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

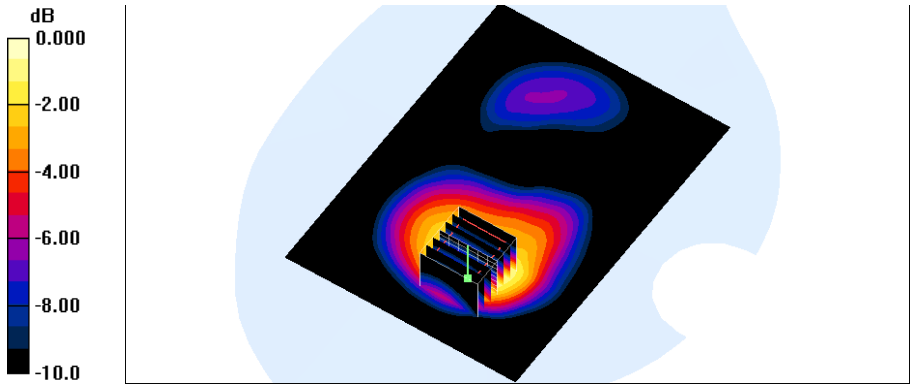
Communication System: GPRS PCS (1Down,4Up); Frequency: 1880 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.33 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 9.32 V/m; Power Drift = 0.054 dB
Peak SAR (extrapolated) = 1.62 W/kg
SAR(1 g) = 0.981 mW/g; SAR(10 g) = 0.547 mW/g
Maximum value of SAR (measured) = 1.23 mW/g



0 dB = 1.23mW/g

Date/Time: 2012/2/9 PM 06:10:13

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH810_1D4U_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

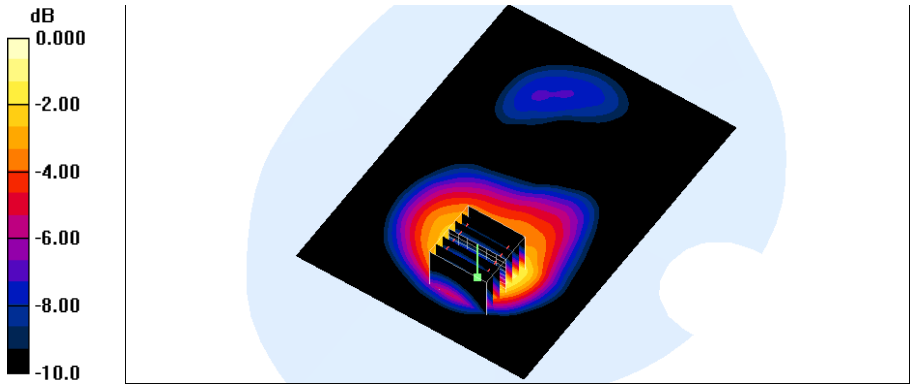
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

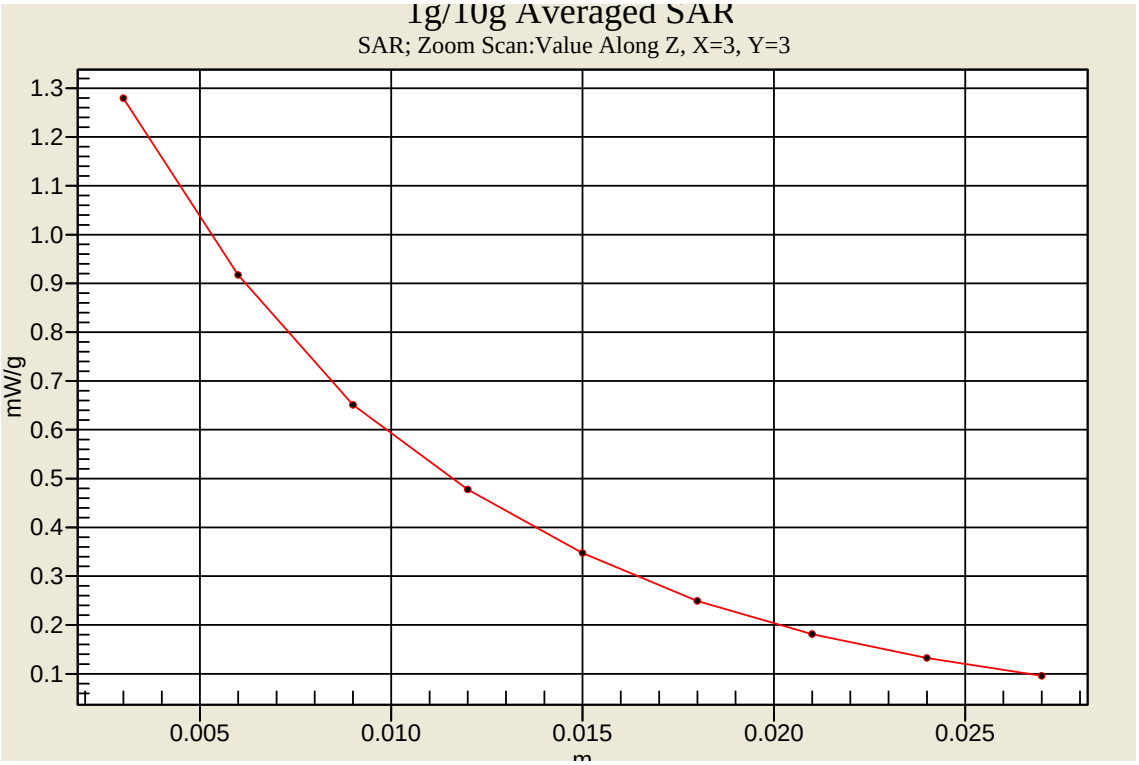
- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.36 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 10.2 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 1.72 W/kg
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.551 mW/g
Maximum value of SAR (measured) = 1.28 mW/g



0 dB = 1.28mW/g



Date/Time: 2012/2/9 PM 07:34:05

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH810_1D4U_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

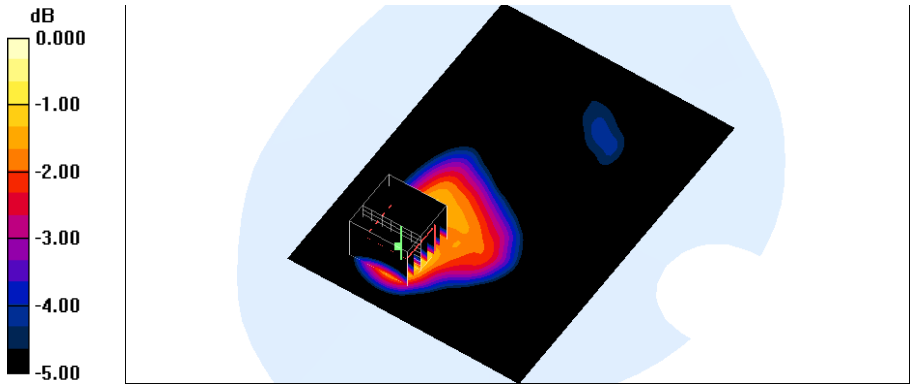
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.594 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.92 V/m; Power Drift = -0.052 dB
Peak SAR (extrapolated) = 0.810 W/kg
SAR(1 g) = 0.493 mW/g; SAR(10 g) = 0.276 mW/g
Maximum value of SAR (measured) = 0.616 mW/g



0 dB = 0.616mW/g

Date/Time: 2012/2/10 AM 05:25:54

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH810_1D4U_Edge Bottom to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

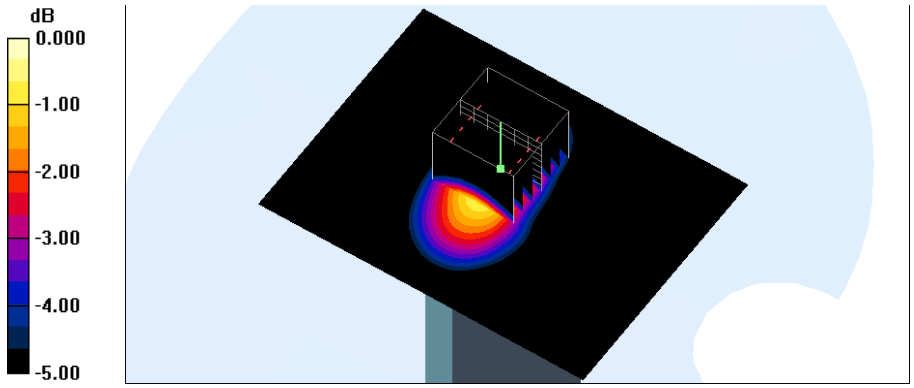
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.573 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 19.0 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.772 W/kg
SAR(1 g) = 0.485 mW/g; SAR(10 g) = 0.274 mW/g
Maximum value of SAR (measured) = 0.598 mW/g



