6. *Tissue Simulating Liquids*

For the measurement of the field distribution inside the SAM phantom with DASY4, the phantom must be filled with around 25 liters of homogeneous tissue simulating liquid. The liquid height from the ear reference point (ERP) of the phantom to the liquid top surface is (head SAR)or from the flat phantom to the liquid top surface (body SAR) is 15.2cm.

The following ingredients for tissue simulating liquid are used:

➢ **Water**: deionized water (pure H_2O), resistivity $\geqq 16M\Omega$ - as basis for the liquid
➢ **Sugar**: refined sugar in crystals, as available 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.
➢ **DGMBE**: Deithlenglycol-monobuthyl ether (DGMBE), Fluka Chemie GmbH, CAS#112-34-5 – to reduce relative permittivity.

Table 6.1 gives the recipes for one liter of head and body tissue simulating liquid for frequency band 1900 MHz.

Ingredient	HSL-850	MSL-850	HSL-1900	MSL-1900	HSL_2450	MSL-2450
Water	532.98 g	631.68 g	552.42 g	716.56 g	450.0 ml	698.3 ml
Cellulose	0 g	0 g	0 g	0 g	0 g	0 g
Salt	18.3 g	11.72 g	3.06 g	4.0 g	0 g	0 g
Preventol D-7	2.4 g	1.2 g	0 g	0 g	0 g	0 g
Sugar	766.0 g	600.0 g	0 g	0 g	0 g	0 g
DGMBE	0 g	0 g	444.52 g	300.67 g	550.0 ml	301.7 ml
Total amount	1 liter (1.3 kg)	1 liter	1 liter (1.0 kg)	1 liter (1.0 kg)	1 liter (1.0 kg)	1 liter (1.0 kg)
Dielectric Parameters at 22°	f = 835 MHz ε_r= 41.5±5%, σ = 0.90±5% S/m	f = 835 MHz ε_r= 55.2±5%, σ = 0.97±5% S/m	f= 1900 MHz ε_r= 40.0±5%, σ = 1.4±5% S/m	f= 1900 MHz ε_r= 53.3±5 %, σ = 1.52±5% S/m	f = 2450MHz ε_r= 39.2±5%, σ = 1.8±5% S/m	f = 2450MHz ε_r= 52.7±5%, σ = 1.95±5% S/m

Table 6.1 Recipes of head and body tissue simulating liquid for band 850 MHz, 1900 MHz and 2450 MHz.

The dielectric parameters of the liquids were verified prior to the SAR evaluation using an Agilent 85070D Dielectric Probe Kit and an Agilent Network Analyzer.

Table 6.2 shows the measuring results for head and muscle simulating liquid.

	Bands	Frequency(MHz)	Permittivity (ε_r)	Conductivity (σ)	Measurement Date
Head	GSM850 (824 ~ 849 MHz)	824.2	40.3	0.889	Jul. 08, 2007
		836.4	40.1	0.901	
		848.8	40.0	0.914	
Body	GSM850 (824 ~ 849 MHz)	824.2	55.0	0.960	Jul. 10, 2007
		836.6	54.8	0.972	
		848.8	54.7	0.985	
Head	PCS1900 (1850 ~ 1910 MHz)	1850.2	39.4	1.34	Jul. 08, 2007
		1880.0	39.3	1.37	
		1909.8	39.2	1.40	
Body	PCS1900 (1850 ~ 1910 MHz)	1850.2	53.7	1.45	Jul. 14, 2007
		1880.0	53.7	1.48	
		1909.8	53.6	1.51	
Head	WLAN (2450MHz)	2412	38.6	1.73	Jul. 17, 2007
		2437	38.2	1.74	
		2462	38.0	1.78	
Body	WLAN (2450MHz)	2412	51.5	1.90	Jul. 17, 2007
		2437	51.5	1.92	
		2462	51.4	1.95	
Body	GSM850 (824 ~ 849 MHz)	824.2	54.3	0.956	Aug. 14, 2007
		836.6	54.1	0.969	
		848.8	54.0	0.982	
Body	PCS1900 (1850 ~ 1910 MHz)	1850.2	52.7	1.45	Aug. 14, 2007
		1880.0	52.6	1.48	
		1909.8	52.6	1.52	
Body	WLAN (2450MHz)	2412	51.6	1.91	Aug. 14, 2007
		2437	51.6	1.93	
		2462	51.6	1.95	

Table 6.2

The measuring data are consistent with ε_r= 41.5±5% and σ = 0.9±5% for head GSM 850 band, ε_r= 55.2 ± 5% and σ = 0.97 ± 5% for body GSM 850 band, ε_r= 40.0 ± 5%, σ = 1.4 ± 5% for head PCS 1900 band, ε_r= 53.3 ± 5%, σ = 1.52 ± 5% for body PCS 1900 band, ε_r = 39.2 ± 5%, σ = 1.80 ± 5% for head 2450 band, and ε_r = 52.7 ± 5%, σ = 1.95 ± 5% for body 2450 band.

7. *Uncertainty Assessment*

The component of uncertainly may generally be categorized according to the methods used to evaluate them. The evaluation of uncertainly by the statistical analysis of a series of observations is termed a Type A evaluation of uncertainty. The evaluation of uncertainty by means other than the statistical analysis of a series of observation is termed a Type B evaluation of uncertainty. Each component of uncertainty, however evaluated, is represented by an estimated standard deviation, termed standard uncertainty, which is determined by the positive square root of the estimated variance.

A Type A evaluation of standard uncertainty may be based on any valid statistical method for treating data. This includes calculating the standard deviation of the mean of a series of independent observations; using the method of least squares to fit a curve to the data in order to estimate the parameter of the curve and their standard deviations; or carrying out an analysis of variance in order to identify and quantify random effects in certain kinds of measurement.

A type B evaluation of standard uncertainty is typically based on scientific judgment using all of the relevant information available. These may include previous measurement data, experience and knowledge of the behavior and properties of relevant materials and instruments, manufacture's specification, data provided in calibration reports and uncertainties assigned to reference data taken from handbooks. Broadly speaking, the uncertainty is either obtained from an outdoor source or obtained from an assumed distribution, such as the normal distribution, rectangular or triangular distributions indicated in Table 7.1

Uncertainty Distributions	Normal	Rectangular	Triangular	U-shape
Multiplying factor[a]	$1/k$ [b]	$1/\sqrt{3}$	$1/\sqrt{6}$	$1/\sqrt{2}$

(a)   standard uncertainty is determined as the product of the multiplying factor and the estimated range of variations in the measured quantity

(b) κ is the coverage factor

Table 7.1 Standard Uncertainty for Assumed Distribution

The combined standard uncertainty of the measurement result represents the estimated standard deviation of the result. It is obtained by combining the individual standard uncertainties of both Type A and Type B evaluation using the usual "root-sum-squares" (RSS) methods of combining standard deviations by taking the positive square root of the estimated variances.

Expanded uncertainty is a measure of uncertainty that defines an interval about the measurement result within which the measured value is confidently believed to lie. It is obtained by multiplying the combined standard uncertainty by a coverage factor. Typically, the coverage factor ranges from 2 to 3. Using a coverage factor allows the true value of a measured quantity to be specified with a defined probability within the specified uncertainty range. For purpose of this document, a coverage factor two is used, which corresponds to confidence interval of about 95 %. The DASY4 uncertainty Budget is showed in Table 7.2.

Error Description	Uncertainty Value ± %	Probability Distribution	Divisor	*Ci 1g*	Standard Unc. (1-g)	*vi or Veff*
Measurement System						
Probe Calibration	± 4.8	Normal	1	1	±4.8	∞
Axial Isotropy	± 4.7	Rectangular	√3	$(1-C_p)^{1/2}$	±1.9	∞
Hemispherical Isotropy	± 9.6	Rectangular	√3	$(C_p)^{1/2}$	±3.9	∞
Boundary Effect	± 1.0	Rectangular	√3	1	±0.6	∞
Linearity	± 4.7	Rectangular	√3	1	±2.7	∞
System Detection Limit	± 1.0	Rectangular	√3	1	±0.6	∞
Readout Electronics	± 1.0	Rectangular	1	1	±1.0	∞
Response Time	± 0.8	Normal	√3	1	± 0.5	∞
Integration time	±2.6	Rectangular	√3	1	±1.5	∞
RF Ambient Conditions	± 3.0	Rectangular	√3	1	±1.7	∞
Probe Positioner Mech. Tolerance	± 0.4	Rectangular	√3	1	±0.2	∞
Probe Positioning with respect to Phantom Shell	± 2.9	Rectangular	√3	1	±1.7	∞
Extrapolation and Interpolation Algorithms for Max. SAR Evaluation	± 1.0	Rectangular	√3	1	±0.6	∞
Test sample Related						
Test sample Positioning	±2.9	Normal	1	1	±2.9	145
Device Holder Uncertainty	±3.6	Normal	1	1	±3.6	5
Output Power Variation-SAR drift measurement	±2.5	Rectangular	√3	1	±1.4	∞
Phantom and Tissue parameters						
Phantom uncertainty(Including shape and thickness tolerances)	±4.0	Rectangular	√3	1	±2.3	∞
Liquid Conductivity Target tolerance	±5.0	Rectangular	√3	0.64	±1.8	∞
Liquid Conductivity measurement uncertainty	±2.5	Normal	1	0.64	±1.6	∞
Liquid Permittivity Target tolerance	±5.0	Rectangular	√3	0.6	±1.7	∞
Liquid Permittivity measurement uncertainty	±2.0	Normal	1	0.6	±1.2	∞
Combined standard uncertainty					±10.3	330
Coverage Factor for 95 %		K=2				
Expanded uncertainty (Coverage factor = 2)					**±20.6**	

Table 7.2 Uncertainty Budget of DASY

8. *SAR Measurement Evaluation*

Each DASY system is equipped with one or more system validation kits. These units, together with the predefined measurement procedures within the DASY software, enable the user to conduct the system performance check and system validation. System validation kit includes a dipole, tripod holder to fix it underneath the flat phantom and a corresponding distance holder.

8.1 *Purpose of System Performance check*

The system performance check verifies that the system operates within its specifications. System and operator errors can be detected and corrected. It is recommended that the system performance check be performed prior to any usage of the system in order to guarantee reproducible results. The system performance check uses normal SAR measurements in a simplified setup with a well characterized source. This setup was selected to give a high sensitivity to all parameters that might fail or vary over time. The system check does not intend to replace the calibration of the components, but indicates situations where the system uncertainty is exceeded due to drift or failure.

8.2 *System Setup*

In the simplified setup for system evaluation, the DUT is replaced by a calibrated dipole and the power source is replaced by a continuous wave which comes from a signal generator at frequency 835 MHz and 1900 MHz and 2450 MHz. The calibrated dipole must be placed beneath the flat phantom section of the SAM twin phantom with the correct distance holder. The distance holder should touch the phantom surface with a light pressure at the reference marking and be oriented parallel to the long side of the phantom. The equipment setup is shown below:
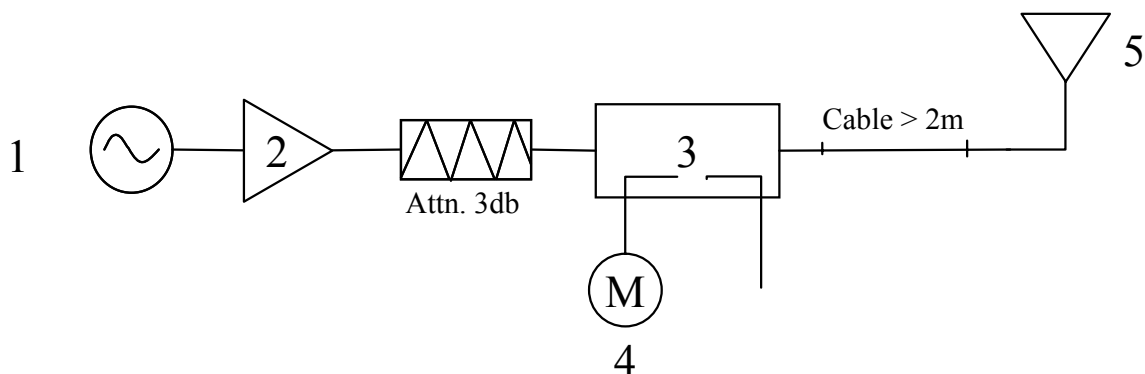

Fig. 8.1 System setup for system Evaluation

1. Signal Generator
2. Amplifier
3. Directional Coupler
4. Power Meter
5. 835 MHz or 1900 MHz or 2450 MHz Dipole

The output power on dipole port must be calibrated to 20dBm (100mW) before dipole is connected.

Fig 8.2 Dipole Setup

8.3 Validation Results

Comparing to the original SAR value provided by Speag, the validation data should be within its specification of 10 %. Table 8.1 shows the target SAR and measured SAR after normalized to 1W input power.

		Target (W/kg)	Measurement data (W/kg)	Variation	Measurement Date
GSM850 Band (835MHz) for head	SAR (1g)	9.24	9.48	2.6 %	Jul. 08, 2007
	SAR (10g)	6.07	6.28	3.5 %	
GSM850 Band (835MHz) for body	SAR (1g)	9.91	9.58	-3.3 %	Jul. 10, 2007
	SAR (10g)	6.55	6.31	-3.7 %	
PCS Band (1900MHz) for head	SAR (1g)	38.4	36.4	-5.2 %	Jul. 08, 2007
	SAR (10g)	20.5	19.6	-4.4 %	
PCS Band (1900MHz) for body	SAR (1g)	41.1	37.5	-8.8 %	Jul. 14, 2007
	SAR (10g)	21.8	20.1	-7.8 %	
WLAN (2450 MHz) for head	SAR (1g)	52.7	54	2.5 %	Jul. 17, 2007
	SAR (10g)	24.5	25.5	4.1 %	
WLAN (2450 MHz) for body	SAR (1g)	52.5	53.4	1.7 %	Jul. 17, 2007
	SAR (10g)	24.4	24.9	2.0 %	
GSM850 Band (835MHz) for body	SAR (1g)	9.91	9.55	-3.6 %	Aug. 14, 2007
	SAR (10g)	6.55	6.29	-4.0 %	
PCS Band (1900MHz) for body	SAR (1g)	41.1	37.6	-8.5 %	Aug. 13, 2007
	SAR (10g)	21.8	20.2	-7.3 %	
WLAN (2450 MHz) for body	SAR (1g)	52.5	56.2	7.0 %	Aug. 14, 2007
	SAR (10g)	24.4	26.2	7.4 %	

Table 8.1 Target and Measured SAR after Normalized

The table above indicates the system performance check can meet the variation criterion.

9. *Description for DUT Testing Position*

This DUT was tested in 6 different positions. They are left cheek, left tilted, right cheek, right tilted, body worn with keypad up and body worn with keypad down as illustrated below:

1) " Cheek Position"
     i) To position the device with the vertical center line of the body of the device and the horizontal line crossing the center piece in a plane parallel to the sagittal plane of the phantom. While maintaining the device in this plane, align the vertical center line with the reference plane containing the three ear and mouth reference point (M, RE and LE) and align the center of the ear piece with the line RE-LE.
     ii) To move the device towards the phantom with the ear piece aligned with the line LE-RE until the phone touched the ear. While maintaining the device in the reference plane and maintaining the phone contact with the ear, move the bottom of the phone until any point on the front side is in contact with the cheek of the phantom or until contact with the ear is lost (see Fig. 9.1).

2) " Tilted Position"
     i) To position the device in the "cheek" position described above.
     ii) While maintaining the device the reference plane described above and pivoting against the ear, move it outward away from the mouth by an angle of 15 degrees or until contact with the ear is lost (see Fig. 9.2).

3) " Body Worn"
     i) To position the device parallel to the phantom surface.
     ii) To adjust the phone parallel to the flat phantom.
     iii) To adjust the distance between the EUT surface and the flat phantom to 1.5 cm or holster touch with the flat phantom.
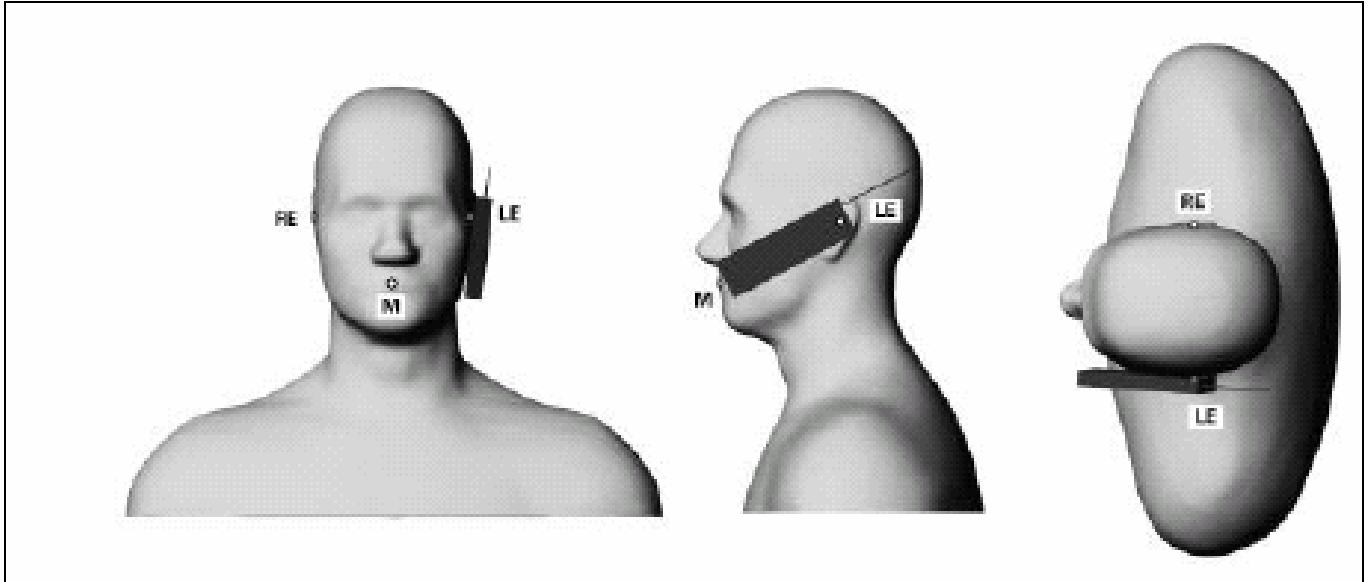
Please refer to Appendix E for the test setup photo.