0 dB = 0.598mW/g

Date/Time: 2012/2/9 PM 08:27:37

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH810_1D4U_Edge Right to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

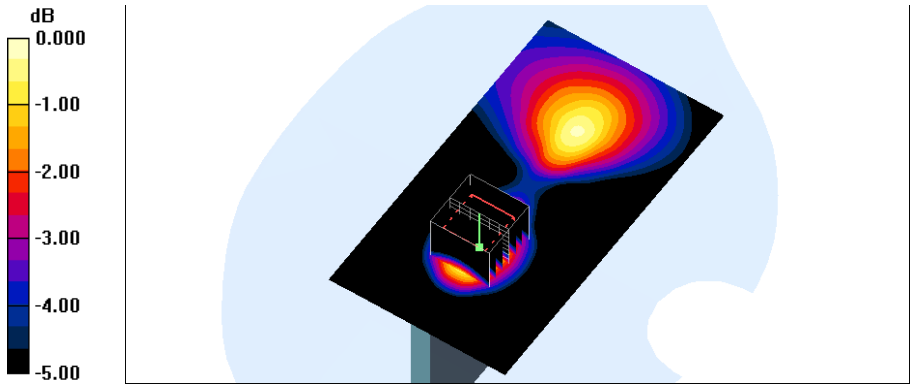
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.132 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.45 V/m; Power Drift = 0.051 dB
Peak SAR (extrapolated) = 0.162 W/kg
SAR(1 g) = 0.106 mW/g; SAR(10 g) = 0.062 mW/g
Maximum value of SAR (measured) = 0.129 mW/g



0 dB = 0.129mW/g

Date/Time: 2012/2/9 PM 08:52:57

Test Laboratory: A Test Lab Techno Corp.

Flat_GPRS PCS CH810_1D4U_Edge Left to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

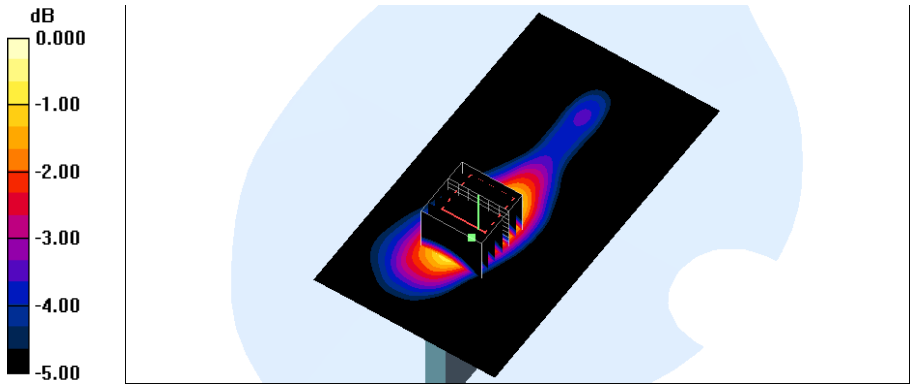
Communication System: GPRS PCS (1Down,4Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.1
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.285 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 11.1 V/m; Power Drift = -0.047 dB
Peak SAR (extrapolated) = 0.363 W/kg
SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.135 mW/g
Maximum value of SAR (measured) = 0.276 mW/g



0 dB = 0.276mW/g

Date/Time: 2012/2/29 PM 03:28:13

Test Laboratory: A Test Lab Techno Corp.

Flat_DTM PCS CH512_2D3U_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

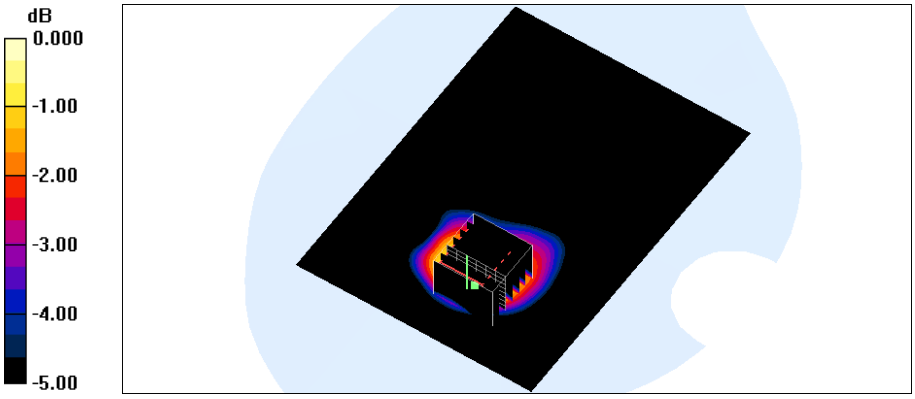
Communication System: DTM PCS (2Down,3Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.45 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.26 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.71 V/m; Power Drift = 0.068 dB
Peak SAR (extrapolated) = 1.67 W/kg
SAR(1 g) = 0.872 mW/g; SAR(10 g) = 0.468 mW/g
Maximum value of SAR (measured) = 1.15 mW/g



0 dB = 1.15mW/g

Date/Time: 2012/2/29 PM 03:21:08

Test Laboratory: A Test Lab Techno Corp.

Flat_DTM PCS CH512_2D3U_Front Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

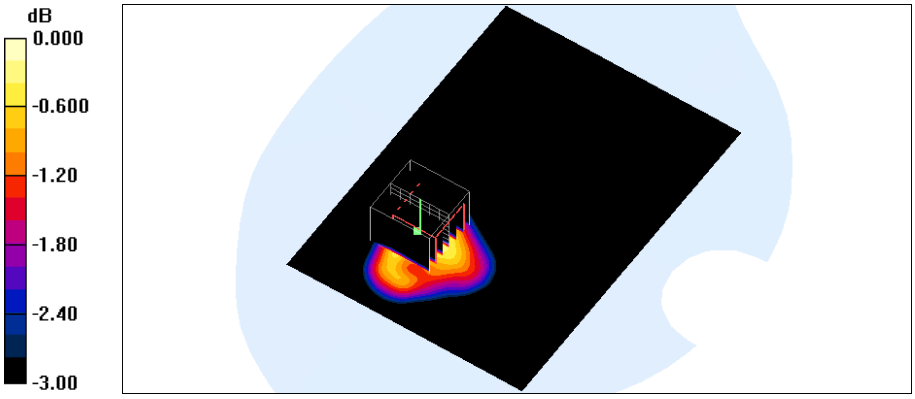
Communication System: DTM PCS (2Down,3Up); Frequency: 1850.2 MHz;Duty Cycle: 1:2.8
Medium parameters used (interpolated): f = 1850.2 MHz; σ = 1.45 mho/m; ε_r = 52.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.788 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 5.71 V/m; Power Drift = 0.078 dB
Peak SAR (extrapolated) = 2.31 W/kg
SAR(1 g) = 0.621 mW/g; SAR(10 g) = 0.354 mW/g
Maximum value of SAR (measured) = 0.766 mW/g



0 dB = 0.766mW/g

Date/Time: 2012/2/29 PM 02:35:57

Test Laboratory: A Test Lab Techno Corp.

Flat_DTM PCS CH661_2D3U_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

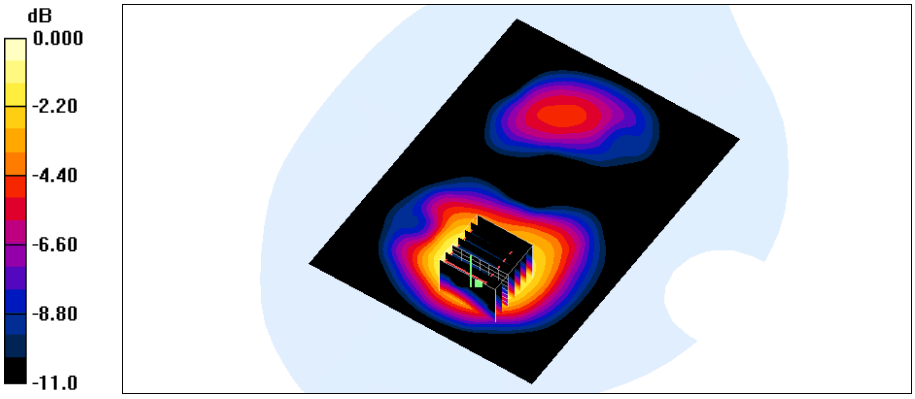
Communication System: DTM PCS (2Down,3Up); Frequency: 1880 MHz;Duty Cycle: 1:2.8
Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.20 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.38 V/m; Power Drift = 0.156 dB
Peak SAR (extrapolated) = 1.57 W/kg
SAR(1 g) = 0.835 mW/g; SAR(10 g) = 0.452 mW/g
Maximum value of SAR (measured) = 1.10 mW/g



0 dB = 1.10mW/g

Date/Time: 2012/2/29 PM 03:05:19

Test Laboratory: A Test Lab Techno Corp.

Flat_DTM PCS CH810_2D3U_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

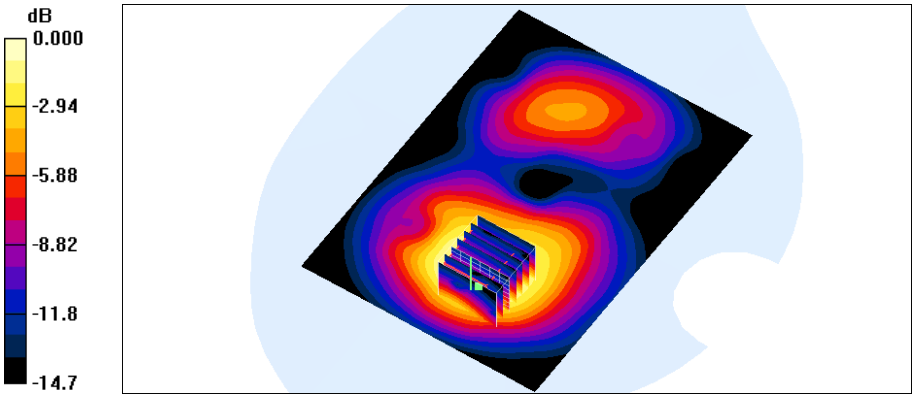
Communication System: DTM PCS (2Down,3Up); Frequency: 1909.8 MHz;Duty Cycle: 1:2.8
Medium parameters used: f = 1910 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.17 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 7.38 V/m; Power Drift = 0.022 dB
Peak SAR (extrapolated) = 1.52 W/kg
SAR(1 g) = 0.818 mW/g; SAR(10 g) = 0.445 mW/g
Maximum value of SAR (measured) = 1.07 mW/g



0 dB = 1.07mW/g

Date/Time: 2012/2/10 PM 04:01:50

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band II CH9538_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

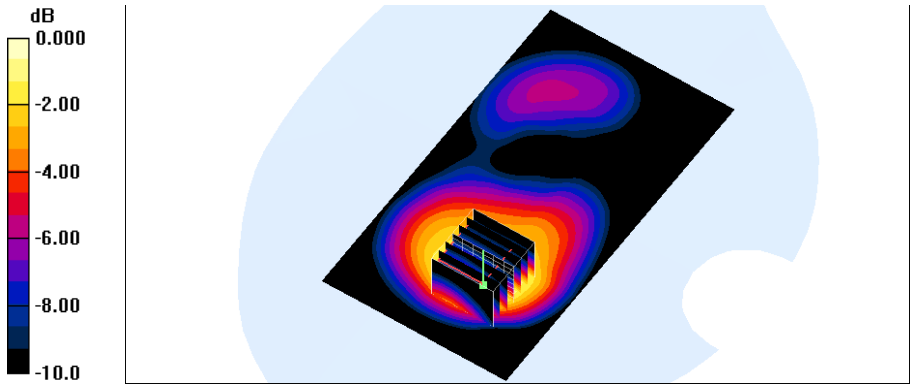
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.03 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 9.53 V/m; Power Drift = -0.034 dB
Peak SAR (extrapolated) = 1.18 W/kg
SAR(1 g) = 0.726 mW/g; SAR(10 g) = 0.409 mW/g
Maximum value of SAR (measured) = 0.890 mW/g



0 dB = 0.890mW/g

Date/Time: 2012/2/10 PM 04:30:05

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band II CH9538_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

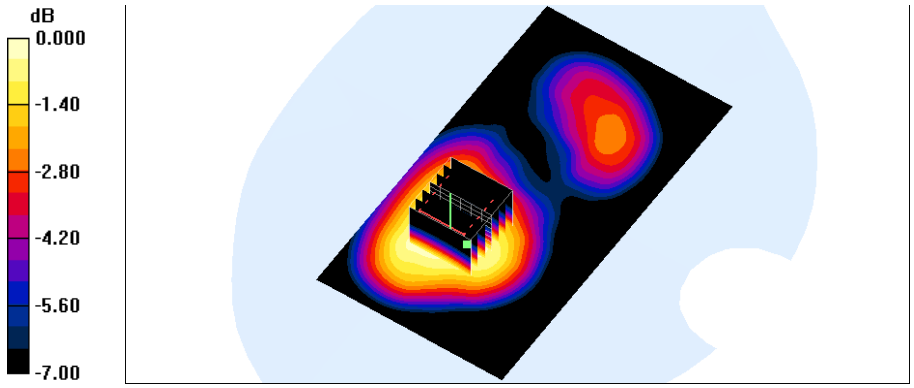
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.399 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.26 V/m; Power Drift = -0.034 dB
Peak SAR (extrapolated) = 0.498 W/kg
SAR(1 g) = 0.340 mW/g; SAR(10 g) = 0.218 mW/g
Maximum value of SAR (measured) = 0.401 mW/g



0 dB = 0.401mW/g

Date/Time: 2012/2/10 PM 05:51:09

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band II CH9538_Edge Bottom to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

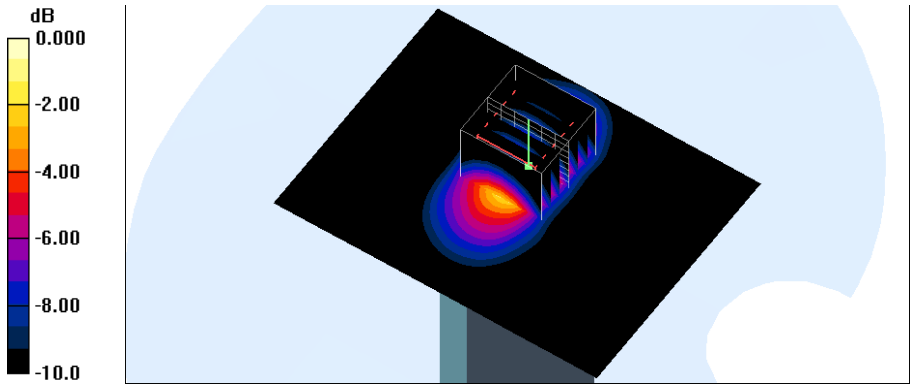
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x61x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.381 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 14.2 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 0.527 W/kg
SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.155 mW/g
Maximum value of SAR (measured) = 0.400 mW/g



0 dB = 0.400mW/g

Date/Time: 2012/2/10 AM 11:40:44

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band II CH9538_Edge Right to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

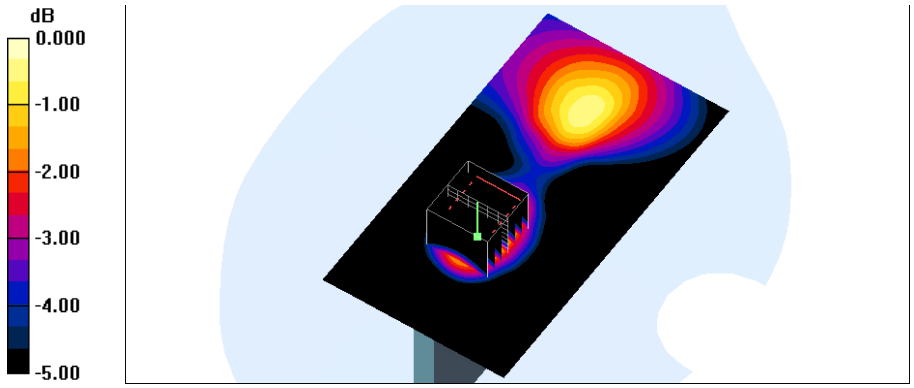
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.081 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.33 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.102 W/kg
SAR(1 g) = 0.066 mW/g; SAR(10 g) = 0.038 mW/g
Maximum value of SAR (measured) = 0.080 mW/g



0 dB = 0.080mW/g

Date/Time: 2012/2/10 AM 07:07:43

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band II CH9538_Edge Left to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