Fig. 9.1   Phone Position 1, "Cheek" or "Touch" Position. The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the plane for phone positioning, are indicated.
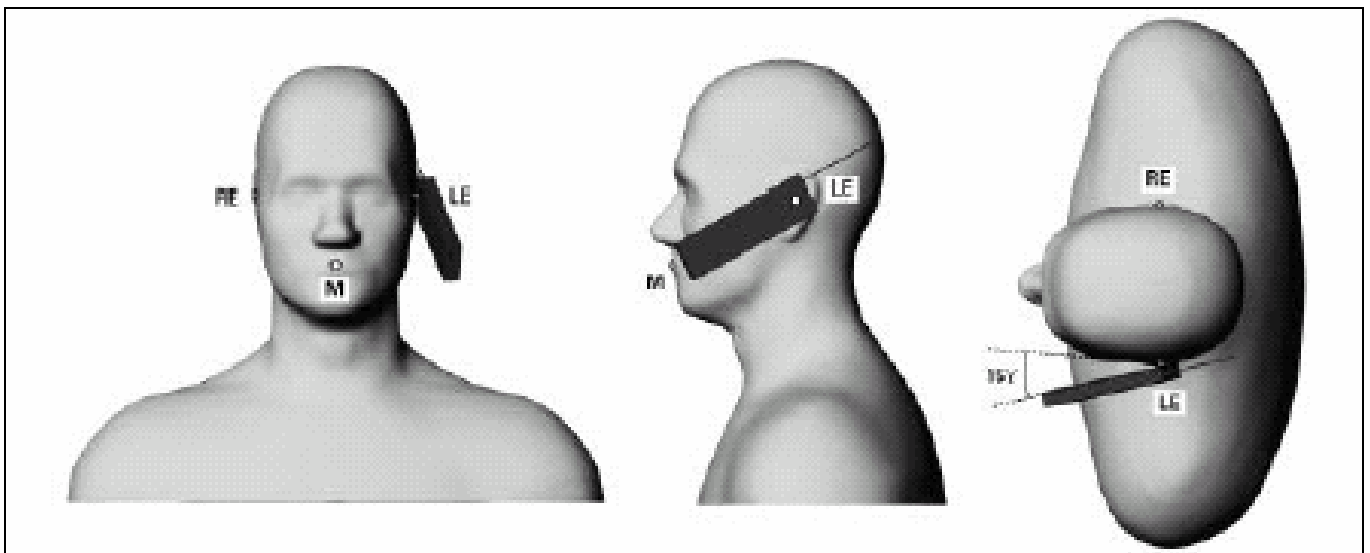

Fig. 9.2   Phone Position 2, "Tilted Position". The reference point for the right ear (RE), left ear (LE) and mouth (M), which define the plane for phone positioning, are indicated.

10. *Measurement Procedures*

The measurement procedures are as follows:

➢ Linking DUT with base station emulator CMU200 in middle channel
➢ Setting base station to allow DUT to radiate maximum output power
➢ Measuring output power through RF cable and power meter
➢ Placing the DUT in the positions described in the last section
➢ Setting scan area, grid size and other setting on the DASY4 software
➢ Taking data for the lowest, middle, and highest channel on each testing position

According to the IEEE P1528 draft standard, the recommended procedure for assessing the peak spatial-average SAR value consists of the following steps:

➢ Power reference measurement
➢ Area scan
➢ Zoom scan
➢ Power reference measurement

10.1 *Spatial Peak SAR Evaluation*

The procedure for spatial peak SAR evaluation has been implemented according to the IEEE1528-2003 standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY4 software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

Base on the Draft: SCC-34, SC-2, WG-2-Computational Dosimetry, IEEE P1528/D1.2 (Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques), a new algorithm has been implemented. The spatial-peak SAR can be computed over any required mass.

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:

- extraction of the measured data (grid and values) from the Zoom Scan
- calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- generation of a high-resolution mesh within the measured volume

- interpolation of all measured values form the measurement grid to the high-resolution grid
- extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to surface
- calculation of the averaged SAR within masses of 1g and 10g

10.2 *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. Next, in order to determine the EM field distribution in a three-dimensional spatial extension, Zoom Scan is required. The Zoom Scan measures 5x5x7 points with step size 8, 8 and 5 mm. The Zoom Scan is performed around the highest E-field value to determine the averaged SAR-distribution over 1 g.

10.3 *SAR Averaged Methods*

In DASY4, 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.

11. SAR Test Results

11.1 Right Cheek

Mode	Scanner	Chan.	Freq (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limit (W/kg)	Results
GSM850	1	128	824.2 (Low)	GMSK	32.12	-0.073	0.088	1.6	Pass
		189	836.4 (Mid)	GMSK	32.19	-0.031	0.263	1.6	Pass
		251	848.8 (High)	GMSK	32.23	-0.138	0.119	1.6	Pass
GSM850 with BT On		189	836.4 (Mid)	GMSK	32.19	-0.013	0.09	1.6	Pass
GSM850	2	189	836.4 (Mid)	GMSK	32.44	-0.048	0.293	1.6	Pass
PCS1900	1	512	1850.2 (Low)	GMSK	28.75	0.151	0.134	1.6	Pass
		661	1880.0 (Mid)	GMSK	29.11	0.133	0.137	1.6	Pass
		810	1909.8 (High)	GMSK	29.26	-0.034	0.065	1.6	Pass
PCS1900 with BT On		661	1880.0 (Mid)	GMSK	29.11	-0.033	0.141	1.6	Pass
PCS1900	2	661	1880.0 (Mid)	GMSK	29.28	-0.142	0.226	1.6	Pass
802.11b	1	1	2412(Low)	CCK	14.02	0.152	0.00974	1.6	Pass
		6	2437(Mid)	CCK	13.86	-0.16	0.021	1.6	Pass
		11	2462(High)	CCK	14.06	-0.183	0.044	1.6	Pass
802.11b with BT On		11	2462(High)	CCK	14.06	-0.111	0.042	1.6	Pass
802.11b	2	11	2462(High)	CCK	14.06	-0.182	0.035	1.6	Pass
802.11g	1	1	2412(Low)	OFDM	17.94	-	-	-	-
		6	2437(Mid)	OFDM	18.83	-0.164	0.019	1.6	Pass
		11	2462(High)	OFDM	18.56	-	-	-	-

11.2 Right Tilted

Mode	Scanner	Chan.	Freq (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limit (W/kg)	Results
GSM850	1	128	824.2 (Low)	GMSK	32.12	-	-	-	-
		189	836.4 (Mid)	GMSK	32.19	-0.023	0.154	1.6	Pass
		251	848.8 (High)	GMSK	32.23	-	-	-	-
PCS1900		512	1850.2 (Low)	GMSK	28.75	-	-	-	-
		661	1880.0 (Mid)	GMSK	29.11	-0.081	0.033	1.6	Pass
		810	1909.8 (High)	GMSK	29.26	-	-	-	-
802.11b		1	2412(Low)	CCK	14.02	-	-	-	-
		6	2437(Mid)	CCK	13.86	-0.188	0.00966	1.6	Pass
		11	2462(High)	CCK	14.06	-	-	-	-
802.11g		1	2412(Low)	OFDM	17.94	-	-	-	-
		6	2437(Mid)	OFDM	18.83	-	-	-	-
		11	2462(High)	OFDM	18.56	-	-	-	-

11.3 Left Cheek

Mode	Scanner	Chan.	Freq (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limit (W/kg)	Results
GSM850	1	128	824.2 (Low)	GMSK	32.12	-	-	-	-
		189	836.4 (Mid)	GMSK	32.19	-0.118	0.246	1.6	Pass
		251	848.8 (High)	GMSK	32.23	-	-	-	-
PCS1900		512	1850.2 (Low)	GMSK	28.75	-	-	-	-
		661	1880.0 (Mid)	GMSK	29.11	-0.045	0.085	1.6	Pass
		810	1909.8 (High)	GMSK	29.26	-	-	-	-
802.11b		1	2412(Low)	CCK	14.02	-	-	-	-
		6	2437(Mid)	CCK	13.86	-0.151	0.016	1.6	Pass
		11	2462(High)	CCK	14.06	-	-	-	-
802.11g		1	2412(Low)	OFDM	17.94	-	-	-	-
		6	2437(Mid)	OFDM	18.83	-	-	-	-
		11	2462(High)	OFDM	18.56	-	-	-	-

11.4 Left Tilted

Mode	Scanner	Chan.	Freq (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limit (W/kg)	Results
GSM850	1	128	824.2 (Low)	GMSK	32.12	-	-	-	-
		189	836.4 (Mid)	GMSK	32.19	-0.058	0.151	1.6	Pass
		251	848.8 (High)	GMSK	32.23	-	-	-	-
PCS1900		512	1850.2 (Low)	GMSK	28.75	-	-	-	-
		661	1880.0 (Mid)	GMSK	29.11	0.053	0.047	1.6	Pass
		810	1909.8 (High)	GMSK	29.26	-	-	-	-
802.11b		1	2412(Low)	CCK	14.02	-	-	-	-
		6	2437(Mid)	CCK	13.86	0.024	0.00842	1.6	Pass
		11	2462(High)	CCK	14.06	-	-	-	-
802.11g		1	2412(Low)	OFDM	17.94	-	-	-	-
		6	2437(Mid)	OFDM	18.83	-	-	-	-
		11	2462(High)	OFDM	18.56	-	-	-	-

11.5 *Keypad Up with 1.5cm Gap*

Mode	Scanner	Chan.	Freq. (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limits (W/Kg)	Results
GSM850 (GPRS8)		128 (Low)	824.2	GMSK	32.03	-	-	-	-
		189 (Mid)	836.6	GMSK	32.10	-	-	-	-
		251 (High)	848.8	GMSK	32.14	-	-	-	-
GSM850 (GPRS10)		128 (Low)	824.2	GMSK	30.25	-	-	-	-
		189 (Mid)	836.6	GMSK	30.32	-	-	-	-
		251 (High)	848.8	GMSK	30.37	-	-	-	-
GSM850 (GPRS12)		128 (Low)	824.2	GMSK	26.62	-	-	-	-
		189 (Mid)	836.6	GMSK	26.70	-0.127	0.133	1.6	Pass
		251 (High)	848.8	GMSK	26.77	-	-	-	-
GSM850 (EDGE8)		128 (Low)	824.2	8PKS	26.30	-	-	-	-
		189 (Mid)	836.6	8PKS	26.26	-	-	-	-
		251 (High)	848.8	8PKS	26.18	-	-	-	-
GSM850 (EDGE10)		128 (Low)	824.2	8PKS	24.21	-	-	-	-
		189 (Mid)	836.6	8PKS	24.14	-	-	-	-
		251 (High)	848.8	8PKS	24.12	-	-	-	-
PCS1900 (GPRS8)		512 (Low)	1850.2	GMSK	28.76	-	-	-	-
		661 (Mid)	1880.0	GMSK	29.12	-	-	-	-
		810 (High)	1909.8	GMSK	29.29	-	-	-	-
PCS1900 (GPRS10)	1	512 (Low)	1850.2	GMSK	26.95	-	-	-	-
		661 (Mid)	1880.0	GMSK	27.31	-	-	-	-
		810 (High)	1909.8	GMSK	27.47	-	-	-	-
PCS1900 (GPRS12)		512 (Low)	1850.2	GMSK	23.28	-	-	-	-
		661 (Mid)	1880.0	GMSK	23.62	-0.149	0.07	1.6	Pass
		810 (High)	1909.8	GMSK	23.80	-	-	-	-
PCS1900 (EDGE8)		512 (Low)	1850.2	8PKS	24.80	-	-	-	-
		661 (Mid)	1880.0	8PKS	24.73	-	-	-	-
		810 (High)	1909.8	8PKS	24.71	-	-	-	-
PCS1900 (EDGE10)		512 (Low)	1850.2	8PKS	22.84	-	-	-	-
		661 (Mid)	1880.0	8PKS	22.76	-	-	-	-
		810 (High)	1909.8	8PKS	22.68	-	-	-	-
802.11b		1 (Low)	2412	CCK	14.02	-	-	-	-
		6 (Mid)	2437	CCK	13.86	0.103	0.00206	1.6	Pass
		11 (High)	2462	CCK	14.06	-	-	-	-
802.11g		1 (Low)	2412	OFDM	17.94	-	-	-	-
		6 (Mid)	2437	OFDM	18.83	-	-	-	-
		11 (High)	2462	OFDM	18.56	-	-	-	-

11.6 Keypad Down with 1.5cm Gap

Mode	Scanner	Chan.	Freq. (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limits (W/Kg)	Results
GSM850 (GPRS8)	1	128 (Low)	824.2	GMSK	32.03	-	-	-	-
		189 (Mid)	836.6	GMSK	32.10	-0.183	0.172	1.6	Pass
		251 (High)	848.8	GMSK	32.14	-	-	-	-
GSM850 (GPRS10)		128 (Low)	824.2	GMSK	30.25	-0.123	0.296	1.6	Pass
		189 (Mid)	836.6	GMSK	30.32	0.159	0.187	1.6	Pass
		251 (High)	848.8	GMSK	30.37	-0.111	0.357	1.6	Pass
GSM850 (GPRS10) with BT On		251 (High)	848.8	GMSK	30.37	-0.148	0.387	1.6	Pass
GSM850 (GPRS10) with BT On	2	251 (High)	848.8	GMSK	30.63	-0.097	0.539	1.6	Pass
GSM850 (GPRS12)	1	128 (Low)	824.2	GMSK	26.62	-	-	-	-
		189 (Mid)	836.6	GMSK	26.70	-0.144	0.168	1.6	Pass
		251 (High)	848.8	GMSK	26.77	-	-	-	-
GSM850 (EDGE8)		128 (Low)	824.2	8PKS	26.30	-	-	-	-
		189 (Mid)	836.6	8PKS	26.26	-0.045	0.132	1.6	Pass
		251 (High)	848.8	8PKS	26.18	-	-	-	-
GSM850 (EDGE10)		128 (Low)	824.2	8PKS	24.21	-	-	-	-
		189 (Mid)	836.6	8PKS	24.14	-0.111	0.105	1.6	Pass
		251 (High)	848.8	8PKS	24.12	-	-	-	-
PCS1900 (GPRS8)		512 (Low)	1850.2	GMSK	28.76	-	-	-	-
		661 (Mid)	1880.0	GMSK	29.12	-0.114	0.18	1.6	Pass
		810 (High)	1909.8	GMSK	29.29	-	-	-	-
PCS1900 (GPRS10)		512 (Low)	1850.2	GMSK	26.95	-0.02	0.159	1.6	Pass
		661 (Mid)	1880.0	GMSK	27.31	0.019	0.236	1.6	Pass
		810 (High)	1909.8	GMSK	27.47	0.16	0.106	1.6	Pass
PCS1900 (GPRS10) with BT On		661 (Mid)	1880.0	GMSK	27.31	-0.199	0.17	1.6	Pass
PCS1900 (GPRS10)	2	661 (Mid)	1880.0	GMSK	27.36	-0.056	0.178	1.6	Pass
PCS1900 (GPRS12)		512 (Low)	1850.2	GMSK	23.28	-	-	-	-
		661 (Mid)	1880.0	GMSK	23.62	-0.141	0.128	1.6	Pass
		810 (High)	1909.8	GMSK	23.80	-	-	-	-
PCS1900 (EDGE8)		512 (Low)	1850.2	8PKS	24.80	-	-	-	-
		661 (Mid)	1880.0	8PKS	24.73	-0.101	0.076	1.6	Pass
		810 (High)	1909.8	8PKS	24.71	-	-	-	-
PCS1900 (EDGE10)	1	512 (Low)	1850.2	8PKS	22.84	-	-	-	-
		661 (Mid)	1880.0	8PKS	22.76	-0.05	0.036	1.6	Pass
		810 (High)	1909.8	8PKS	22.68	-	-	-	-
802.11b		1 (Low)	2412	CCK	14.02	-0.104	0.00967	1.6	Pass
		6 (Mid)	2437	CCK	13.86	0.142	0.011	1.6	Pass
		11 (High)	2462	CCK	14.06	0.164	0.011	1.6	Pass
802.11b with BT On		6 (Mid)	2437	CCK	13.86	0.174	0.00032	1.6	Pass
802.11b	2	6 (Mid)	2437	CCK	13.86	-0.108	0.016	1.6	Pass
802.11g	1	1 (Low)	2412	OFDM	17.94	-	-	-	-
		6 (Mid)	2437	OFDM	18.83	0.171	0.00019	1.6	Pass
		11 (High)	2462	OFDM	18.56	-	-	-	-

11.7   Keypad Up with Holster Touch

Mode	Scanner	Chan.	Freq. (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limits (W/Kg)	Results
GSM850 (GPRS8)	2	128 (Low)	824.2	GMSK	32.13	-	-	-	-
		189 (Mid)	836.6	GMSK	32.32	-	-	-	-
		251 (High)	848.8	GMSK	32.50	-	-	-	-
GSM850 (GPRS10)		128 (Low)	824.2	GMSK	30.29	-	-	-	-
		189 (Mid)	836.6	GMSK	30.46	-	-	-	-
		251 (High)	848.8	GMSK	30.63	-	-	-	-
GSM850 (GPRS12)		128 (Low)	824.2	GMSK	26.52	-	-	-	-
		189 (Mid)	836.6	GMSK	26.71	-0.158	0.501	1.6	Pass
		251 (High)	848.8	GMSK	26.88	-	-	-	-
GSM850 (EDGE8)		128 (Low)	824.2	8PKS	26.22	-	-	-	-
		189 (Mid)	836.6	8PKS	26.23	-	-	-	-
		251 (High)	848.8	8PKS	26.18	-	-	-	-
GSM850 (EDGE10)		128 (Low)	824.2	8PKS	24.16	-	-	-	-
		189 (Mid)	836.6	8PKS	24.11	-	-	-	-
		251 (High)	848.8	8PKS	24.04	-	-	-	-
PCS1900 (GPRS8)		512 (Low)	1850.2	GMSK	28.85	-	-	-	-
		661 (Mid)	1880.0	GMSK	29.21	-	-	-	-
		810 (High)	1909.8	GMSK	29.22	-	-	-	-
PCS1900 (GPRS10)		512 (Low)	1850.2	GMSK	26.98	-	-	-	-
		661 (Mid)	1880.0	GMSK	27.36	-	-	-	-
		810 (High)	1909.8	GMSK	27.37	-	-	-	-
PCS1900 (GPRS12)		512 (Low)	1850.2	GMSK	23.12	-	-	-	-
		661 (Mid)	1880.0	GMSK	23.52	-0.122	0.564	1.6	Pass
		810 (High)	1909.8	GMSK	23.46	-	-	-	-
PCS1900 (EDGE8)		512 (Low)	1850.2	8PKS	24.96	-	-	-	-
		661 (Mid)	1880.0	8PKS	24.84	-	-	-	-
		810 (High)	1909.8	8PKS	24.71	-	-	-	-
PCS1900 (EDGE10)		512 (Low)	1850.2	8PKS	22.91	-	-	-	-
		661 (Mid)	1880.0	8PKS	22.83	-	-	-	-
		810 (High)	1909.8	8PKS	22.71	-	-	-	-
802.11b		1 (Low)	2412	CCK	14.02	-	-	-	-
		6 (Mid)	2437	CCK	13.86	-0.121	0.026	1.6	Pass
		11 (High)	2462	CCK	14.06	-	-	-	-
802.11g		1 (Low)	2412	OFDM	17.94	-	-	-	-
		6 (Mid)	2437	OFDM	18.83	-	-	-	-
		11 (High)	2462	OFDM	18.56	-	-	-	-