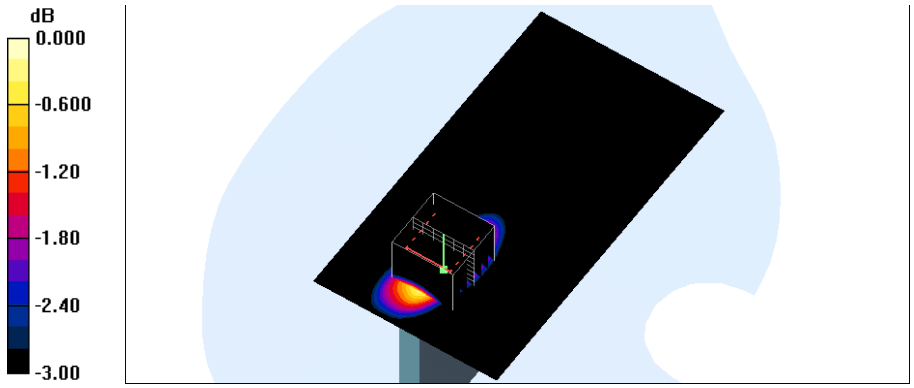
Communication System: WCDMA Band II; Frequency: 1907.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1908 MHz; σ = 1.51 mho/m; ε_r = 52; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.64, 4.64, 4.64); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.196 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.35 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 0.238 W/kg
SAR(1 g) = 0.152 mW/g; SAR(10 g) = 0.090 mW/g
Maximum value of SAR (measured) = 0.185 mW/g



0 dB = 0.185mW/g

Date/Time: 2012/2/11 AM 12:43:50

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band V CH4183_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

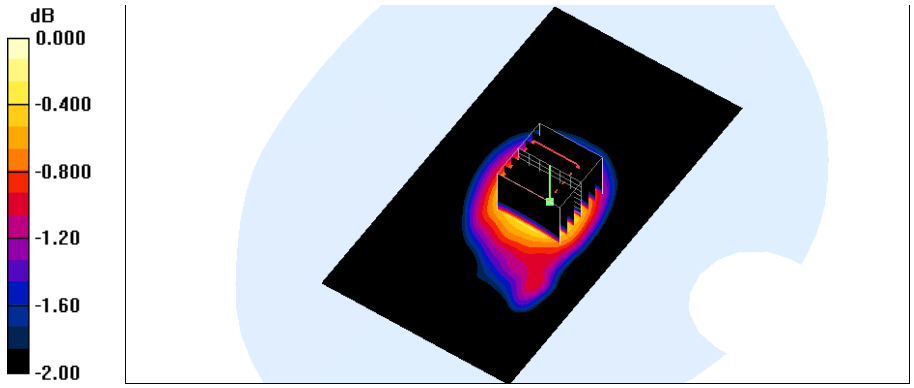
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.987 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.293 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 17.4 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.359 W/kg
SAR(1 g) = 0.267 mW/g; SAR(10 g) = 0.201 mW/g
Maximum value of SAR (measured) = 0.295 mW/g



0 dB = 0.295mW/g

Date/Time: 2012/2/11 AM 01:09:14

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band V CH4183_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

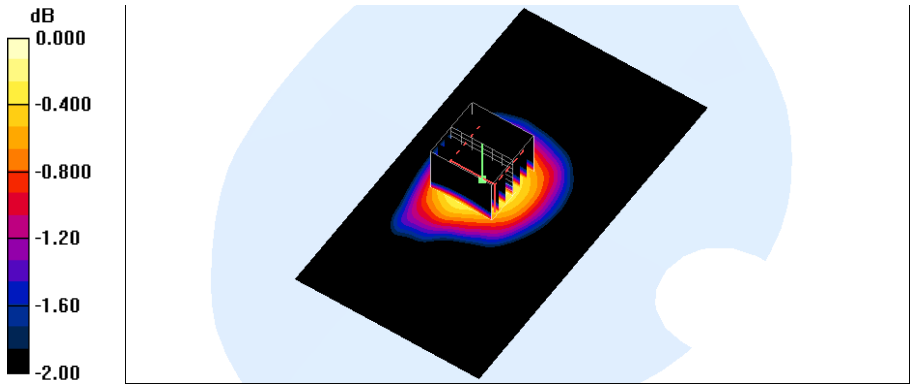
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.987 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.289 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 17.0 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.350 W/kg
SAR(1 g) = 0.261 mW/g; SAR(10 g) = 0.197 mW/g
Maximum value of SAR (measured) = 0.288 mW/g



0 dB = 0.288mW/g

Date/Time: 2012/2/11 AM 01:36:49

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band V CH4183_Edge Bottom to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

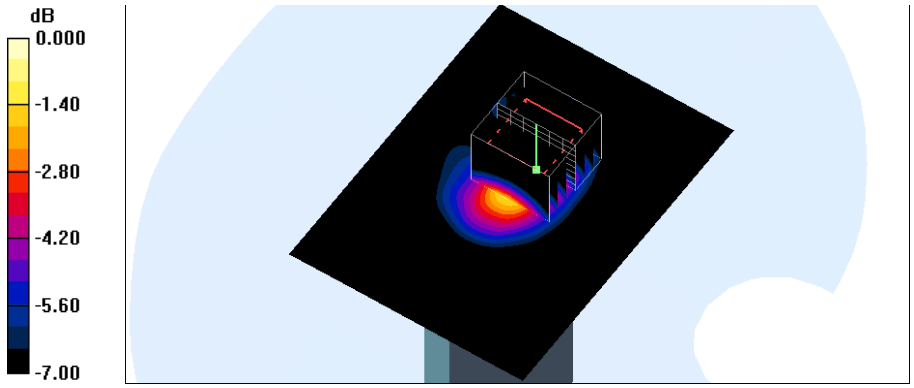
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.987 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x81x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.093 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 8.81 V/m; Power Drift = 0.030 dB
Peak SAR (extrapolated) = 0.176 W/kg
SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.036 mW/g
Maximum value of SAR (measured) = 0.093 mW/g



0 dB = 0.093mW/g

Date/Time: 2012/2/11 AM 03:15:49

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band V CH4183_Edge Right to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

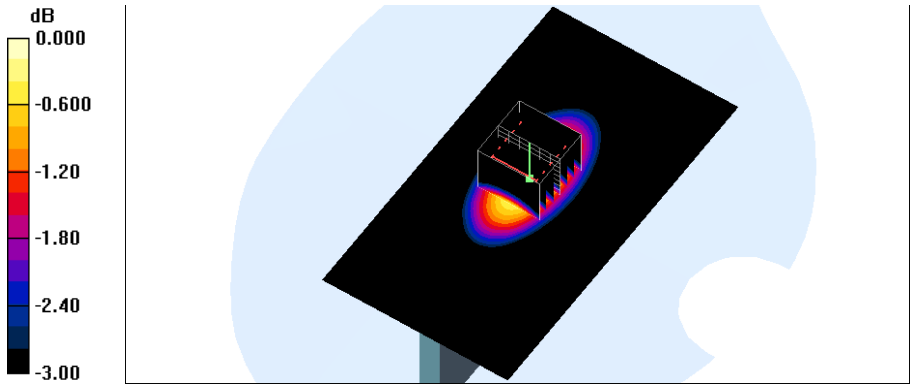
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.987 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.196 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 14.1 V/m; Power Drift = 0.025 dB
Peak SAR (extrapolated) = 0.256 W/kg
SAR(1 g) = 0.173 mW/g; SAR(10 g) = 0.118 mW/g
Maximum value of SAR (measured) = 0.199 mW/g



0 dB = 0.199mW/g

Date/Time: 2012/2/11 AM 06:14:21

Test Laboratory: A Test Lab Techno Corp.

Flat_WCDMA Band V CH4183_Edge Left to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

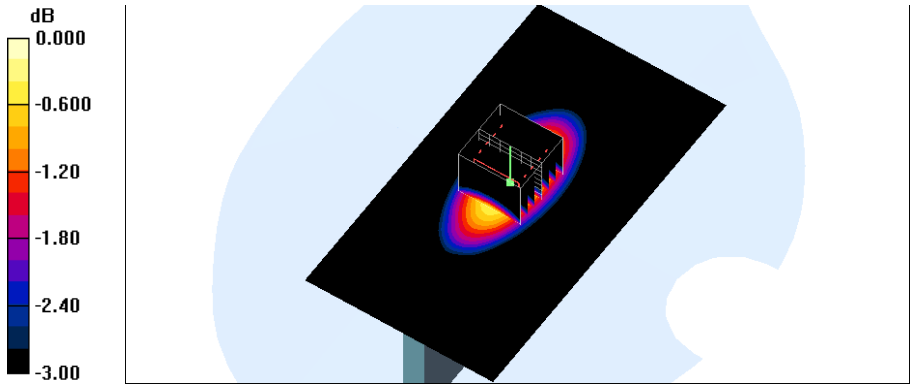
Communication System: WCDMA Band V; Frequency: 836.6 MHz;Duty Cycle: 1:1
Medium parameters used: f = 837 MHz; σ = 0.987 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(6.16, 6.16, 6.16); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.354 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 19.0 V/m; Power Drift = -0.008 dB
Peak SAR (extrapolated) = 0.461 W/kg
SAR(1 g) = 0.313 mW/g; SAR(10 g) = 0.215 mW/g
Maximum value of SAR (measured) = 0.359 mW/g



0 dB = 0.359mW/g

Date/Time: 2012/2/13 AM 06:42:04

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11b CH11_1M_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

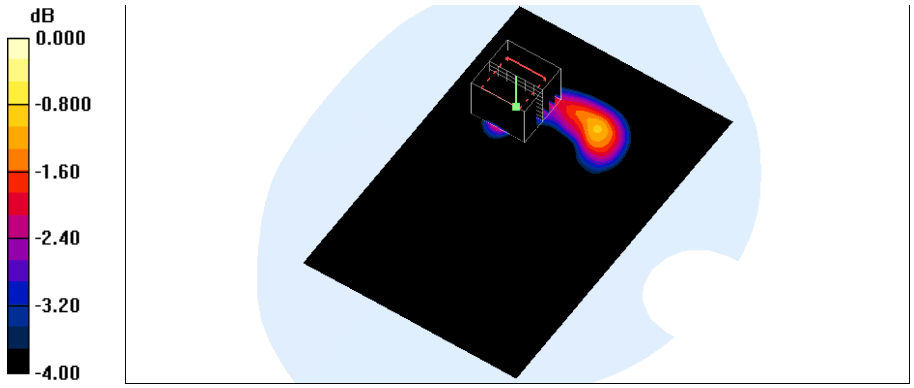
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.152 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.23 V/m; Power Drift = -0.090 dB
Peak SAR (extrapolated) = 0.277 W/kg
SAR(1 g) = 0.118 mW/g; SAR(10 g) = 0.055 mW/g
Maximum value of SAR (measured) = 0.152 mW/g



0 dB = 0.152mW/g

Date/Time: 2012/2/13 AM 03:54:59

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11b CH11_1M_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

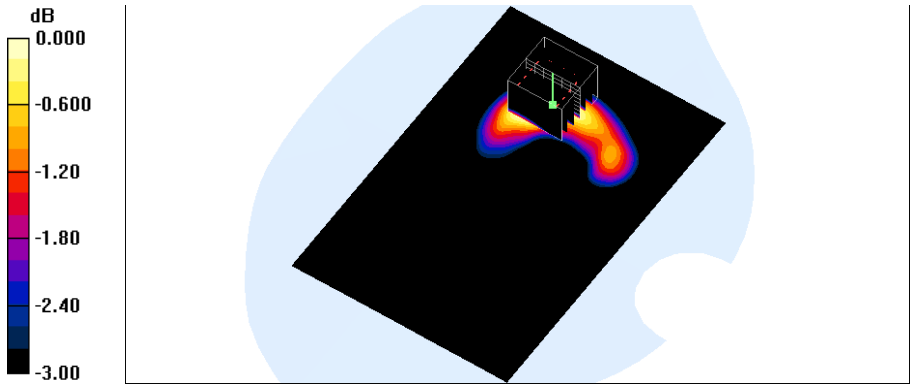
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.092 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 4.11 V/m; Power Drift = -0.086 dB
Peak SAR (extrapolated) = 0.132 W/kg
SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.037 mW/g
Maximum value of SAR (measured) = 0.081 mW/g



0 dB = 0.081mW/g

Date/Time: 2012/2/13 AM 09:44:12

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11b CH11_1M_Edge Top to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

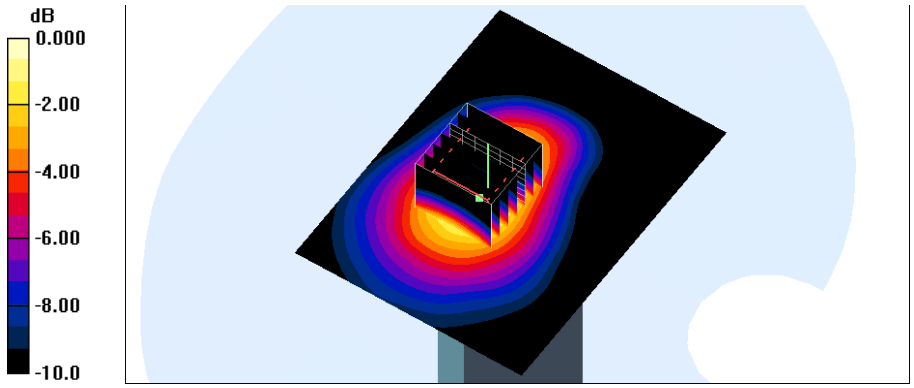
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x81x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.098 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 6.37 V/m; Power Drift = -0.019 dB
Peak SAR (extrapolated) = 0.168 W/kg
SAR(1 g) = 0.081 mW/g; SAR(10 g) = 0.043 mW/g
Maximum value of SAR (measured) = 0.100 mW/g



0 dB = 0.100mW/g

Date/Time: 2012/2/13 AM 10:15:20

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11b CH11_1M_Edge Right to phantom 10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

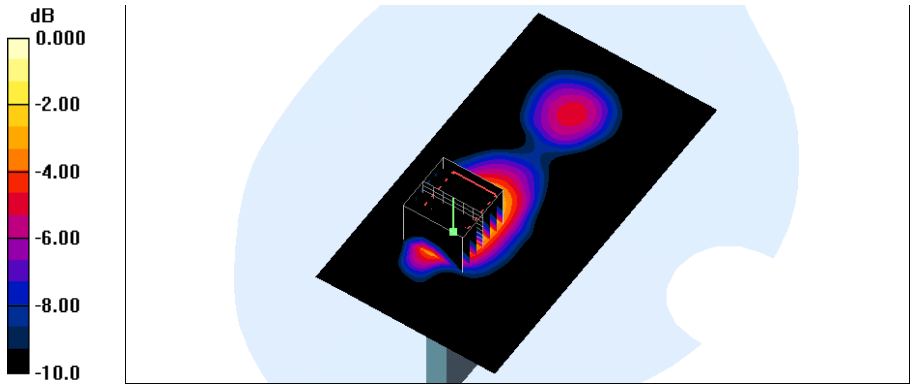
Communication System: IEEE 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (61x111x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.097 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 3.40 V/m; Power Drift = -0.119 dB
Peak SAR (extrapolated) = 0.167 W/kg
SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.034 mW/g
Maximum value of SAR (measured) = 0.093 mW/g



0 dB = 0.093mW/g

Date/Time: 2012/3/1 PM 05:12:22

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH36_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

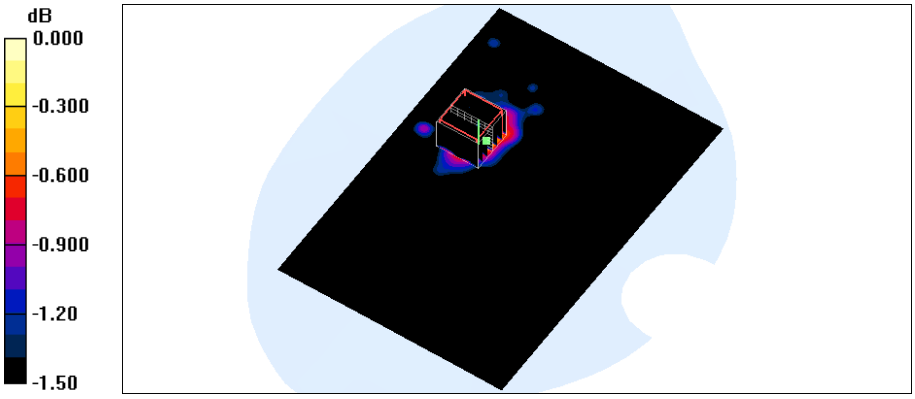
Communication System: IEEE 802.11a; Frequency: 5180 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5180 MHz; σ = 5.5 mho/m; ε_r = 47.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.3, 4.3, 4.3); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.110 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.74 V/m; Power Drift = -0.038 dB
Peak SAR (extrapolated) = 0.246 W/kg
SAR(1 g) = 0.099 mW/g; SAR(10 g) = 0.081 mW/g
Maximum value of SAR (measured) = 0.118 mW/g



0 dB = 0.118mW/g

Date/Time: 2012/3/1 PM 05:36:15

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH40_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