11.8 Keypad Down with Holster Touch

Mode	Scanner	Chan.	Freq. (MHz)	Modulation Type	Conducted Power (dBm)	Power Drift (dB)	Measured 1g SAR (W/kg)	Limits (W/Kg)	Results
GSM850 (GPRS8)		128 (Low)	824.2	GMSK	32.13	-	-	-	-
		189 (Mid)	836.6	GMSK	32.32	-0.137	0.68	1.6	Pass
		251 (High)	848.8	GMSK	32.50	-	-	-	-
GSM850 (GPRS10)	2	128 (Low)	824.2	GMSK	30.29	-0.167	0.864	1.6	Pass
		189 (Mid)	836.6	GMSK	30.46	-0.078	0.873	1.6	Pass
		251 (High)	848.8	GMSK	30.63	-0.087	0.991	1.6	Pass
GSM850 (GPRS10) with BT On		251 (High)	848.8	GMSK	30.63	-0.148	0.941	1.6	Pass
GSM850 (GPRS10)	1	251 (High)	848.8	GMSK	30.37	-0.187	0.988	1.6	Pass
GSM850 (GPRS12)		128 (Low)	824.2	GMSK	26.52	-	-	-	-
		189 (Mid)	836.6	GMSK	26.71	0.002	0.728	1.6	Pass
		251 (High)	848.8	GMSK	26.88	-	-	-	-
GSM850 (EDGE8)		128 (Low)	824.2	8PKS	26.22	-	-	-	-
		189 (Mid)	836.6	8PKS	26.23	-0.106	0.2	1.6	Pass
		251 (High)	848.8	8PKS	26.18	-	-	-	-
GSM850 (EDGE10)		128 (Low)	824.2	8PKS	24.16	-	-	-	-
		189 (Mid)	836.6	8PKS	24.11	-0.105	0.245	1.6	Pass
	2	251 (High)	848.8	8PKS	24.04	-	-	-	-
PCS1900 (GPRS8)		512 (Low)	1850.2	GMSK	28.85	-	-	-	-
		661 (Mid)	1880.0	GMSK	29.21	0.06	0.484	1.6	Pass
		810 (High)	1909.8	GMSK	29.22	-	-	-	-
PCS1900 (GPRS10)		512 (Low)	1850.2	GMSK	26.98	-0.089	0.804	1.6	Pass
		661 (Mid)	1880.0	GMSK	27.36	-0.155	0.641	1.6	Pass
		810 (High)	1909.8	GMSK	27.37	0.043	0.586	1.6	Pass
PCS1900 (GPRS10) with BT On		512 (Low)	1850.2	GMSK	26.98	0.118	0.784	1.6	Pass
PCS1900 (GPRS10)	1	512 (Low)	1850.2	GMSK	27.31	-0.17	0.728	1.6	Pass
PCS1900 (GPRS12)		512 (Low)	1850.2	GMSK	23.12	-	-	-	-
		661 (Mid)	1880.0	GMSK	23.52	-0.107	0.564	1.6	Pass
		810 (High)	1909.8	GMSK	23.46	-	-	-	-
PCS1900 (EDGE8)		512 (Low)	1850.2	8PKS	24.96	-	-	-	-
		661 (Mid)	1880.0	8PKS	24.84	0.176	0.249	1.6	Pass
		810 (High)	1909.8	8PKS	24.71	-	-	-	-
PCS1900 (EDGE10)	2	512 (Low)	1850.2	8PKS	22.91	-	-	-	-
		661 (Mid)	1880.0	8PKS	22.83	0.026	0.309	1.6	Pass
		810 (High)	1909.8	8PKS	22.71	-	-	-	-
802.11b		1 (Low)	2412	CCK	14.02	0.135	0.031	1.6	Pass
		6 (Mid)	2437	CCK	13.86	0.128	0.053	1.6	Pass
		11 (High)	2462	CCK	14.06	0.05	0.168	1.6	Pass
802.11b with BT On		11 (High)	2462	CCK	14.06	-0.15	0.164	1.6	Pass
802.11b	1	11 (High)	2462	CCK	14.06	0.131	0.087	1.6	Pass
802.11g	2	1 (Low)	2412	OFDM	17.94	-	-	-	-
		6 (Mid)	2437	OFDM	18.83	0.148	0.016	1.6	Pass
		11 (High)	2462	OFDM	18.56	-	-	-	-

Remark :
1. For scanner 1, the largest summation of GSM/BT and WLAN for Head SAR is 0.307 W/kg and its position is right cheek.
2. For scanner 2, the largest summation of GSM/BT and WLAN for Head SAR is 0.328 W/kg and its position is right cheek.
3. For scanner 1, the largest summation of GSM/GPRS/EDGE/BT and WLAN for body SAR is 0.398 W/kg and its position is keypad down with 1.5cm gap, and body SAR is 0.555 W/kg and its position is keypad down with holster touch.
4. For scanner 2, the largest summation of GSM/GPRS/EDGE/BT and WLAN for body SAR is 1.075 W/kg and its position is keypad down with 1.5cm gap, and body SAR is 1.159 W/kg and its position is keypad down with holster touch.

Test Engineer：Eric Huang，Jason Wang，Gordon Lin and John Tsai

12.<u>Reference</u>

[1] FCC 47 CFR Part 2 "Frequency Allocations and Radio Treaty Matters; General Rules and Regulations"

[2] IEEE Std. P1528-2003, "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", April 21, 2003

[3] Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97-01), "Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to RF Emissions", June 2001

[4] IEEE Std. C95.3-2002, "IEEE Recommended Practice for the Measurement of Potentially Hazardous Electromagnetic Fields-RF and Microwave", 2002

[5] IEEE Std. C95.1-1999, "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz", 1999

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

[7] DAYS4 System Handbook

[8] RSS-102 Issued 2, "Radio Frequency Exposure Compliance of Radiocommunication Apparatus (All Frequency Bands)", November 2005

Appendix A - System Performance Check Data

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

System Check_Head_835MHz

DUT: Dipole 835 MHz

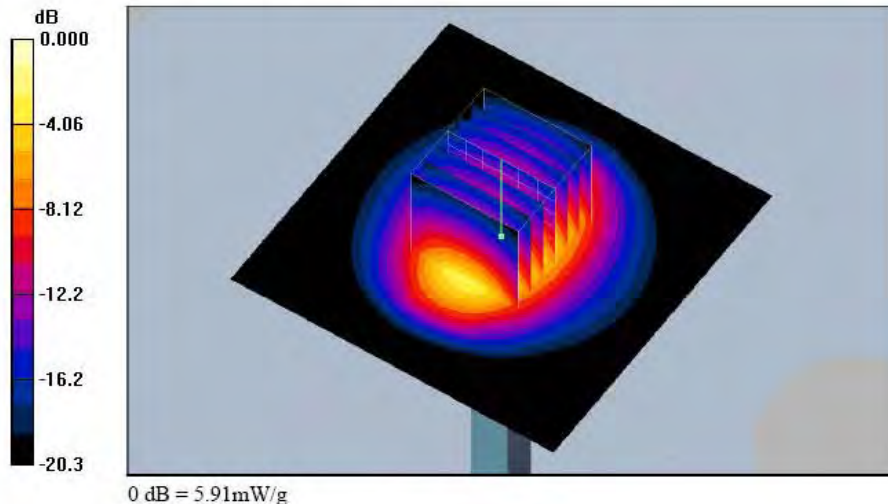Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: HSL_850 Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3
Ambient Temperature：22.8 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 35.6 V/m; Power Drift = -0.056 dB
Peak SAR (extrapolated) = 1.40 W/kg
SAR(1 g) = 0.948 mW/g; SAR(10 g) = 0.628 mW/g
Maximum value of SAR (measured) = 1.03 mW/g

0 dB = 1.03mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

System Check_Head_1900MHz

DUT: Dipole 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: HSL_1900 Medium parameters used: f = 1900 MHz; σ = 1.39 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
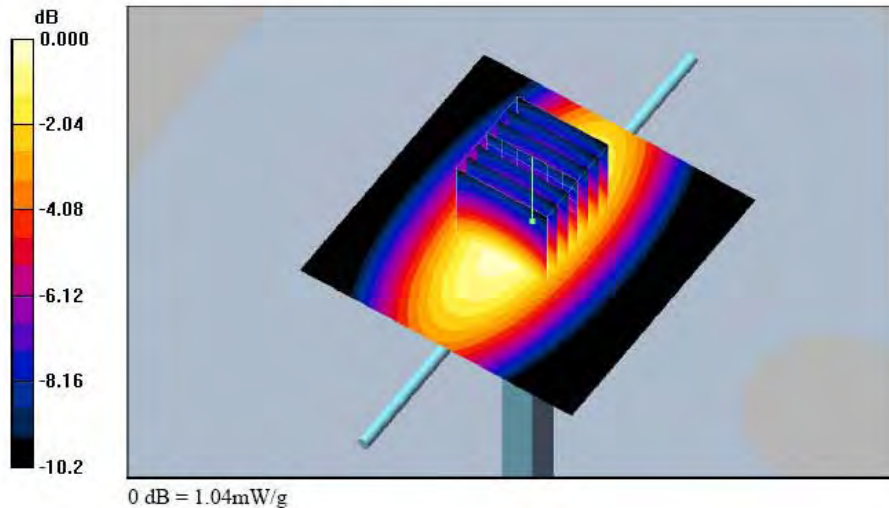Maximum value of SAR (interpolated) = 4.20 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.8 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 6.08 W/kg
SAR(1 g) = 3.64 mW/g; SAR(10 g) = 1.96 mW/g
Maximum value of SAR (measured) = 4.14 mW/g

0 dB = 4.14mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

System Check_Head_2450MHz

DUT: Dipole 2450 MHz

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2450 MHz; σ = 1.76 mho/m; ε_r = 38.1; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

2450MHz/Area Scan (41x41x1): Measurement grid: dx=20mm, dy=20mm
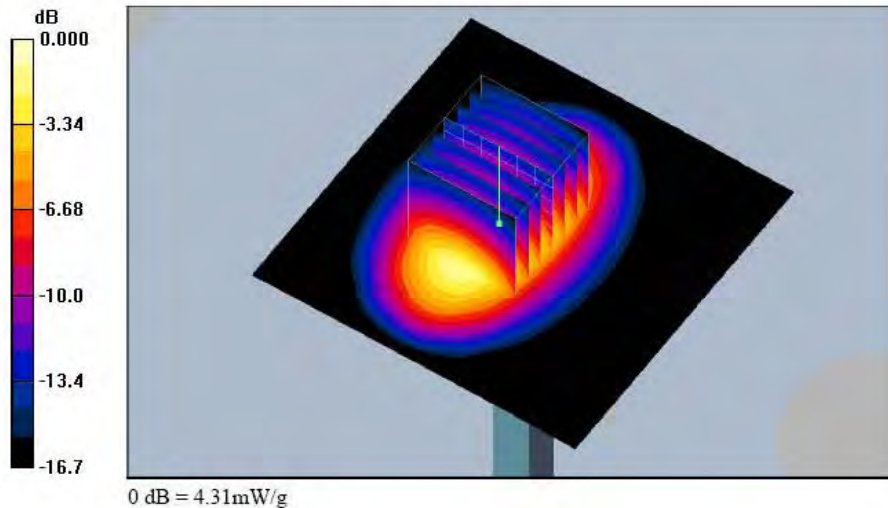Maximum value of SAR (interpolated) = 5.83 mW/g

2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.8 V/m; Power Drift = -0.036 dB
Peak SAR (extrapolated) = 11.4 W/kg
SAR(1 g) = 5.4 mW/g; SAR(10 g) = 2.55 mW/g
Maximum value of SAR (measured) = 6.11 mW/g

0 dB = 6.11mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10
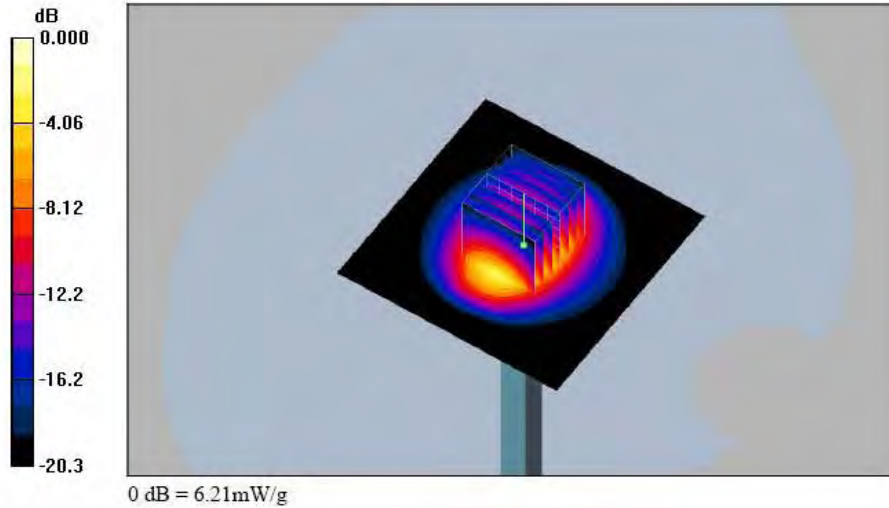
System Check_Body_835MHz

DUT: Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1

Medium: MSL_850 Medium parameters used: f = 835 MHz; σ = 0.971 mho/m; ε_r = 54.8; ρ = 1000 kg/m³

Ambient Temperature：22.6 ℃; Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.05 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 33.8 V/m; Power Drift = -0.025 dB
Peak SAR (extrapolated) = 1.39 W/kg
SAR(1 g) = 0.958 mW/g; SAR(10 g) = 0.631 mW/g
Maximum value of SAR (measured) = 1.04 mW/g

0 dB = 1.04mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

System Check_Body_1900MHz

DUT: Dipole 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1900 MHz; σ = 1.5 mho/m; ε_r = 53.6; ρ = 1000 kg/m^3
Ambient Temperature : 23.4 ℃; Liquid Temperature : 21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
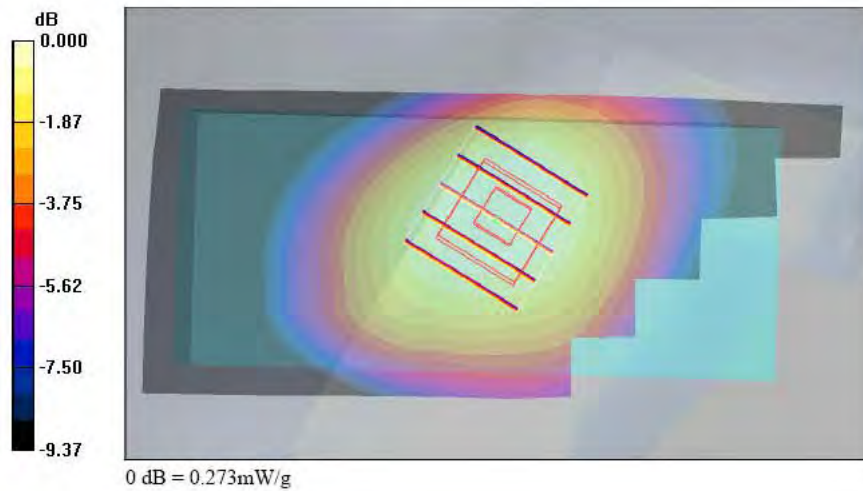Maximum value of SAR (interpolated) = 4.42 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.2 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 6.08 W/kg
SAR(1 g) = 3.75 mW/g; SAR(10 g) = 2.01 mW/g
Maximum value of SAR (measured) = 4.30 mW/g

0 dB = 4.30mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/17

System Check_Body_2450MHz

DUT: Dipole 2450 MHz

Communication System: CW; Frequency: 2450 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2450 MHz; σ = 1.93 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature：23.0 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
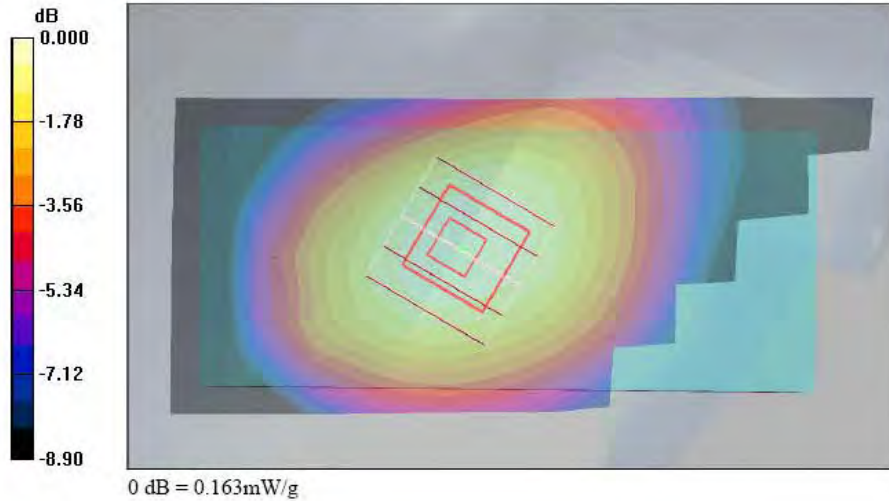Maximum value of SAR (interpolated) = 6.15 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 57.2 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 12.4 W/kg
SAR(1 g) = 5.34 mW/g; SAR(10 g) = 2.49 mW/g
Maximum value of SAR (measured) = 5.91 mW/g

0 dB = 5.91mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

System Check_Body_835MHz

DUT: Dipole 835 MHz

Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium: MSL_850 Medium parameters used: f = 835 MHz; $\sigma = 0.967$ mho/m; $\varepsilon_r = 54.2$; $\rho = 1000$ kg/m^3
Ambient Temperature：22.9 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
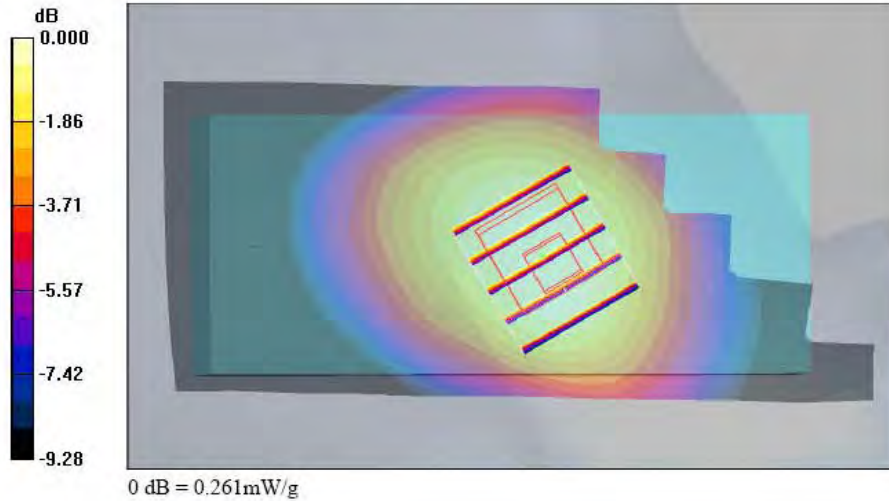Maximum value of SAR (interpolated) = 1.03 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 33.6 V/m; Power Drift = 0.105 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.955 mW/g; SAR(10 g) = 0.629 mW/g
Maximum value of SAR (measured) = 1.03 mW/g

0 dB = 1.04mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

System Check_Body_1900MHz

DUT: Dipole 1900 MHz

Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium: MSL_1900 Medium parameters used: f = 1900 MHz; σ = 1.5 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
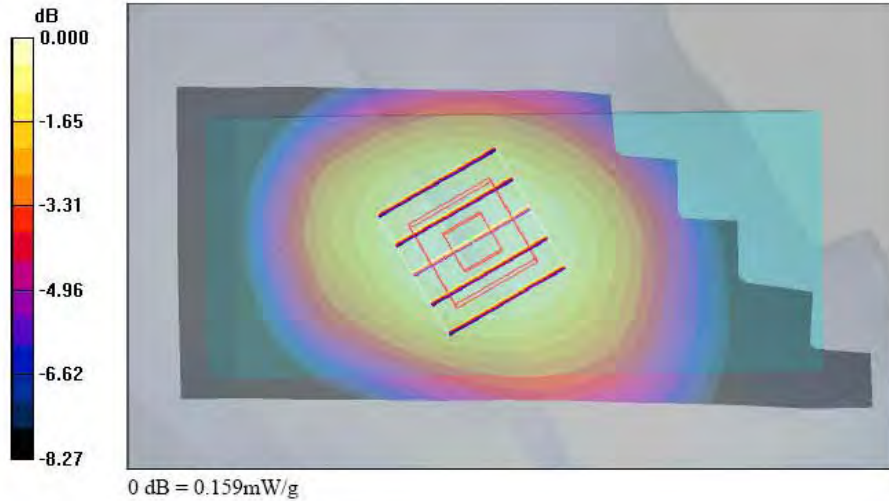Maximum value of SAR (interpolated) = 4.43 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 52.3 V/m; Power Drift = 0.121 dB
Peak SAR (extrapolated) = 6.09 W/kg
SAR(1 g) = 3.76 mW/g; SAR(10 g) = 2.02 mW/g
Maximum value of SAR (measured) = 4.31 mW/g