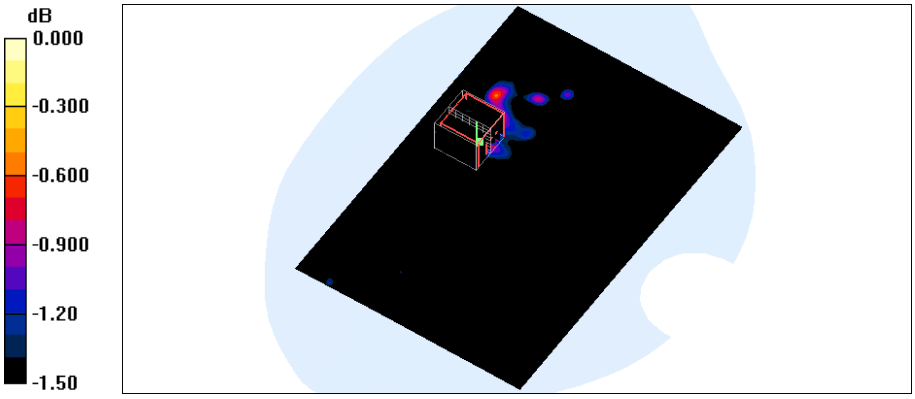
Communication System: IEEE 802.11a; Frequency: 5200 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5200 MHz; σ = 5.52 mho/m; ε_r = 47.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(4.3, 4.3, 4.3); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.076 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 2.59 V/m; Power Drift = -0.024 dB
Peak SAR (extrapolated) = 0.238 W/kg
SAR(1 g) = 0.071 mW/g; SAR(10 g) = 0.057 mW/g
Maximum value of SAR (measured) = 0.087 mW/g



0 dB = 0.087mW/g

Date/Time: 2012/3/1 PM 05:59:17

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH52_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

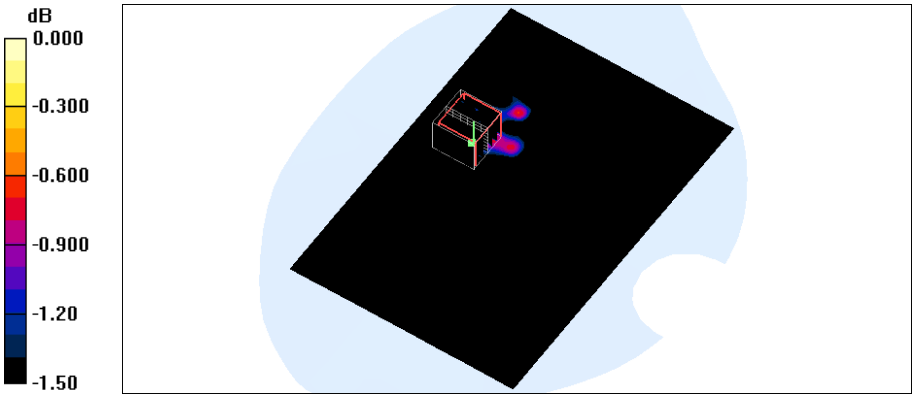
Communication System: IEEE 802.11a; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5260 MHz; σ = 5.57 mho/m; ε_r = 47.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.96, 3.96, 3.96); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.089 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.15 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 0.143 W/kg
SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.061 mW/g
Maximum value of SAR (measured) = 0.096 mW/g



0 dB = 0.096mW/g

Date/Time: 2012/3/1 PM 06:18:21

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH64_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

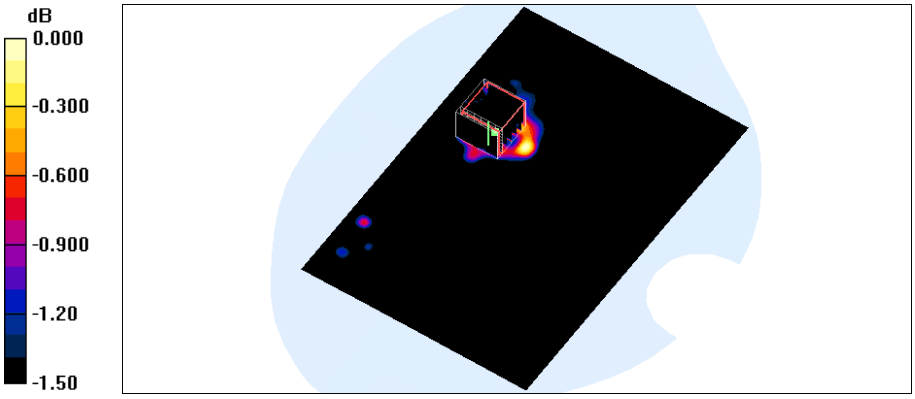
Communication System: IEEE 802.11a; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5320 MHz; σ = 5.68 mho/m; ε_r = 47.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.96, 3.96, 3.96); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.089 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.04 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.342 W/kg
SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.059 mW/g
Maximum value of SAR (measured) = 0.088 mW/g



0 dB = 0.088mW/g

Date/Time: 2012/3/1 PM 06:38:16

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH100_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

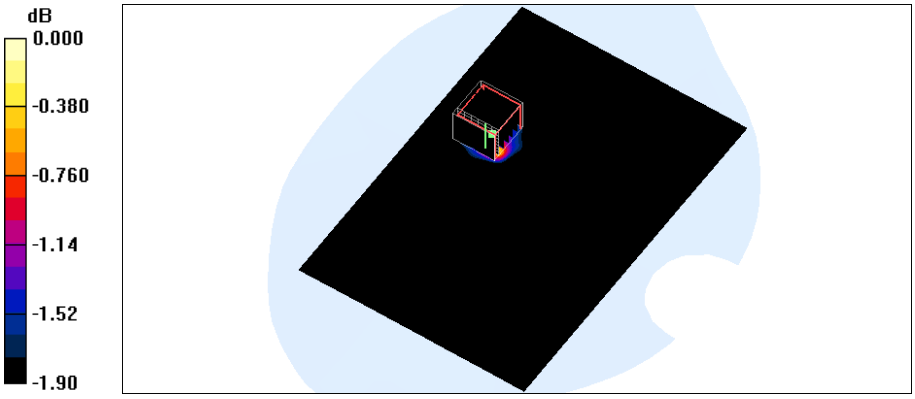
Communication System: IEEE 802.11a; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 5.9 mho/m; ε_r = 47.1; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.67, 3.67, 3.67); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.153 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.38 V/m; Power Drift = -0.146 dB
Peak SAR (extrapolated) = 0.272 W/kg
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.076 mW/g
Maximum value of SAR (measured) = 0.156 mW/g



0 dB = 0.156mW/g

Date/Time: 2012/3/1 PM 07:01:18

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH104_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

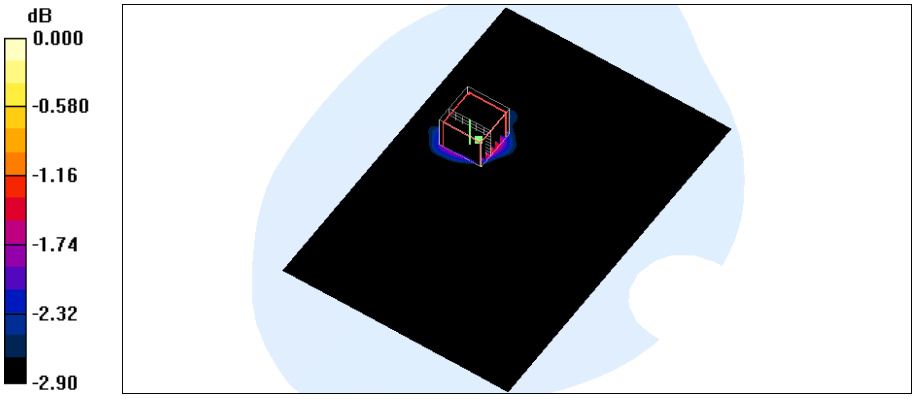
Communication System: IEEE 802.11a; Frequency: 5520 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5520 MHz; σ = 5.91 mho/m; ε_r = 47; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.67, 3.67, 3.67); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.158 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.17 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 0.622 W/kg
SAR(1 g) = 0.138 mW/g; SAR(10 g) = 0.087 mW/g
Maximum value of SAR (measured) = 0.181 mW/g



0 dB = 0.181mW/g

Date/Time: 2012/3/1 PM 07:25:14

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH116_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

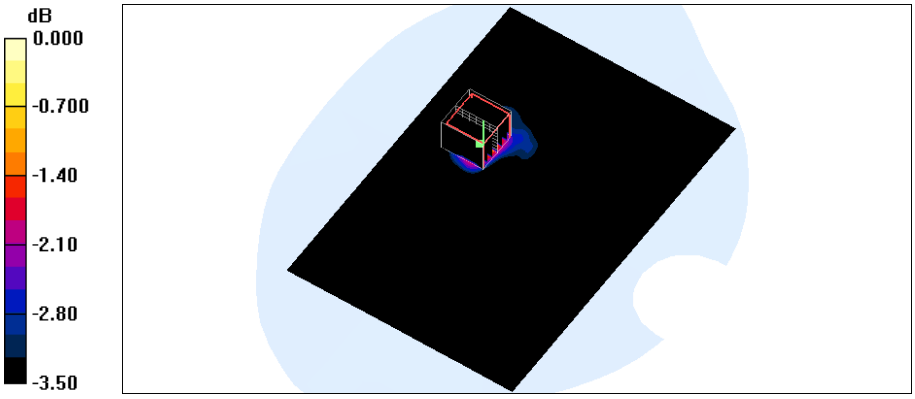
Communication System: IEEE 802.11a; Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5580 MHz; σ = 5.98 mho/m; ε_r = 46.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.36, 3.36, 3.36); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.225 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.53 V/m; Power Drift = -0.046 dB
Peak SAR (extrapolated) = 1.23 W/kg
SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.104 mW/g
Maximum value of SAR (measured) = 0.239 mW/g



0 dB = 0.239mW/g

Date/Time: 2012/3/1 PM 07:44:10

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH124_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

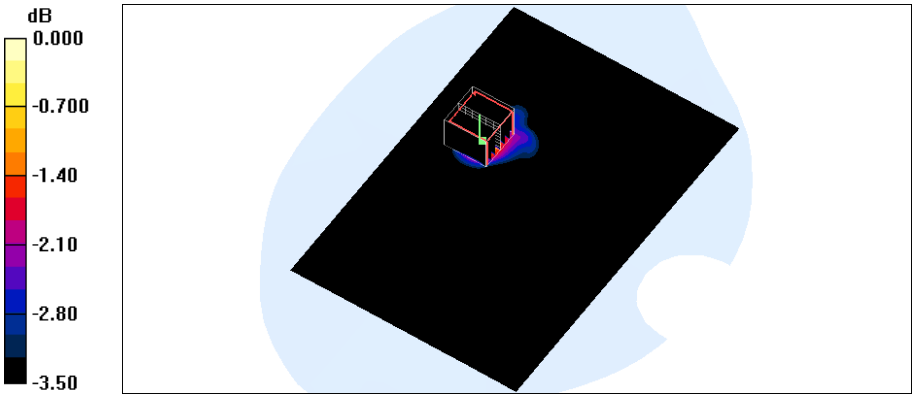
Communication System: IEEE 802.11a; Frequency: 5620 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5620 MHz; σ = 6.04 mho/m; ε_r = 46.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.36, 3.36, 3.36); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.251 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.70 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 1.12 W/kg
SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.115 mW/g
Maximum value of SAR (measured) = 0.283 mW/g



0 dB = 0.283mW/g

Date/Time: 2012/3/1 PM 09:06:22

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH124_6M_Front Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

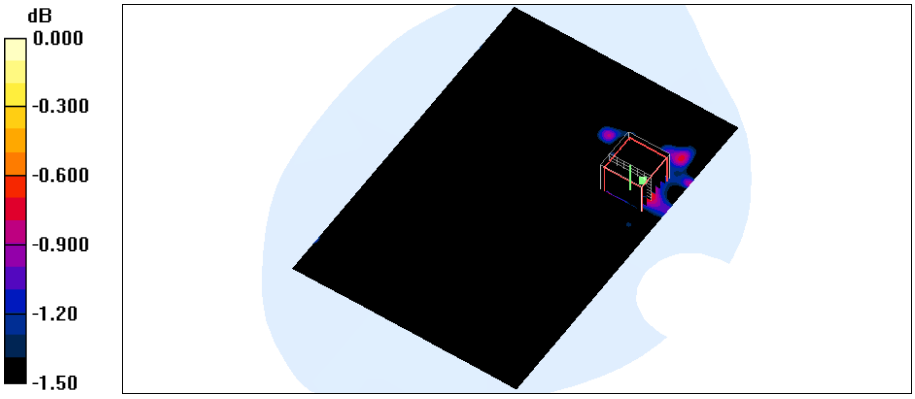
Communication System: IEEE 802.11a; Frequency: 5620 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5620 MHz; σ = 6.04 mho/m; ε_r = 46.8; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.36, 3.36, 3.36); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.102 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.22 V/m; Power Drift = -0.099 dB
Peak SAR (extrapolated) = 0.269 W/kg
SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.065 mW/g
Maximum value of SAR (measured) = 0.102 mW/g



0 dB = 0.102mW/g

Date/Time: 2012/3/1 PM 08:03:13

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH149_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

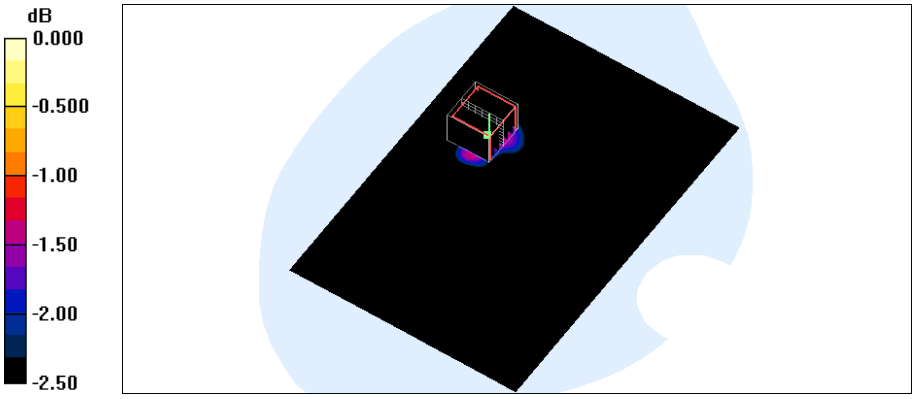
Communication System: IEEE 802.11a; Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5745 MHz; σ = 6.2 mho/m; ε_r = 46.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.86, 3.86, 3.86); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.165 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.31 V/m; Power Drift = 0.077 dB
Peak SAR (extrapolated) = 0.738 W/kg
SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.089 mW/g
Maximum value of SAR (measured) = 0.202 mW/g



0 dB = 0.202mW/g

Date/Time: 2012/3/1 PM 08:21:21

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH153_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

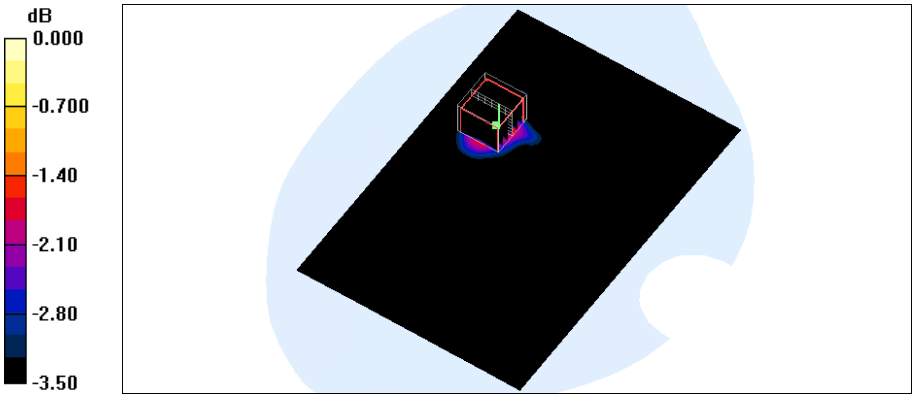
Communication System: IEEE 802.11a; Frequency: 5765 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5765 MHz; σ = 6.23 mho/m; ε_r = 46.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.86, 3.86, 3.86); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.181 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.25 V/m; Power Drift = -0.132 dB
Peak SAR (extrapolated) = 0.744 W/kg
SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.085 mW/g
Maximum value of SAR (measured) = 0.191 mW/g



0 dB = 0.191mW/g

Date/Time: 2012/3/1 PM 08:43:12

Test Laboratory: A Test Lab Techno Corp.