0 dB = 4.31mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/14

System Check_Body_2450MHz

DUT: Dipole 2450 MHz

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2450 MHz; σ = 1.94 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Pin=100mW/Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm
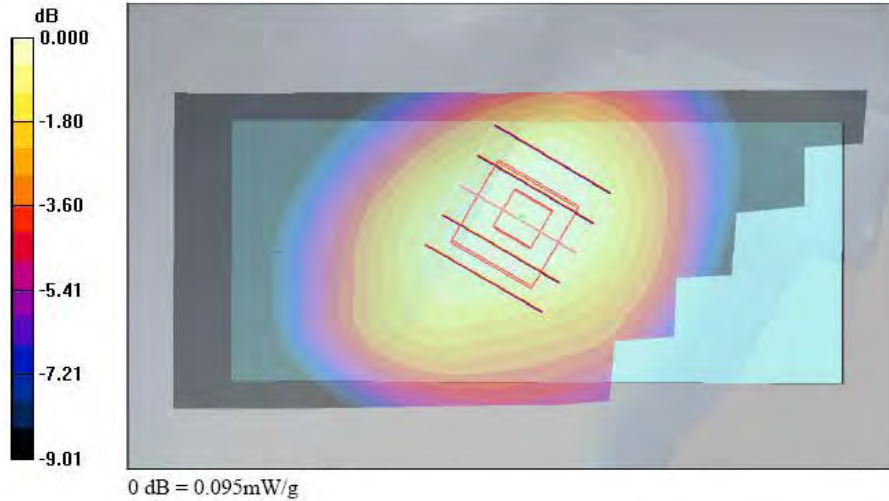Maximum value of SAR (interpolated) = 6.46 mW/g

Pin=100mW/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 58.5 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 13.1 W/kg
SAR(1 g) = 5.62 mW/g; SAR(10 g) = 2.62 mW/g
Maximum value of SAR (measured) = 6.21 mW/g

0 dB = 6.21mW/g

Appendix B - SAR Measurement Data

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/8

Right Cheek_GSM850 Ch189_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used : f = 836.4 MHz; σ = 0.901 mho/m; ε_r = 40.1; ρ = 1000 kg/m³
Ambient Temperature：22.8 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.285 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.85 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 0.335 W/kg
SAR(1 g) = 0.263 mW/g; SAR(10 g) = 0.197 mW/g
Maximum value of SAR (measured) = 0.273 mW/g

0 dB = 0.273mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/8

Right Tilted_GSM850 Ch189_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used : f = 836.4 MHz; σ = 0.901 mho/m; ε_r = 40.1; ρ = 1000 kg/m³
Ambient Temperature：22.8 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
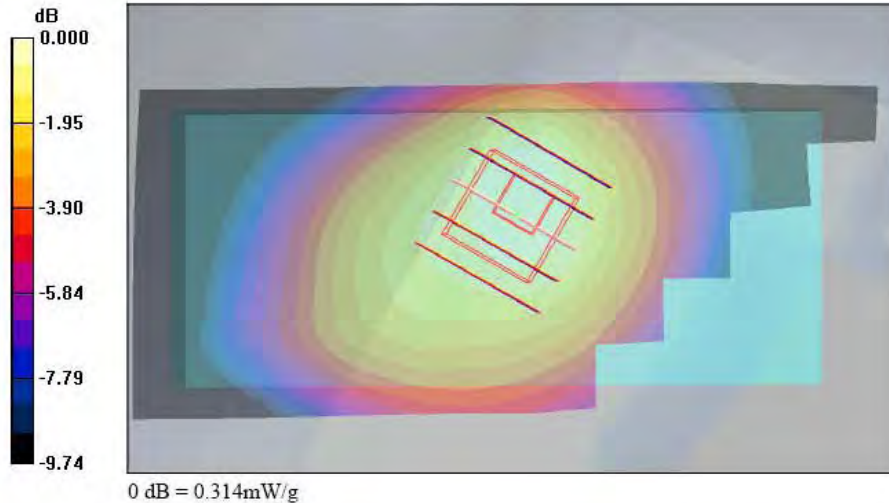Maximum value of SAR (interpolated) = 0.166 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.60 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.187 W/kg
SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.116 mW/g
Maximum value of SAR (measured) = 0.163 mW/g

0 dB = 0.163mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Left Cheek_GSM850 Ch189_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.901 mho/m; ε_r = 40.1; ρ = 1000 kg/m³
Ambient Temperature：22.8 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
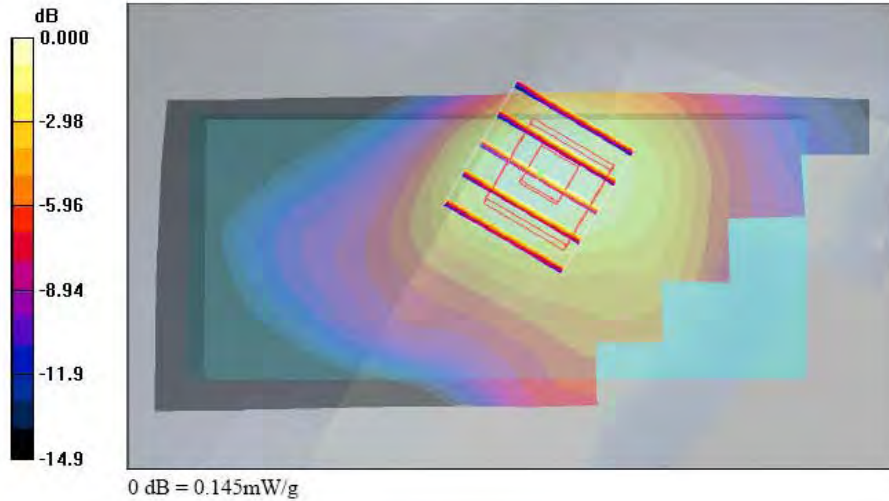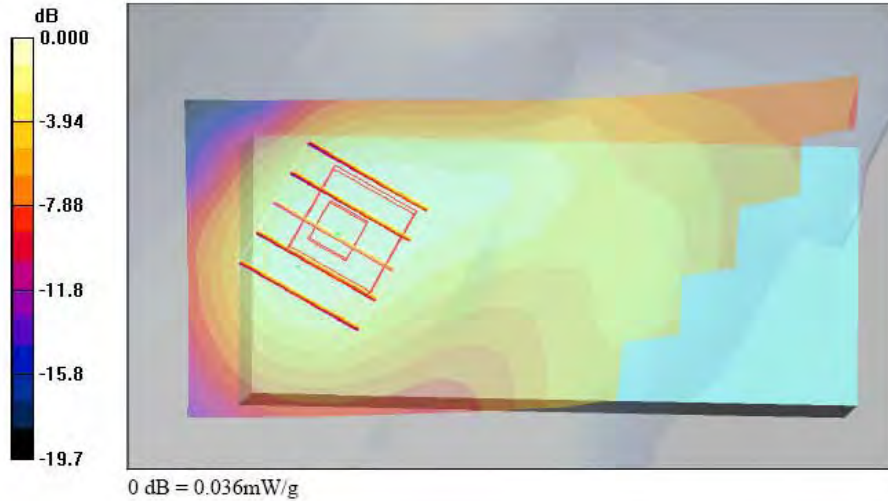Maximum value of SAR (interpolated) = 0.261 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.66 V/m; Power Drift = -0.118 dB
Peak SAR (extrapolated) = 0.323 W/kg
SAR(1 g) = 0.246 mW/g; SAR(10 g) = 0.180 mW/g
Maximum value of SAR (measured) = 0.261 mW/g

0 dB = 0.261mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Left Tilted_GSM850 Ch189_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.901 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3
Ambient Temperature：22.8 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.161 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.61 V/m; Power Drift = -0.058 dB
Peak SAR (extrapolated) = 0.182 W/kg
SAR(1 g) = 0.151 mW/g; SAR(10 g) = 0.116 mW/g
Maximum value of SAR (measured) = 0.159 mW/g

0 dB = 0.159mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Right Cheek_GSM850 Ch189_Scanner1_Bluetooth On

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.901 mho/m; ε_r = 40.1; ρ = 1000 kg/m^3
Ambient Temperature：22.8 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
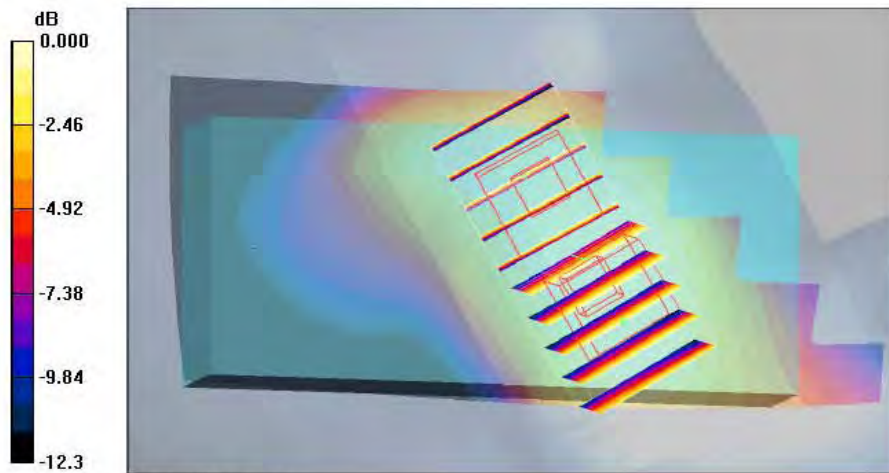Maximum value of SAR (interpolated) = 0.097 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.43 V/m; Power Drift = -0.013 dB
Peak SAR (extrapolated) = 0.112 W/kg
SAR(1 g) = 0.090 mW/g; SAR(10 g) = 0.068 mW/g
Maximum value of SAR (measured) = 0.095 mW/g

0 dB = 0.095mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/8

Right Cheek_GSM850 Ch189_Scanner2

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: HSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.901 mho/m; ε_r = 40.1; ρ = 1000 kg/m³
Ambient Temperature：22.8 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.6, 6.6, 6.6); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
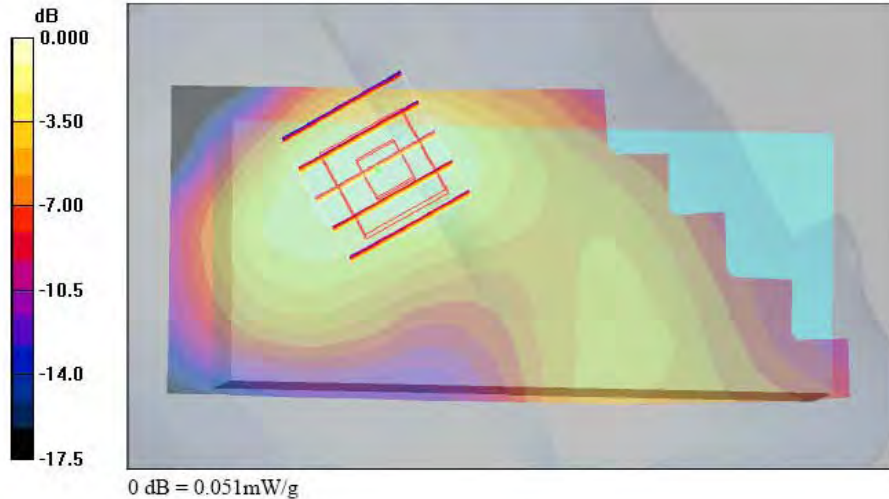
Maximum value of SAR (interpolated) = 0.322 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.63 V/m; Power Drift = -0.048 dB
Peak SAR (extrapolated) = 0.404 W/kg
SAR(1 g) = 0.293 mW/g; SAR(10 g) = 0.210 mW/g
Maximum value of SAR (measured) = 0.314 mW/g

dB
0.000
-1.95
-3.90
-5.84
-7.79
-9.74

0 dB = 0.314mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Right Cheek_PCS Ch661_Scanner1

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m³
Ambient Temperature：22.6 ℃；Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
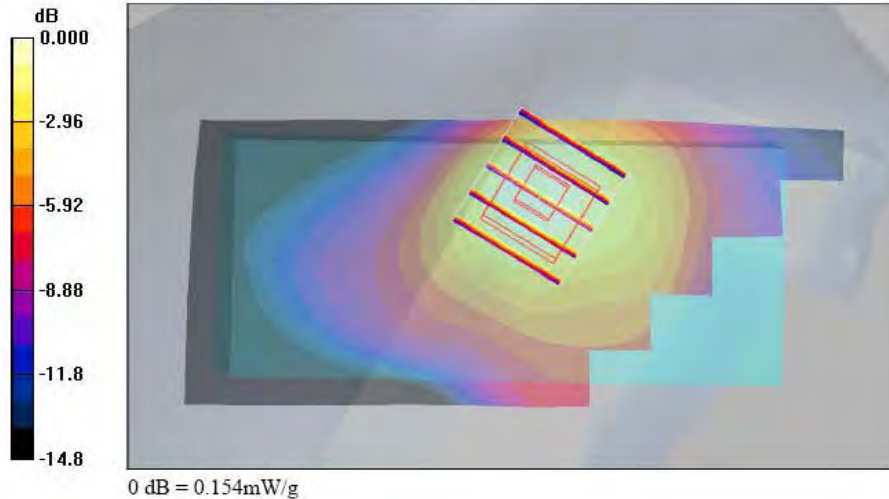Maximum value of SAR (interpolated) = 0.156 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.93 V/m; Power Drift = 0.133 dB
Peak SAR (extrapolated) = 0.186 W/kg
SAR(1 g) = 0.137 mW/g; SAR(10 g) = 0.089 mW/g
Maximum value of SAR (measured) = 0.145 mW/g

0 dB = 0.145mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Right Tilted_PCS Ch661_Scanner1

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m³
Ambient Temperature：22.7 ℃；Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
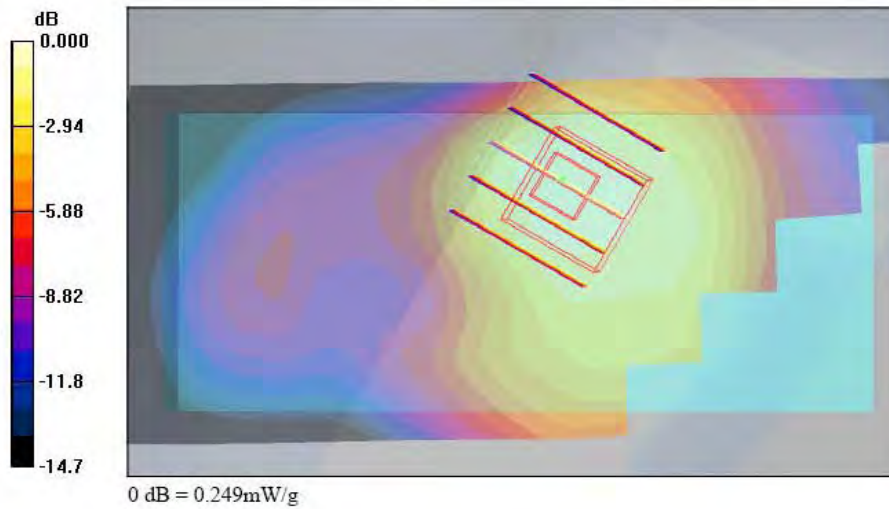Maximum value of SAR (interpolated) = 0.038 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.16 V/m; Power Drift = -0.081 dB
Peak SAR (extrapolated) = 0.046 W/kg
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.022 mW/g
Maximum value of SAR (measured) = 0.036 mW/g

0 dB = 0.036mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Left Cheek_PCS Ch661_Scanner1

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; $ε_r$ = 39.3; ρ = 1000 kg/m³
Ambient Temperature：22.6 ℃；Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.090 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.72 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.113 W/kg
SAR(1 g) = 0.085 mW/g; SAR(10 g) = 0.059 mW/g
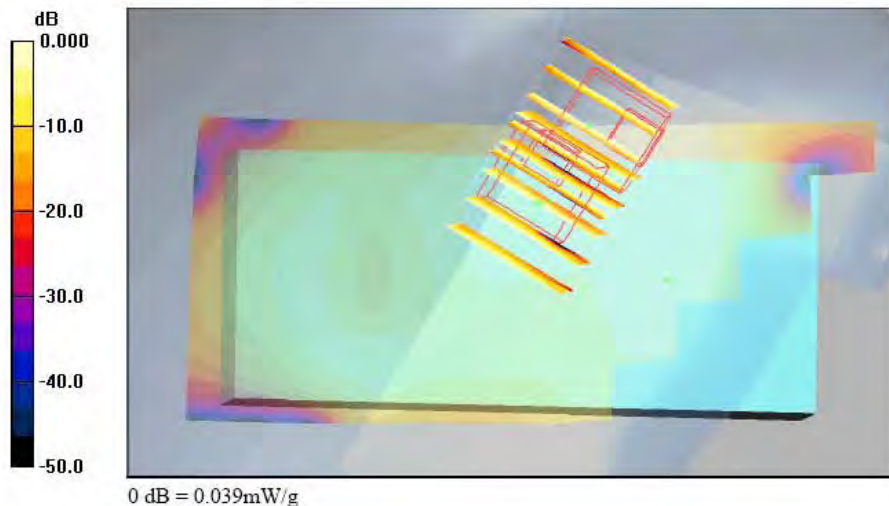Maximum value of SAR (measured) = 0.091 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.72 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.097 W/kg
SAR(1 g) = 0.075 mW/g; SAR(10 g) = 0.052 mW/g
Maximum value of SAR (measured) = 0.079 mW/g

0 dB = 0.079mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Left Tilted_PCS Ch661_Scanner1

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m³
Ambient Temperature：22.6 ℃；Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
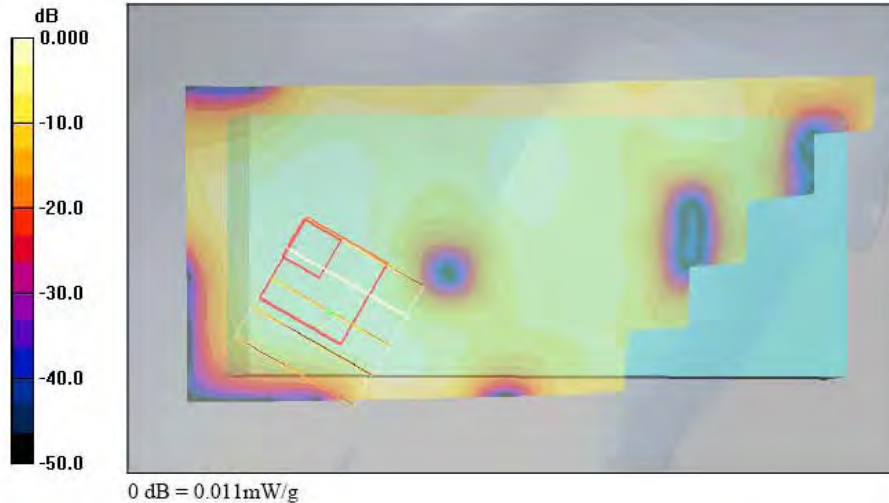Maximum value of SAR (interpolated) = 0.055 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.99 V/m; Power Drift = 0.053 dB
Peak SAR (extrapolated) = 0.066 W/kg
SAR(1 g) = 0.047 mW/g; SAR(10 g) = 0.031 mW/g
Maximum value of SAR (measured) = 0.051 mW/g

0 dB = 0.051mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/8

Right Cheek_PCS Ch661_Scanner1_Bluetooth On

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: $f = 1880$ MHz; $\sigma = 1.37$ mho/m; $\varepsilon_r = 39.3$; $\rho = 1000$ kg/m^3
Ambient Temperature：22.6 ℃; Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.161 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.13 V/m; Power Drift = -0.033 dB
Peak SAR (extrapolated) = 0.195 W/kg
SAR(1 g) = 0.141 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.154 mW/g

0 dB = 0.154mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/8

Right Cheek_PCS Ch661_Scanner2_Bluetooth On

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: HSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.3; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.3 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(5.3, 5.3, 5.3); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
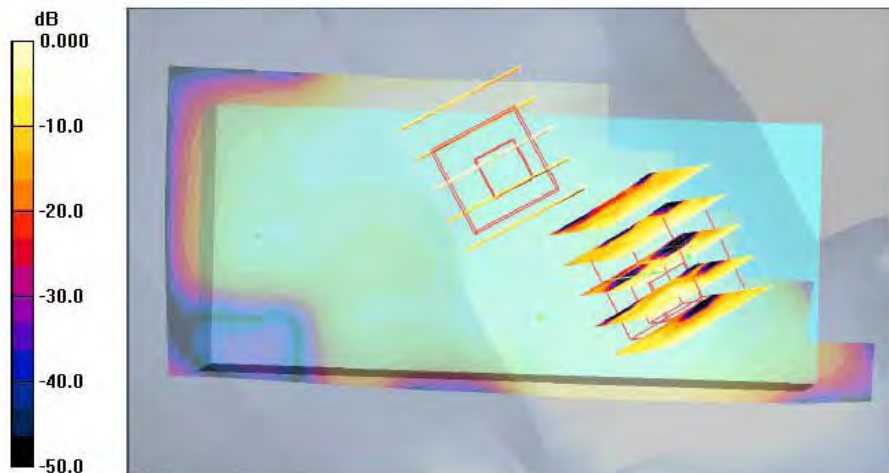Maximum value of SAR (interpolated) = 0.258 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.86 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 0.307 W/kg
SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.151 mW/g
Maximum value of SAR (measured) = 0.249 mW/g

dB
0.000
-2.94
-5.88
-8.82
-11.8
-14.7

0 dB = 0.249mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Right Cheek_802.11b Ch11_Scanner1

DUT: 762206

Communication System: 802.11b ; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2462 MHz; σ = 1.78 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Ambient Temperature：23.0 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch11/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.048 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.68 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.092 W/kg
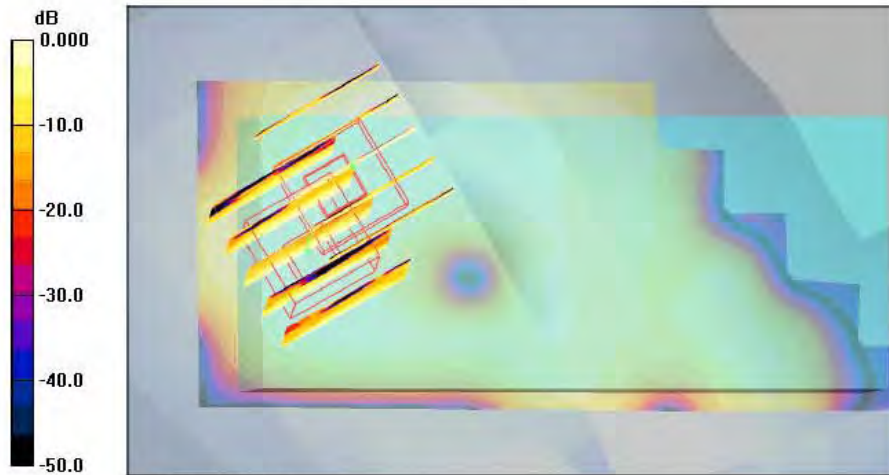**SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.024 mW/g**

Maximum value of SAR (measured) = 0.048 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.68 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.067 W/kg
SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.019 mW/g
Maximum value of SAR (measured) = 0.039 mW/g

0 dB = 0.039mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Right Tilted_802.11b Ch6_Scanner1

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.74 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
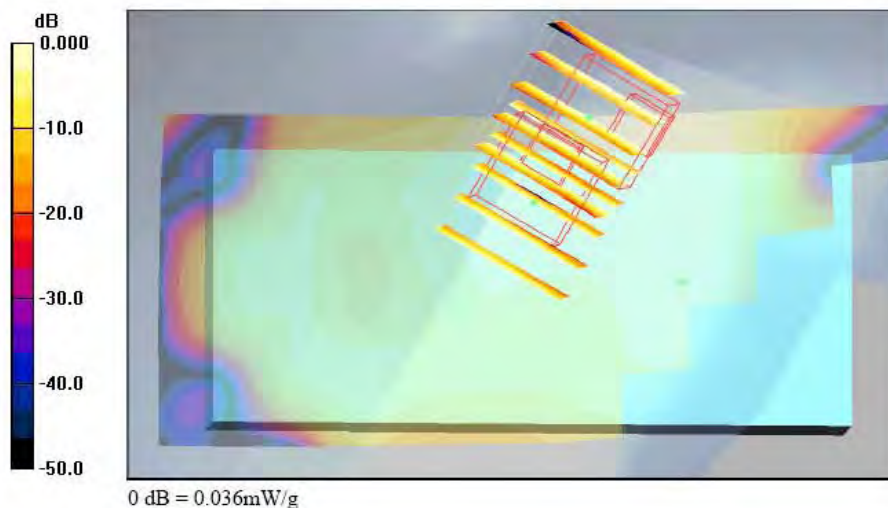Maximum value of SAR (interpolated) = 0.013 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.81 V/m; Power Drift = -0.188 dB
Peak SAR (extrapolated) = 0.029 W/kg
SAR(1 g) = 0.00966 mW/g; SAR(10 g) = 0.00405 mW/g
Maximum value of SAR (measured) = 0.011 mW/g

0 dB = 0.011mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Left Cheek_802.11b Ch6_Scanner1

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.74 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Ambient Temperature：22.8 ℃； Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.018 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.76 V/m; Power Drift = -0.151 dB
Peak SAR (extrapolated) = 0.025 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00869 mW/g
Maximum value of SAR (measured) = 0.018 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.76 V/m; Power Drift = -0.151 dB
Peak SAR (extrapolated) = 0.021 W/kg
SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.00697 mW/g
Maximum value of SAR (measured) = 0.014 mW/g

0 dB = 0.014mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Left Tilted_802.11b Ch6_Scanner1

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.74 mho/m; $ε_r$ = 38.2; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.010 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.49 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.019 W/kg
SAR(1 g) = 0.00842 mW/g; SAR(10 g) = 0.00381 mW/g
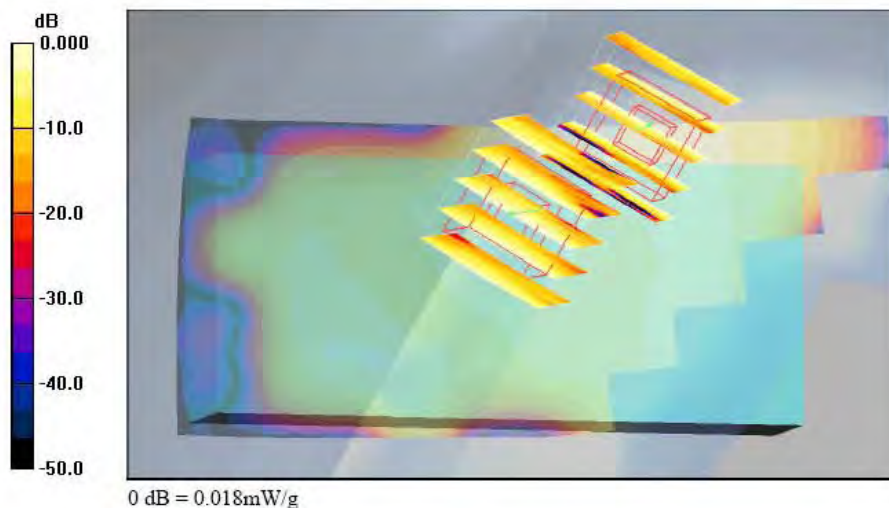Maximum value of SAR (measured) = 0.009 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.49 V/m; Power Drift = 0.024 dB
Peak SAR (extrapolated) = 0.013 W/kg
SAR(1 g) = 0.00815 mW/g; SAR(10 g) = 0.00397 mW/g

0 dB = 0.009mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Right Cheek_802.11b Ch11_Scanner1_Bluetooth On

DUT: 762206

Communication System: 802.11b ; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2462 MHz; σ = 1.78 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Ambient Temperature：23.0 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch11/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
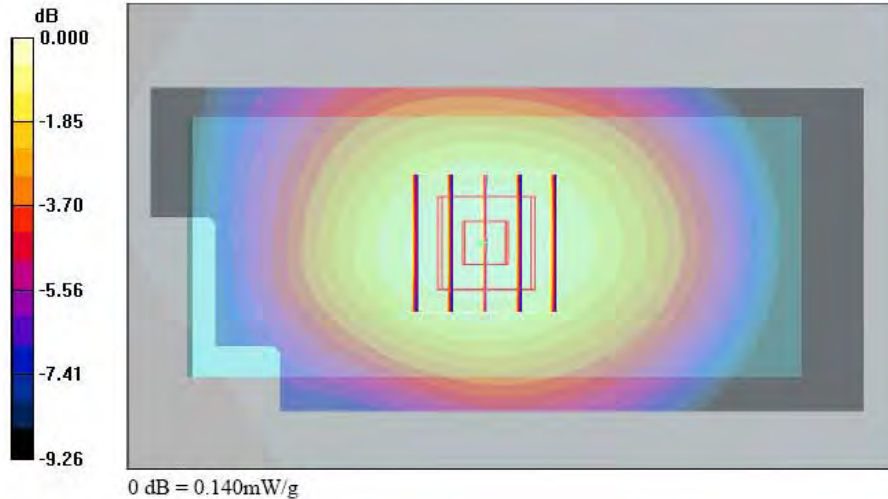Maximum value of SAR (interpolated) = 0.045 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.46 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.090 W/kg
SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.022 mW/g

Maximum value of SAR (measured) = 0.045 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.46 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.063 W/kg
SAR(1 g) = 0.033 mW/g; SAR(10 g) = 0.018 mW/g
Maximum value of SAR (measured) = 0.036 mW/g

0 dB = 0.036mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Right Cheek_802.11b Ch11_Scanner2

DUT: 762206

Communication System: 802.11b ; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2462 MHz; σ = 1.78 mho/m; ε_r = 38; ρ = 1000 kg/m^3
Ambient Temperature：23.0 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch11/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
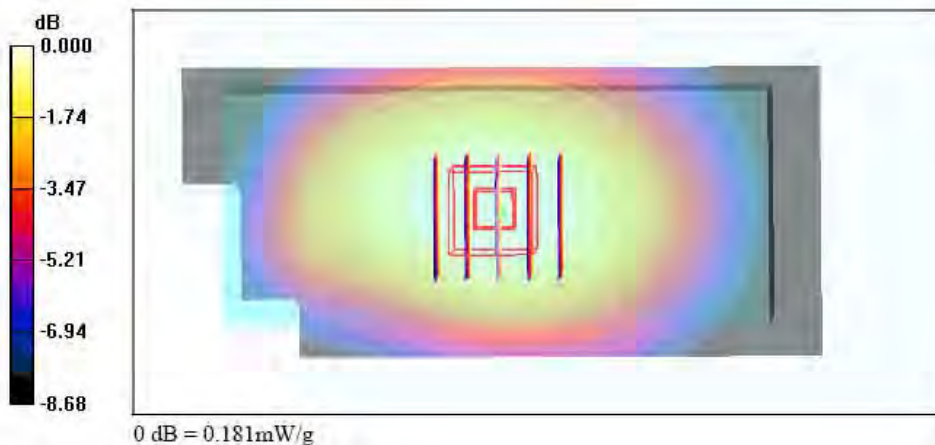Maximum value of SAR (interpolated) = 0.038 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.16 V/m; Power Drift = -0.182 dB
Peak SAR (extrapolated) = 0.076 W/kg
SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.018 mW/g

Maximum value of SAR (measured) = 0.039 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.16 V/m; Power Drift = -0.182 dB
Peak SAR (extrapolated) = 0.045 W/kg
SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.014 mW/g
Maximum value of SAR (measured) = 0.029 mW/g

0 dB = 0.029mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Right Cheek_802.11g Ch6_Scanner1

DUT: 762206

Communication System: 802.11g; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: HSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.74 mho/m; ε_r = 38.2; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.66, 4.66, 4.66); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
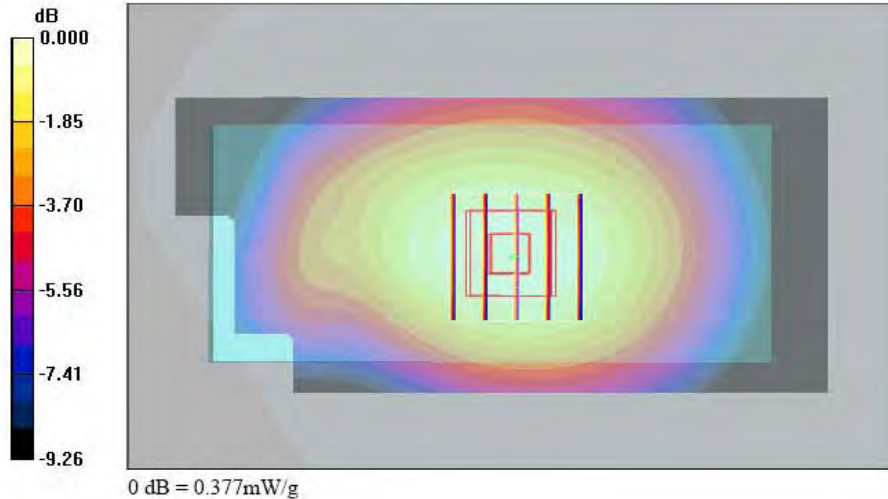Maximum value of SAR (interpolated) = 0.024 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.54 V/m; Power Drift = -0.164 dB
Peak SAR (extrapolated) = 0.028 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.010 mW/g
Maximum value of SAR (measured) = 0.022 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.54 V/m; Power Drift = -0.164 dB
Peak SAR (extrapolated) = 0.028 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00819 mW/g
Maximum value of SAR (measured) = 0.018 mW/g

0 dB = 0.018mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch189_Keypad Up with 1.5cm Gap_GPRS12_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:2
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.972 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.142 mW/g
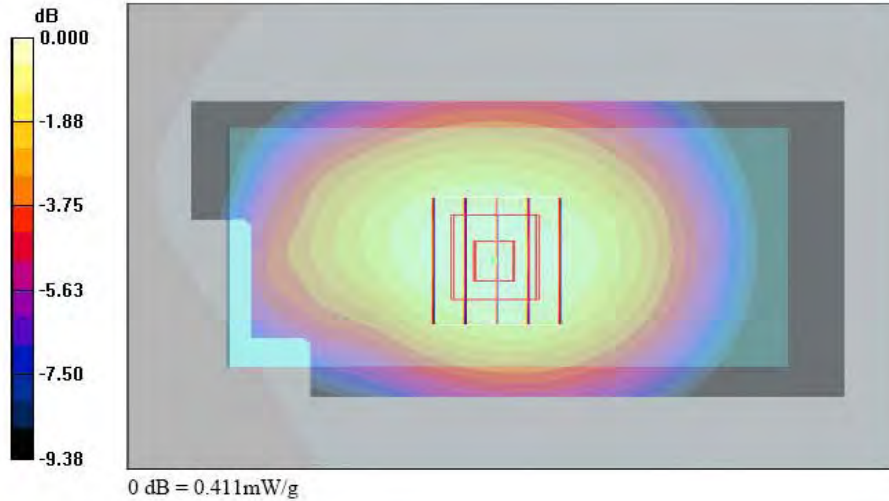
Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.59 V/m; Power Drift = -0.127 dB
Peak SAR (extrapolated) = 0.165 W/kg
SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.098 mW/g
Maximum value of SAR (measured) = 0.140 mW/g

0 dB = 0.140mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/10

Body_GSM850 Ch189_Keypad Down with 1.5cm Gap_GPRS8_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: MSL_850 Medium parameters used : f = 836.4 MHz; σ = 0.972 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
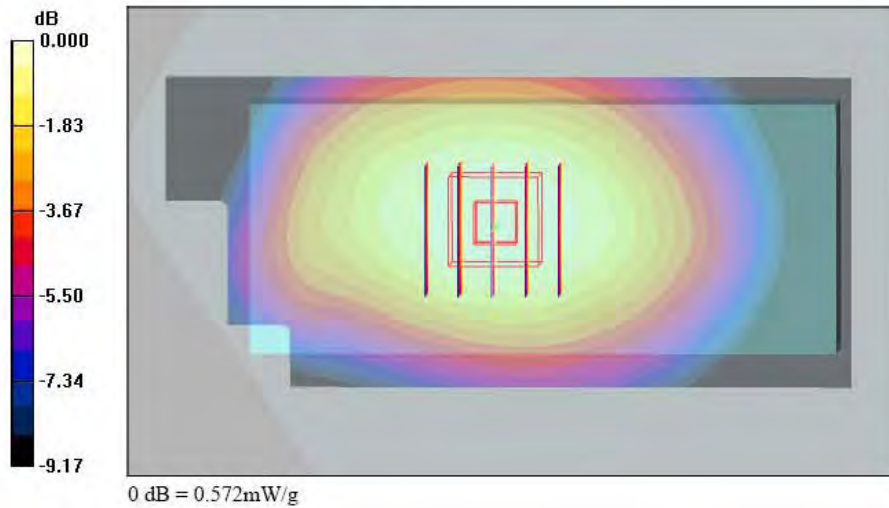
Maximum value of SAR (interpolated) = 0.184 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = -0.183 dB
Peak SAR (extrapolated) = 0.218 W/kg
SAR(1 g) = 0.172 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.181 mW/g