Flat_802.11a CH157_6M_Back Surface to Phantom_10mm_Headset

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

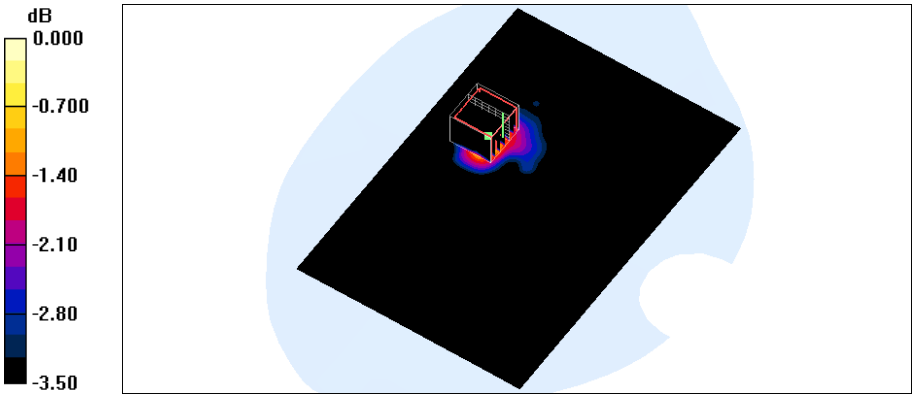
Communication System: IEEE 802.11a; Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used (interpolated): f = 5785 MHz; σ = 6.25 mho/m; ε_r = 46.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: EX3DV4 - SN3753; ConvF(3.86, 3.86, 3.86); Calibrated: 2012/1/4
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (131x191x1):
Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.170 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 3.30 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.503 W/kg
SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.084 mW/g
Maximum value of SAR (measured) = 0.175 mW/g



0 dB = 0.175mW/g

Date/Time: 2012/2/19 PM 11:03:41

Test Laboratory: A Test Lab Techno Corp.

Flat_BT CH78_BT 3.0_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

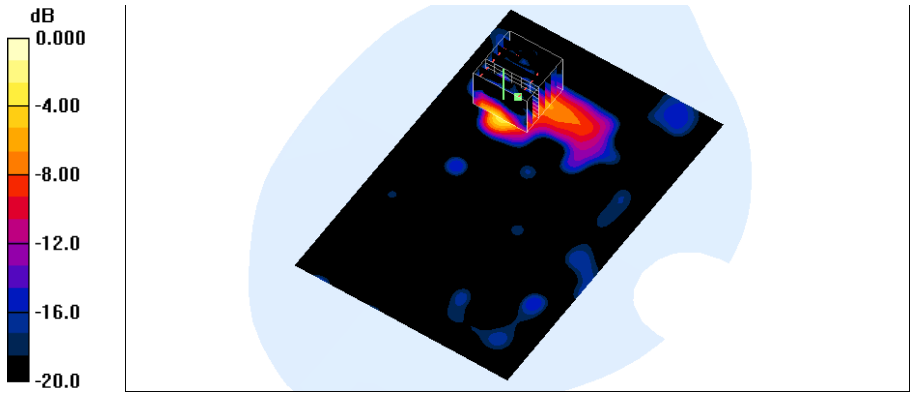
Communication System: Bluetooth; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.98 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.034 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 0.000 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 0.099 W/kg
SAR(1 g) = 0.028 mW/g; SAR(10 g) = 0.0095 mW/g
Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

Date/Time: 2012/2/20 AM 12:11:49

Test Laboratory: A Test Lab Techno Corp.

Flat_BT CH78_BT 3.0_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

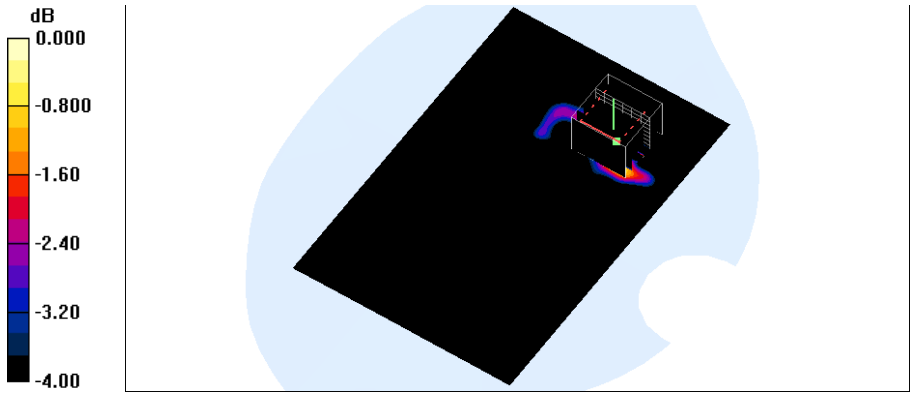
Communication System: Bluetooth; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.98 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.008 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 0.000 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.00396 mW/g; SAR(10 g) = 0.0017 mW/g
Maximum value of SAR (measured) = 0.006 mW/g



0 dB = 0.006mW/g

Date/Time: 2012/2/19 PM 11:42:18

Test Laboratory: A Test Lab Techno Corp.

Flat_BT Freq2480_BT 4.0_Back Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

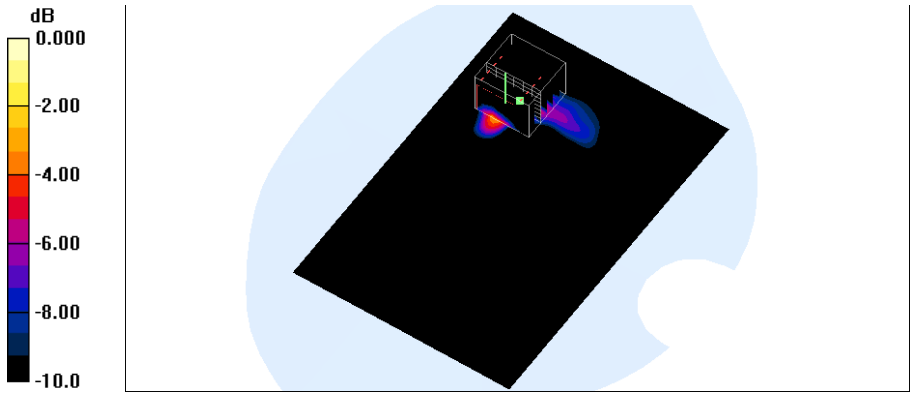
Communication System: Bluetooth; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.98 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.021 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 0.404 V/m; Power Drift = 0.121 dB
Peak SAR (extrapolated) = 0.051 W/kg
SAR(1 g) = 0.018 mW/g; SAR(10 g) = 0.00629 mW/g
Maximum value of SAR (measured) = 0.028 mW/g



0 dB = 0.028mW/g

Date/Time: 2012/2/20 AM 12:49:45

Test Laboratory: A Test Lab Techno Corp.

Flat_BT Freq2480_BT 4.0_Front Surface to Phantom_10mm

DUT: PJ46100; Type: Smartphone; FCC ID: NM8PJ46100

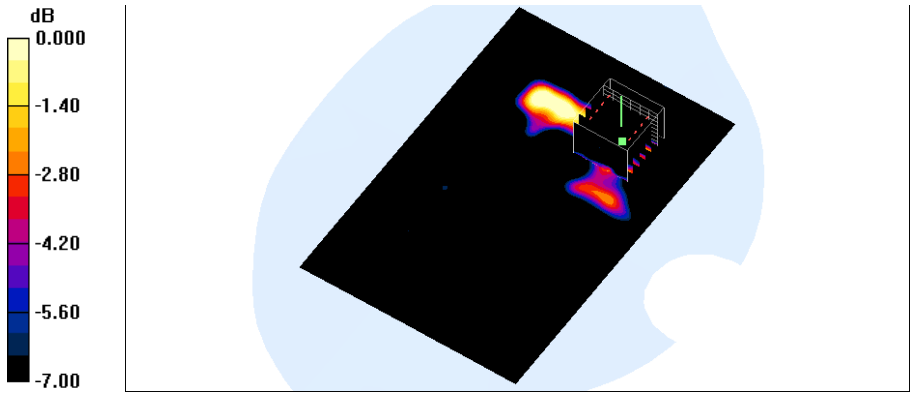
Communication System: Bluetooth; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.98 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within:2.0dB and with a peak SAR value greater than 0.5 W/Kg
- Probe: ES3DV3 - SN3270; ConvF(4.28, 4.28, 4.28); Calibrated: 2011/9/12
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn779; Calibrated: 2012/1/23
- Phantom: SAM 12; Type: SAM v4.0; Serial: TP:1009
- Measurement SW: DASY4, V4.7 Build 80;Postprocessing SW: SEMCAD, V1.8 Build 186

Flat/Area Scan (81x121x1):
Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.010 mW/g

Flat/Zoom Scan (7x7x9)/Cube 0:
Measurement grid: dx=5mm, dy=5mm, dz=3mm
Reference Value = 0.000 V/m; Power Drift = 0.000 dB
Peak SAR (extrapolated) = 0.009 W/kg
SAR(1 g) = 0.00289 mW/g; SAR(10 g) = 0.00121 mW/g
Maximum value of SAR (measured) = 0.005 mW/g



0 dB = 0.005mW/g