0 dB = 0.181mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch251_Keypad Down with 1.5cm Gap_GPRS10_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 849 MHz; σ = 0.985 mho/m; ε_r = 54.7; ρ = 1000 kg/m³
Ambient Temperature：22.6 ℃; Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch251/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
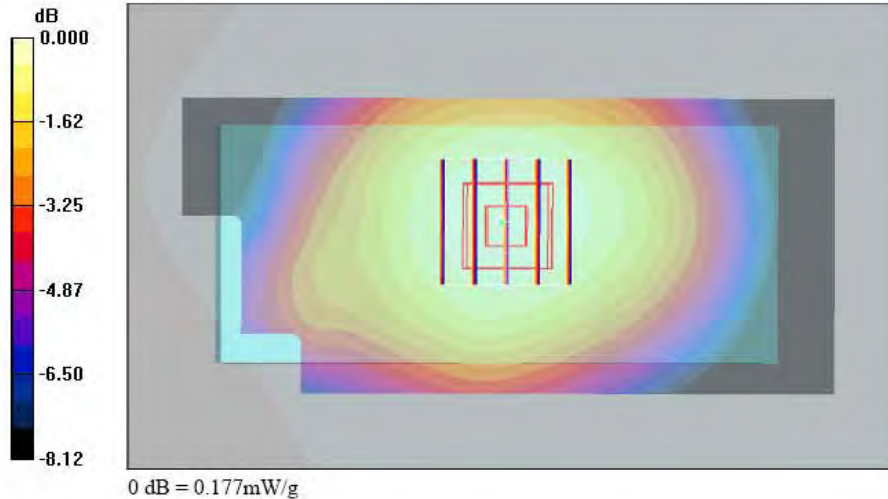Maximum value of SAR (interpolated) = 0.379 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.2 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.449 W/kg
SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.263 mW/g
Maximum value of SAR (measured) = 0.377 mW/g

0 dB = 0.377mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch251_Keypad Down with 1.5cm Gap_GPRS10_Scanner1_Bluetooth On

DUT: 762206

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 849 MHz; σ = 0.985 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch251/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
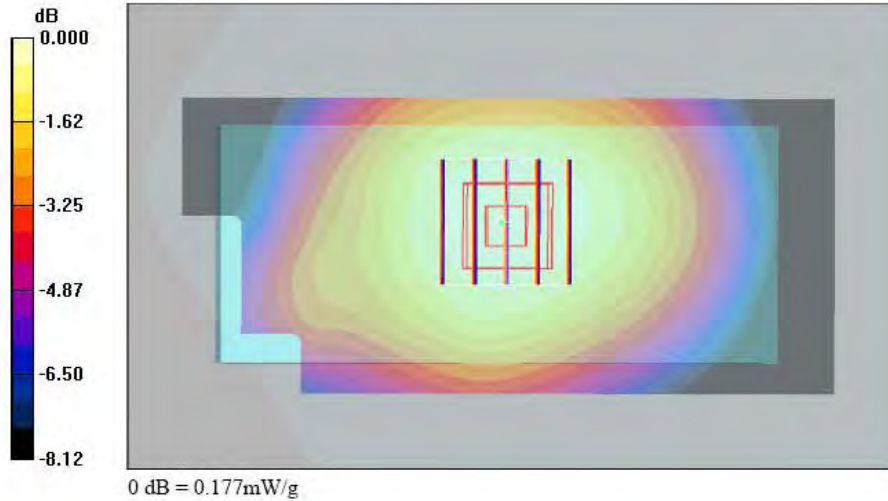Maximum value of SAR (interpolated) = 0.413 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.61 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 0.495 W/kg
SAR(1 g) = 0.387 mW/g; SAR(10 g) = 0.285 mW/g
Maximum value of SAR (measured) = 0.411 mW/g

0 dB = 0.411mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/10

Body_GSM850 Ch251_Keypad Down with 1.5cm Gap_GPRS10_Scanner2_Bluetooth On

DUT: 762206

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 849 MHz; σ = 0.985 mho/m; ε_r = 54.7; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch251/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
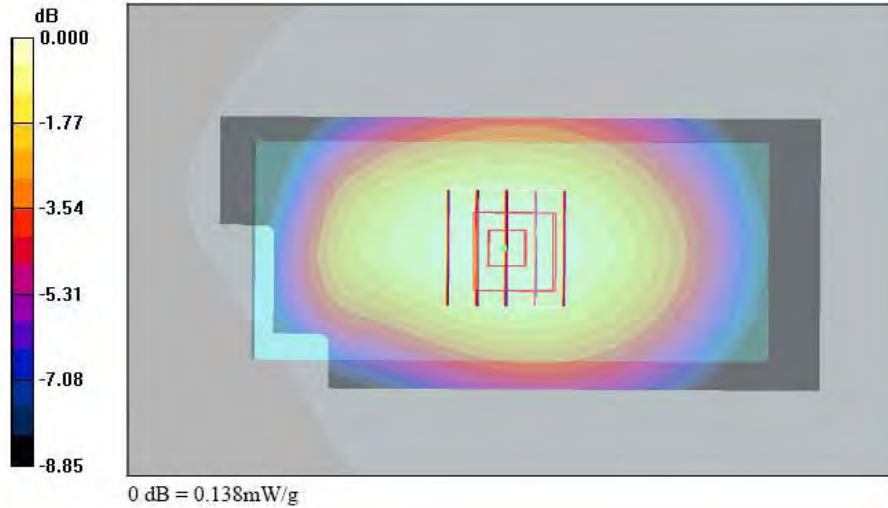Maximum value of SAR (interpolated) = 0.576 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.3 V/m; Power Drift = -0.097 dB
Peak SAR (extrapolated) = 0.677 W/kg
SAR(1 g) = 0.539 mW/g; SAR(10 g) = 0.399 mW/g
Maximum value of SAR (measured) = 0.572 mW/g

0 dB = 0.572mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch189_Keypad Down with 1.5cm Gap_GPRS12_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:2
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.972 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃; Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
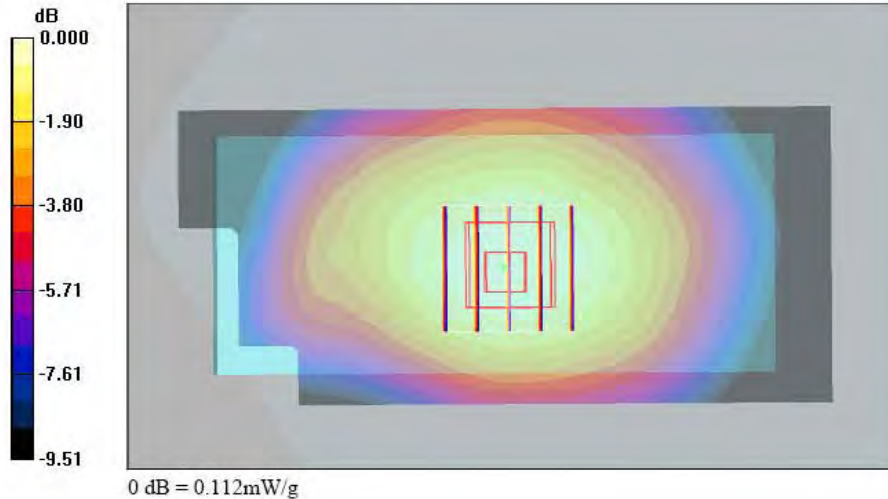Maximum value of SAR (interpolated) = 0.179 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.74 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 0.209 W/kg
SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.177 mW/g

0 dB = 0.177mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch189_Keypad Down with 1.5cm Gap_GPRS12_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:2
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.972 mho/m; ε_r = 54.8; ρ = 1000 kg/m³
Ambient Temperature：22.6 ℃； Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.179 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.74 V/m; Power Drift = -0.144 dB
Peak SAR (extrapolated) = 0.209 W/kg
SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.127 mW/g
Maximum value of SAR (measured) = 0.177 mW/g

0 dB = 0.177mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch189_Keypad Down with 1.5cm Gap_EDGE8_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.972 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Ambient Temperature : 22.6 ℃; Liquid Temperature : 21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
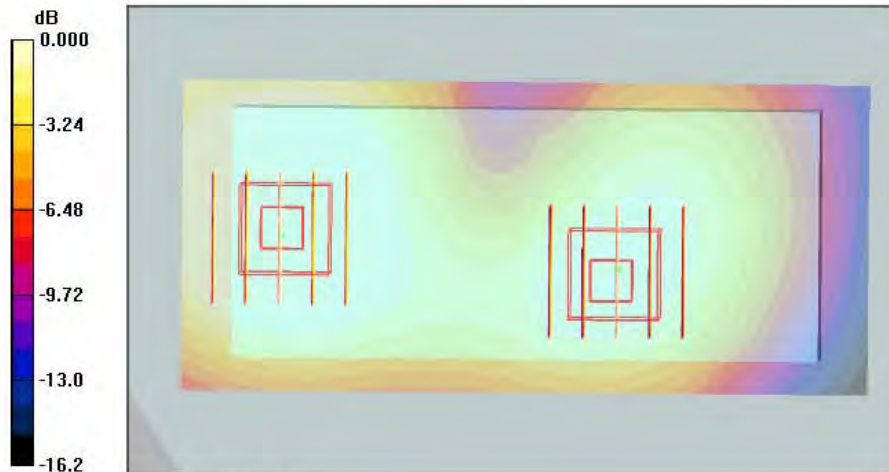Maximum value of SAR (interpolated) = 0.141 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.38 V/m; Power Drift = -0.045 dB
Peak SAR (extrapolated) = 0.186 W/kg
SAR(1 g) = 0.132 mW/g; SAR(10 g) = 0.097 mW/g
Maximum value of SAR (measured) = 0.138 mW/g

0 dB = 0.138mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/10

Body_GSM850 Ch189_Keypad Down with 1.5cm Gap_EDGE10_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.972 mho/m; ε_r = 54.8; ρ = 1000 kg/m^3
Ambient Temperature：22.6 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
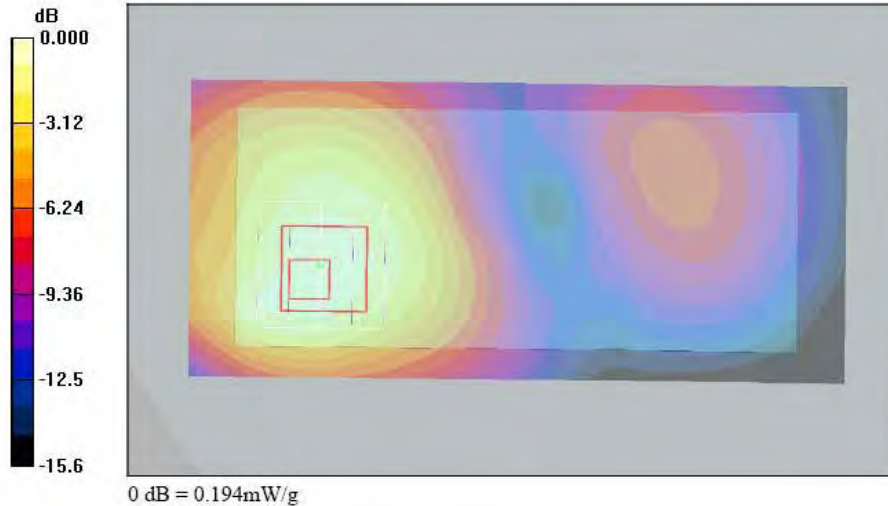Maximum value of SAR (interpolated) = 0.115 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.71 V/m; Power Drift = -0.111 dB
Peak SAR (extrapolated) = 0.138 W/kg
SAR(1 g) = 0.105 mW/g; SAR(10 g) = 0.076 mW/g
Maximum value of SAR (measured) = 0.112 mW/g

0 dB = 0.112mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Up with 1.5cm Gap_GPRS12_Scanner1

DUT: 762206

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:2
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
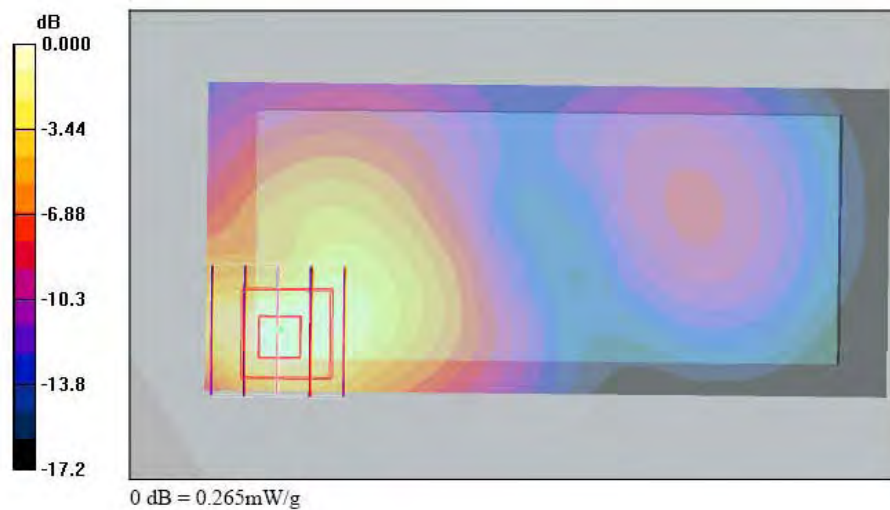Maximum value of SAR (interpolated) = 0.077 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.13 V/m; Power Drift = -0.149 dB
Peak SAR (extrapolated) = 0.094 W/kg
SAR(1 g) = 0.070 mW/g; SAR(10 g) = 0.047 mW/g
Maximum value of SAR (measured) = 0.074 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.13 V/m; Power Drift = -0.149 dB
Peak SAR (extrapolated) = 0.060 W/kg
SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.047 mW/g

0 dB = 0.047mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Down with 1.5cm Gap_GPRS8_Scanner1

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
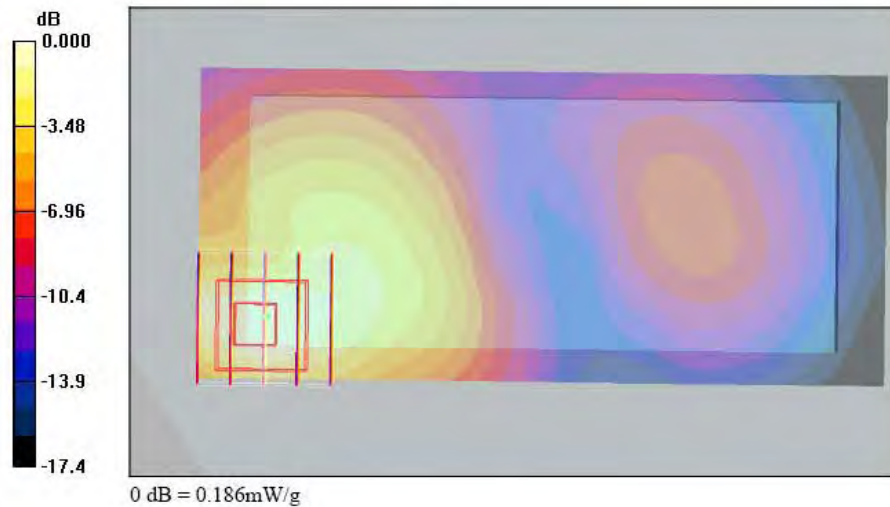Maximum value of SAR (interpolated) = 0.192 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.07 V/m; Power Drift = -0.114 dB
Peak SAR (extrapolated) = 0.280 W/kg
SAR(1 g) = 0.180 mW/g; SAR(10 g) = 0.111 mW/g
Maximum value of SAR (measured) = 0.194 mW/g

0 dB = 0.194mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Down with 1.5cm Gap_GPRS10_Scanner1

DUT: 762206

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
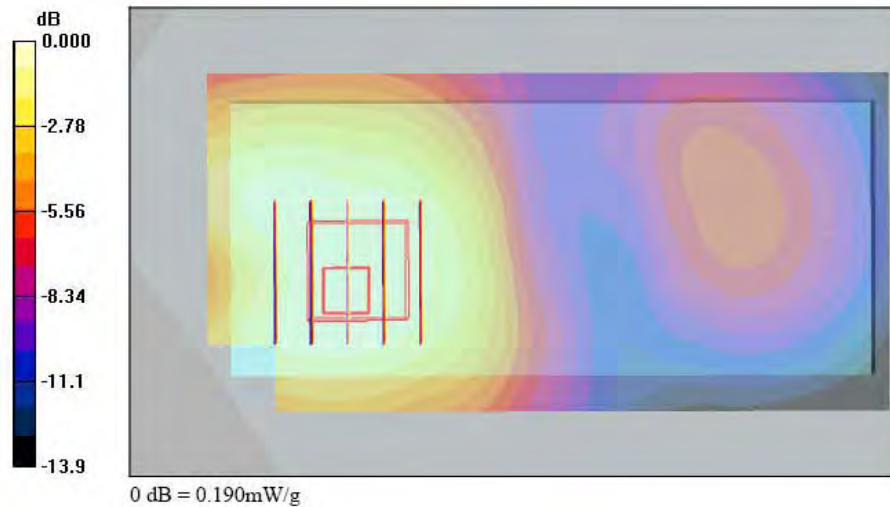Maximum value of SAR (interpolated) = 0.275 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.39 V/m; Power Drift = 0.019 dB
Peak SAR (extrapolated) = 0.380 W/kg
SAR(1 g) = 0.236 mW/g; SAR(10 g) = 0.133 mW/g
Maximum value of SAR (measured) = 0.265 mW/g

0 dB = 0.265mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Down with 1.5cm Gap_GPRS10_Scanner1_Bluetooth On

DUT: 762206

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
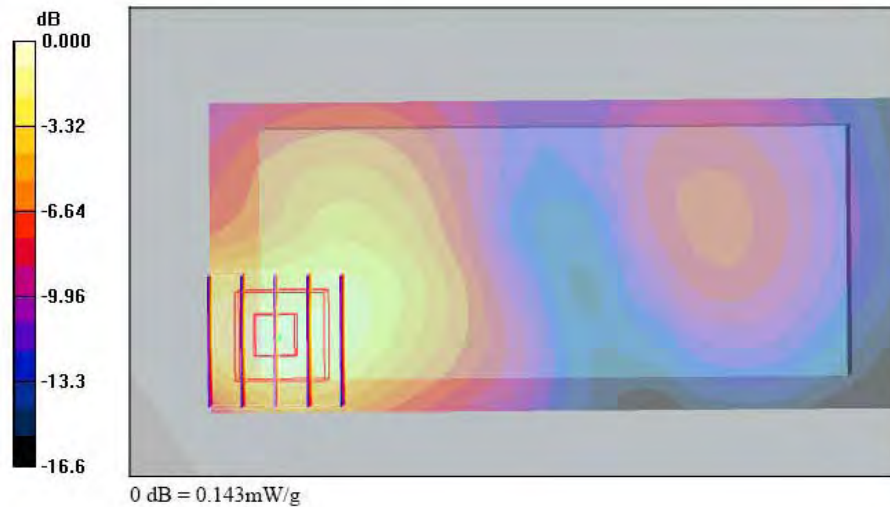Maximum value of SAR (interpolated) = 0.190 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.52 V/m; Power Drift = -0.199 dB
Peak SAR (extrapolated) = 0.269 W/kg
SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.099 mW/g
Maximum value of SAR (measured) = 0.186 mW/g

0 dB = 0.186mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Down with 1.5cm Gap_GPRS10_Scanner2

DUT: 762206

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature：23.3 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
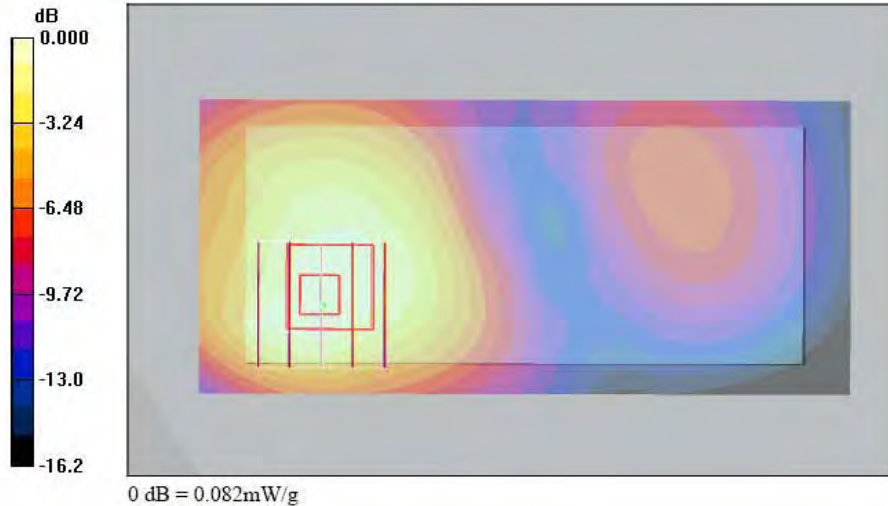Maximum value of SAR (interpolated) = 0.192 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.95 V/m; Power Drift = -0.056 dB
Peak SAR (extrapolated) = 0.254 W/kg
SAR(1 g) = 0.178 mW/g; SAR(10 g) = 0.120 mW/g
Maximum value of SAR (measured) = 0.190 mW/g

0 dB = 0.190mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Down with 1.5cm Gap_GPRS12_Scanner1

DUT: 762206

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:2
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
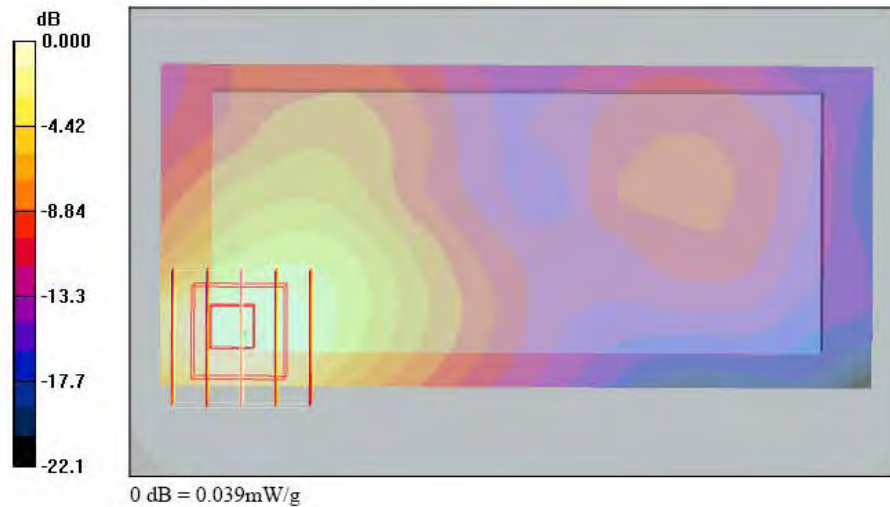Maximum value of SAR (interpolated) = 0.142 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.58 V/m; Power Drift = -0.141 dB
Peak SAR (extrapolated) = 0.203 W/kg
SAR(1 g) = 0.128 mW/g; SAR(10 g) = 0.075 mW/g
Maximum value of SAR (measured) = 0.143 mW/g

0 dB = 0.143mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

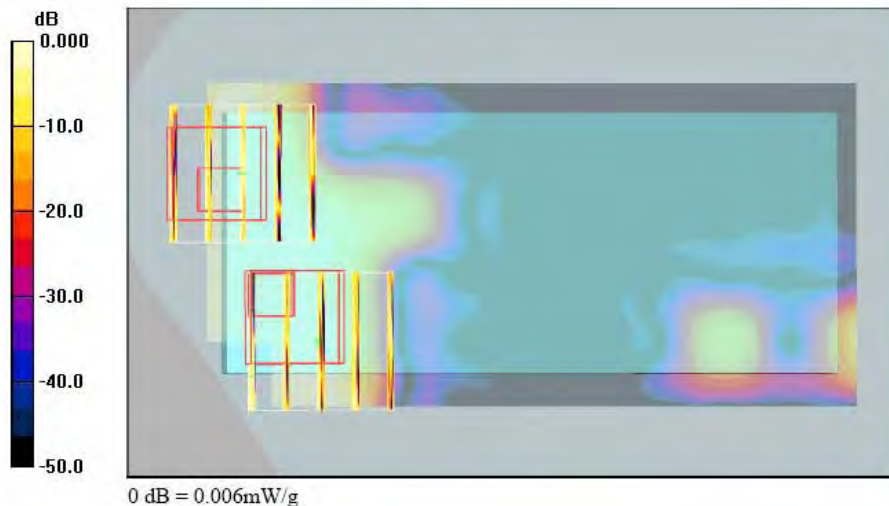**Body_PCS Ch661_Keypad Down with 1.5cm Gap_EDGE8_Scanner1**

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; $ε_r$ = 53.7; ρ = 1000 kg/m³
Ambient Temperature：23.1 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.082 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.64 V/m; Power Drift = -0.101 dB
Peak SAR (extrapolated) = 0.117 W/kg
SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.047 mW/g
Maximum value of SAR (measured) = 0.082 mW/g

0 dB = 0.082mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/14

Body_PCS Ch661_Keypad Down with 1.5cm Gap_EDGE10_Scanner1

DUT: 762206

Communication System: PCS 1900; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 53.7; ρ = 1000 kg/m^3
Ambient Temperature: 23.2 ℃; Liquid Temperature: 21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x111x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.041 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.57 V/m; Power Drift = -0.050 dB
Peak SAR (extrapolated) = 0.056 W/kg
SAR(1 g) = 0.036 mW/g; SAR(10 g) = 0.021 mW/g
Maximum value of SAR (measured) = 0.039 mW/g

dB
0.000
-4.42
-8.84
-13.3
-17.7
-22.1

0 dB = 0.039mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/17

Body_802.11b Ch6_Keypad Up with 1.5cm Gap_Scanner1
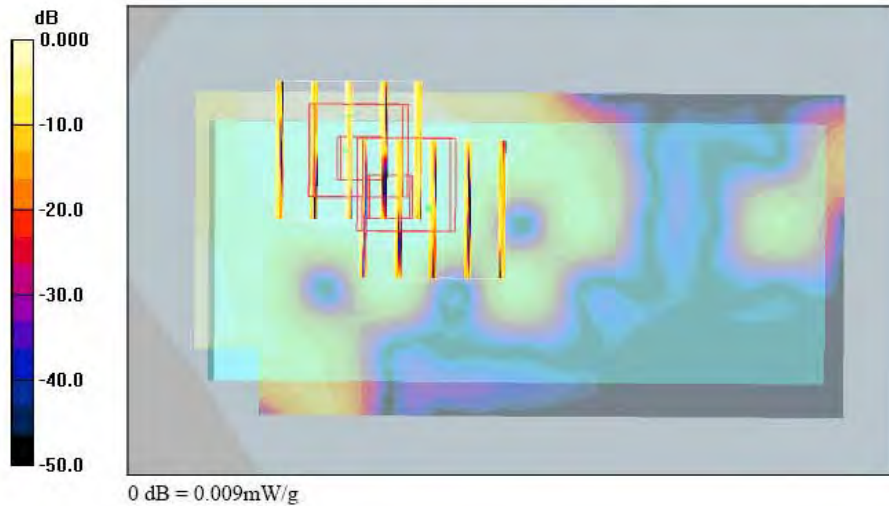
DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.92$ mho/m; $\varepsilon_r = 51.5$; $\rho = 1000$ kg/m^3
Ambient Temperature：23.0 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.008 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.555 V/m; Power Drift = 0.103 dB
Peak SAR (extrapolated) = 0.005 W/kg
SAR(1 g) = 0.000206 mW/g; SAR(10 g) = 4.82e-005 mW/g
Maximum value of SAR (measured) = 0.005 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.555 V/m; Power Drift = 0.103 dB
Peak SAR (extrapolated) = 0.004 W/kg
SAR(1 g) = 0.000159 mW/g; SAR(10 g) = 4.99e-005 mW/g
Maximum value of SAR (measured) = 0.006 mW/g

0 dB = 0.006mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/17

Body_802.11b Ch6_Keypad Down with 1.5cm Gap_Scanner1

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.92 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
Ambient Temperature：23.0 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
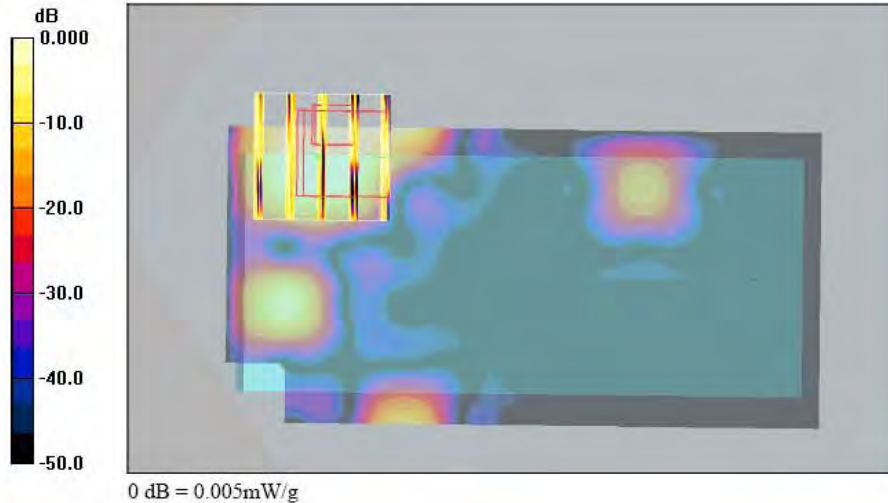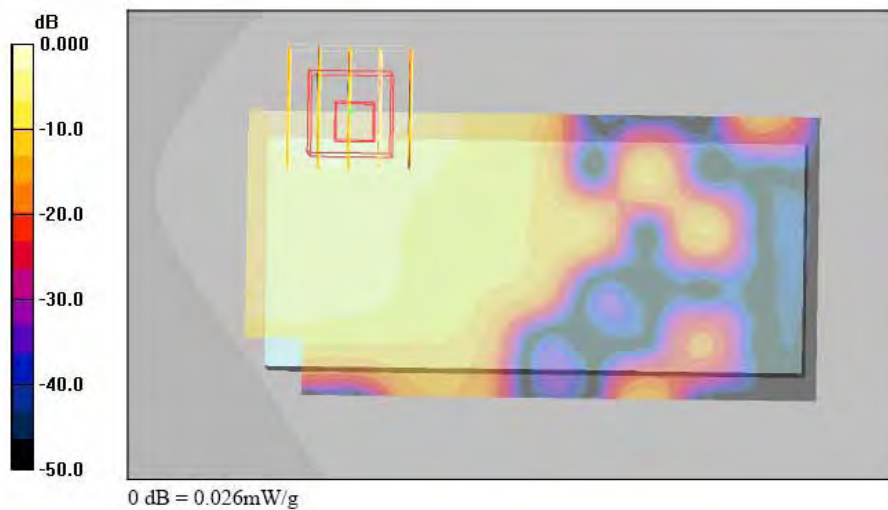Maximum value of SAR (interpolated) = 0.012 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.623 V/m; Power Drift = 0.142 dB
Peak SAR (extrapolated) = 0.053 W/kg
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00491 mW/g
Maximum value of SAR (measured) = 0.009 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.623 V/m; Power Drift = 0.142 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.00973 mW/g; SAR(10 g) = 0.00391 mW/g

0 dB = 0.009mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/17

Body_802.11b Ch6_Keypad Down with 1.5cm Gap_Scanner1_Bluetooth On

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.92 mho/m; ε_r = 51.5; ρ = 1000 kg/m^3
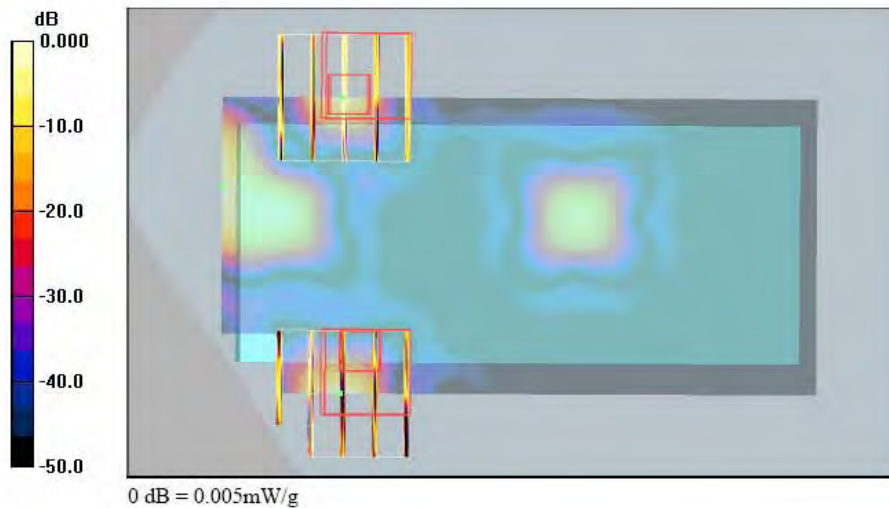Ambient Temperature：23.0 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.012 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.268 V/m; Power Drift = 0.174 dB
Peak SAR (extrapolated) = 0.005 W/kg
SAR(1 g) = 0.000317 mW/g; SAR(10 g) = 5.57e-005 mW/g
Maximum value of SAR (measured) = 0.005 mW/g

0 dB = 0.005mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/7/17

Body_802.11b Ch6_Keypad Down with 1.5cm Gap_Scanner2

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.92 mho/m; $ε_r$ = 51.5; ρ = 1000 kg/m^3
Ambient Temperature：23.0 ℃; Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.020 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.682 V/m; Power Drift = -0.108 dB
Peak SAR (extrapolated) = 0.045 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00858 mW/g
Maximum value of SAR (measured) = 0.026 mW/g

0 dB = 0.026mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/7/17

Body_802.11g Ch6_Keypad Down with 1.5cm Gap_Scanner1

DUT: 762206

Communication System: 802.11g; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.92 mho/m; ε_r = 51.5; ρ = 1000 kg/m³
Ambient Temperature：23.0 ℃; Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
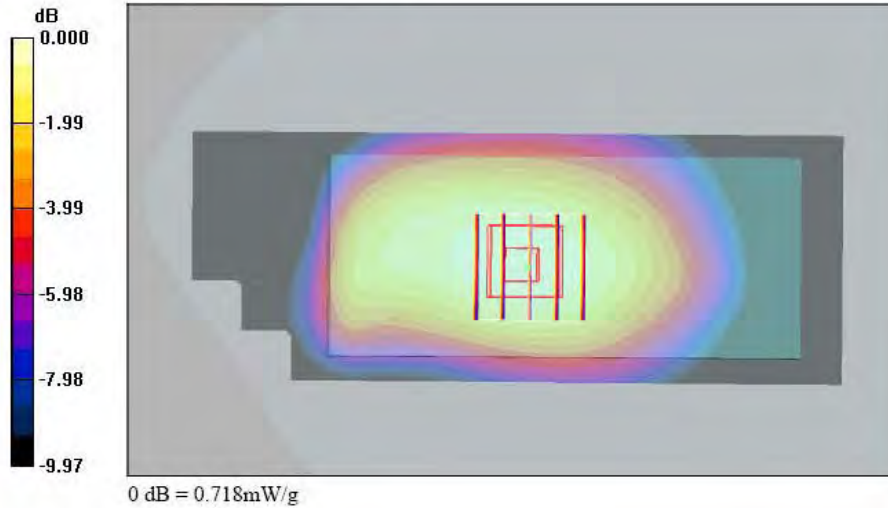Maximum value of SAR (interpolated) = 0.004 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.331 V/m; Power Drift = 0.171 dB
Peak SAR (extrapolated) = 0.004 W/kg
SAR(1 g) = 0.000191 mW/g; SAR(10 g) = 4.3e-005 mW/g
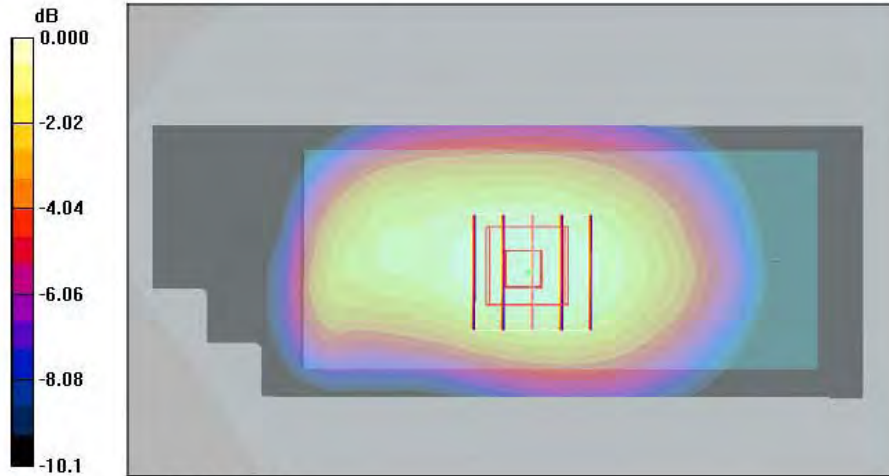Maximum value of SAR (measured) = 0.004 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.331 V/m; Power Drift = 0.171 dB
Peak SAR (extrapolated) = 0.005 W/kg
SAR(1 g) = 0.000153 mW/g; SAR(10 g) = 4.11e-005 mW/g
Maximum value of SAR (measured) = 0.005 mW/g

0 dB = 0.005mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

Body_GSM850 Ch189_Keypad Down with Holster Touch_GPRS8_Scanner2

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.969 mho/m; $ε_r$ = 54.1; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.733 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 21.9 V/m; Power Drift = -0.137 dB
Peak SAR (extrapolated) = 0.880 W/kg
SAR(1 g) = 0.680 mW/g; SAR(10 g) = 0.497 mW/g
Maximum value of SAR (measured) = 0.718 mW/g

0 dB = 0.718mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

Body_GSM850 Ch251_Keypad Down with Holster Touch_GPRS10_Scanner2

DUT: 762206

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 849 MHz; σ = 0.982 mho/m; ε_r = 54; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch251/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
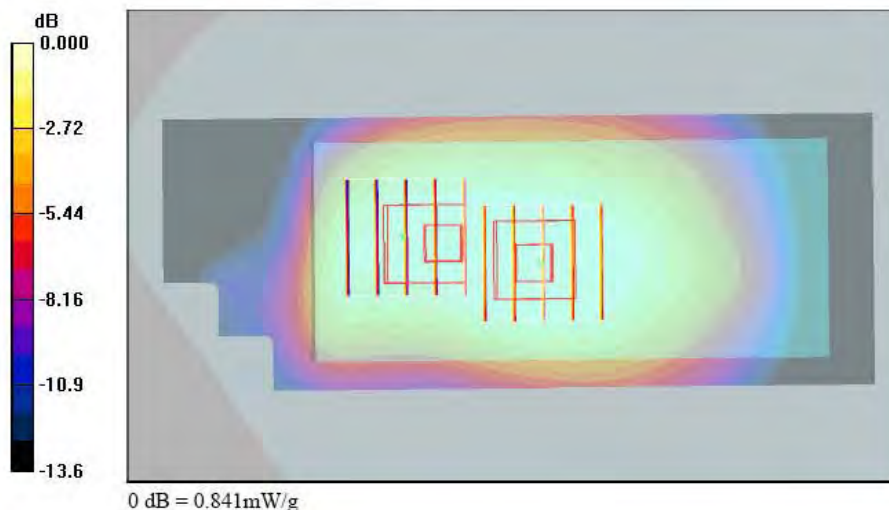Maximum value of SAR (interpolated) = 1.08 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 27.1 V/m; Power Drift = -0.087 dB
Peak SAR (extrapolated) = 1.30 W/kg
SAR(1 g) = 0.991 mW/g; SAR(10 g) = 0.723 mW/g
Maximum value of SAR (measured) = 1.04 mW/g

0 dB = 1.04mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/14

Body_GSM850 Ch251_Keypad Down with Holster Touch_GPRS10_Scanner2_Bluetooth On

DUT: 762206

Communication System: GSM850; Frequency: 848.8 MHz; Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 849 MHz; σ = 0.982 mho/m; ε_r = 54; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch251/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
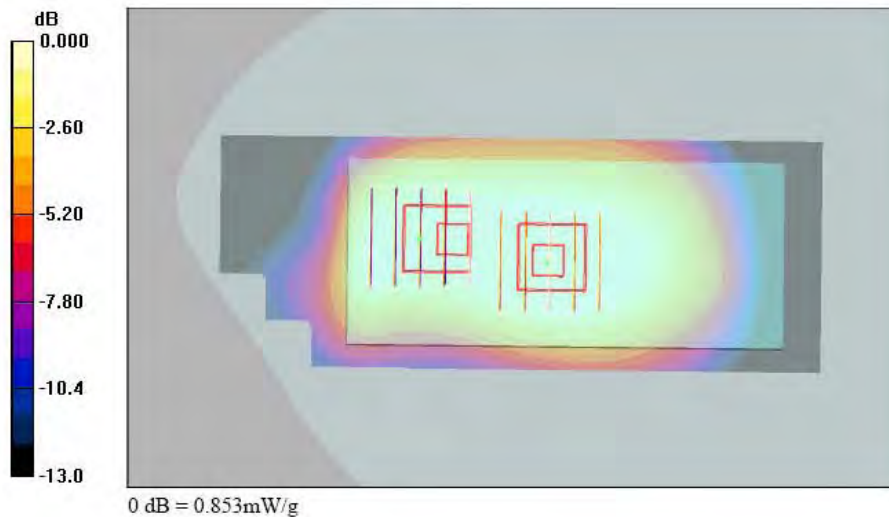Maximum value of SAR (interpolated) = 1.01 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.1 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 1.21 W/kg
SAR(1 g) = 0.941 mW/g; SAR(10 g) = 0.684 mW/g
Maximum value of SAR (measured) = 0.994 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.1 V/m; Power Drift = -0.148 dB
Peak SAR (extrapolated) = 1.01 W/kg
SAR(1 g) = 0.764 mW/g; SAR(10 g) = 0.530 mW/g
Maximum value of SAR (measured) = 0.841 mW/g

0 dB = 0.841mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

Body_GSM850 Ch251_Keypad Down with Holster Touch_GPRS10_Scanner1

DUT: 762206

Communication System: GSM850; Frequency: 848.8 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 849 MHz; σ = 0.982 mho/m; ε_r = 54; ρ = 1000 kg/m³
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch251/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 1.07 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.7 V/m; Power Drift = -0.187 dB
Peak SAR (extrapolated) = 1.28 W/kg
SAR(1 g) = 0.988 mW/g; SAR(10 g) = 0.727 mW/g
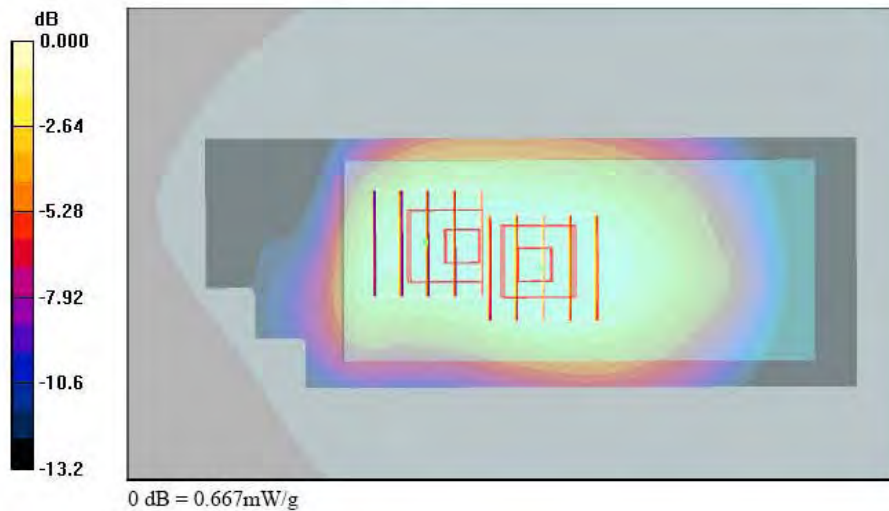Maximum value of SAR (measured) = 1.05 mW/g

Ch251/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 29.7 V/m; Power Drift = -0.187 dB
Peak SAR (extrapolated) = 1.10 W/kg
SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.546 mW/g
Maximum value of SAR (measured) = 0.853 mW/g

0 dB = 0.853mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

Body_GSM850 Ch189_Keypad Down with Holster Touch_GPRS12_Scanner2

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:2
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.969 mho/m; $ε_r$ = 54.1; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.778 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.6 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.943 W/kg
SAR(1 g) = 0.728 mW/g; SAR(10 g) = 0.531 mW/g
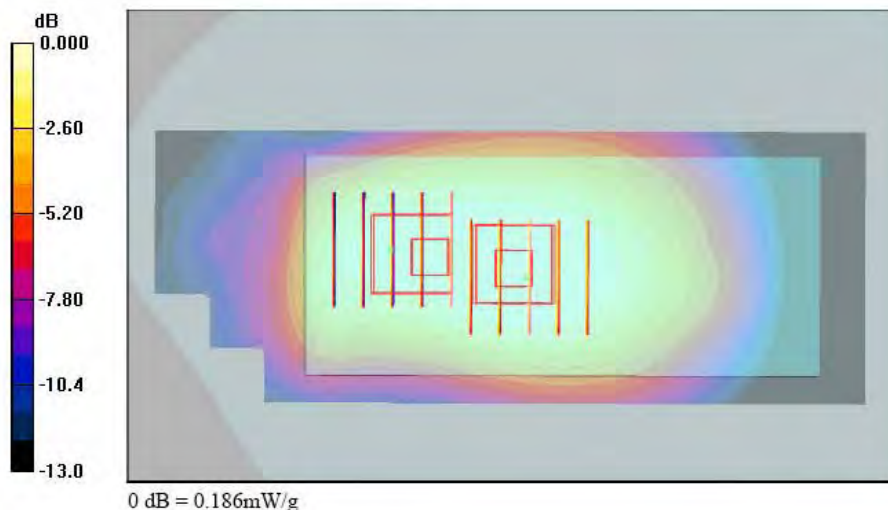Maximum value of SAR (measured) = 0.772 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 22.6 V/m; Power Drift = 0.002 dB
Peak SAR (extrapolated) = 0.800 W/kg
SAR(1 g) = 0.616 mW/g; SAR(10 g) = 0.430 mW/g
Maximum value of SAR (measured) = 0.667 mW/g

0 dB = 0.667mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

Body_GSM850 Ch189_Keypad Down with Holster Touch_EDGE8_Scanner2

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:8.3
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.969 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.213 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 0.253 W/kg
SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.147 mW/g
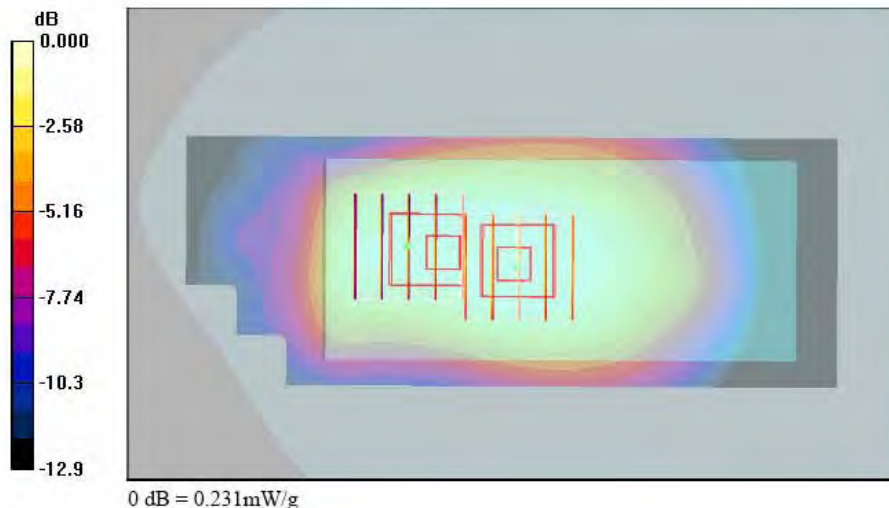Maximum value of SAR (measured) = 0.212 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.0 V/m; Power Drift = -0.106 dB
Peak SAR (extrapolated) = 0.224 W/kg
SAR(1 g) = 0.169 mW/g; SAR(10 g) = 0.118 mW/g
Maximum value of SAR (measured) = 0.186 mW/g

0 dB = 0.186mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

Body_GSM850 Ch189_Keypad Down with Holster Touch_EDGE10_Scanner2

DUT: 762206

Communication System: GSM850; Frequency: 836.4 MHz;Duty Cycle: 1:4
Medium: MSL_850 Medium parameters used: f = 836.4 MHz; σ = 0.969 mho/m; ε_r = 54.1; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(6.33, 6.33, 6.33); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-A; Type: QD 000 P40 C; Serial: TP-1303
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch189/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
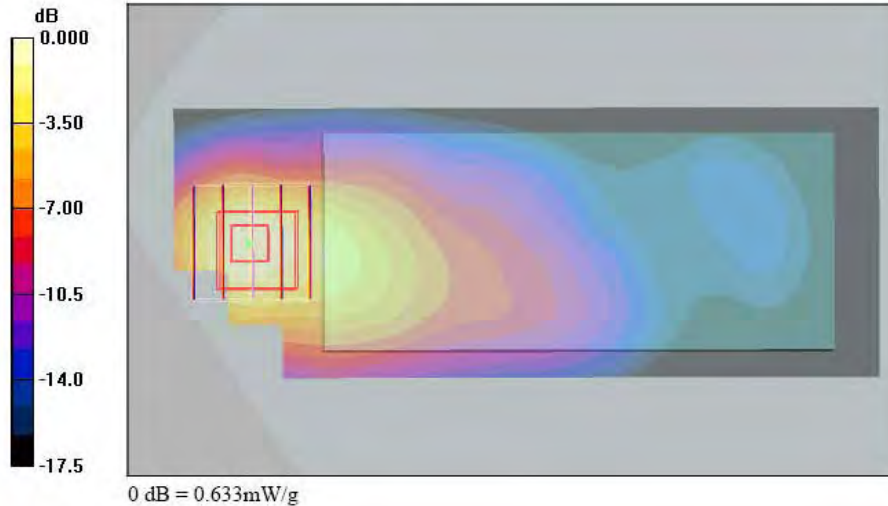Maximum value of SAR (interpolated) = 0.263 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.105 dB
Peak SAR (extrapolated) = 0.316 W/kg
SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.179 mW/g
Maximum value of SAR (measured) = 0.260 mW/g

Ch189/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.105 dB
Peak SAR (extrapolated) = 0.273 W/kg
SAR(1 g) = 0.209 mW/g; SAR(10 g) = 0.146 mW/g
Maximum value of SAR (measured) = 0.231 mW/g

0 dB = 0.231mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch661_Keypad Up with Holster Touch_GPRS12_Scanner2

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:2
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
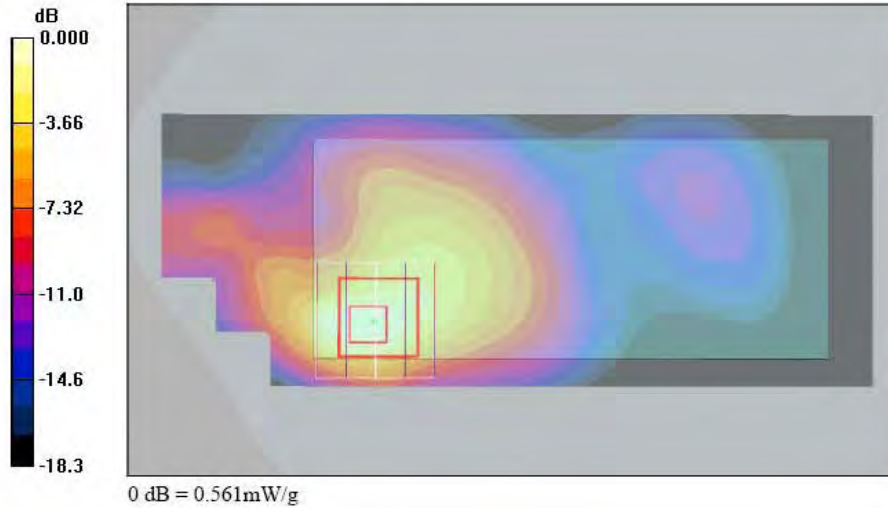Maximum value of SAR (interpolated) = 0.666 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.67 V/m; Power Drift = -0.112 dB
Peak SAR (extrapolated) = 0.844 W/kg
SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.326 mW/g
Maximum value of SAR (measured) = 0.633 mW/g

0 dB = 0.633mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch661_Keypad Down with Holster Touch_GPRS8_Scanner2

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.5 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
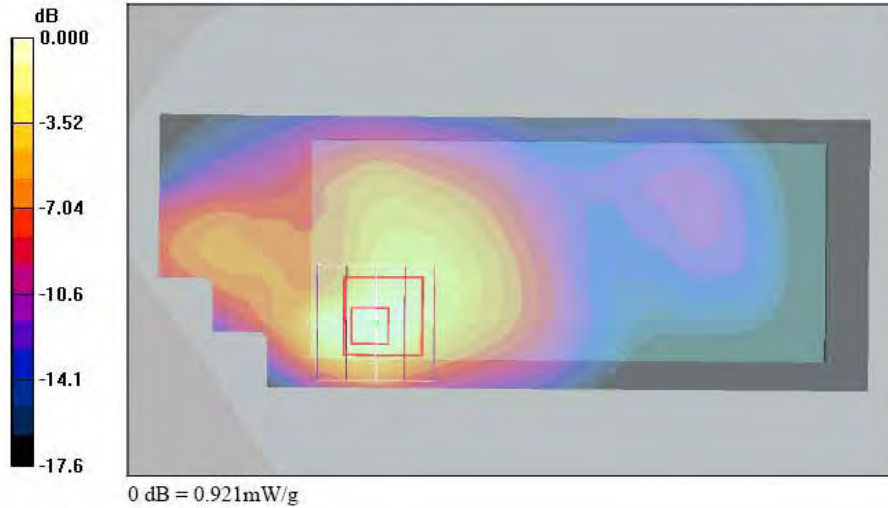Maximum value of SAR (interpolated) = 0.567 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.77 V/m; Power Drift = 0.060 dB
Peak SAR (extrapolated) = 0.840 W/kg
SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.249 mW/g
Maximum value of SAR (measured) = 0.561 mW/g

0 dB = 0.561mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch512_Keypad Down with Holster Touch_GPRS10_Scanner2

DUT: 762206

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used : f = 1850.2 MHz; σ = 1.45 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Ambient Temperature : 23.1 ℃; Liquid Temperature : 21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch512/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.994 mW/g

Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 6.01 V/m; Power Drift = -0.089 dB
Peak SAR (extrapolated) = 1.37 W/kg
SAR(1 g) = 0.804 mW/g; SAR(10 g) = 0.430 mW/g
Maximum value of SAR (measured) = 0.921 mW/g

0 dB = 0.921mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch512_Keypad Down with Holster Touch_GPRS10_Scanner2_Bluetooth On

DUT: 762206

Communication System: PCS; Frequency: 1850.2 MHz; Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1850.2 MHz; σ = 1.45 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Ambient Temperature：23.2 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch512/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm

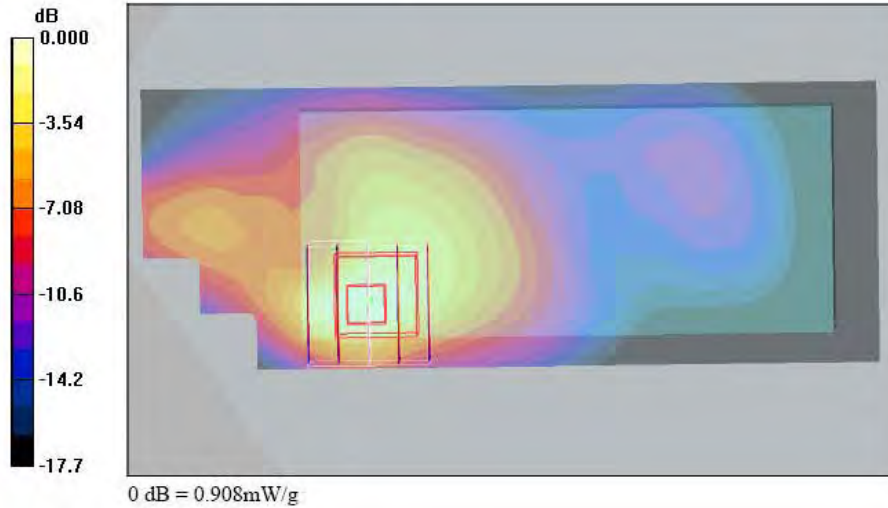Maximum value of SAR (interpolated) = 0.953 mW/g

Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 5.91 V/m; Power Drift = 0.118 dB
Peak SAR (extrapolated) = 1.31 W/kg
SAR(1 g) = 0.784 mW/g; SAR(10 g) = 0.422 mW/g
Maximum value of SAR (measured) = 0.908 mW/g

0 dB = 0.908mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch512_Keypad Down with Holster Touch_GPRS10_Scanner1

DUT: 762206

Communication System: PCS; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used : f = 1850.2 MHz; σ = 1.45 mho/m; ε_r = 52.7; ρ = 1000 kg/m^3
Ambient Temperature：23.5 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch512/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
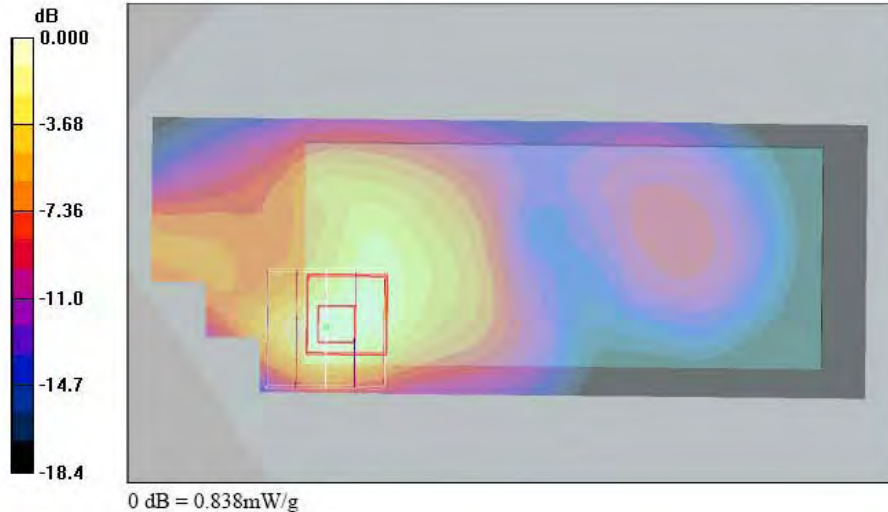Maximum value of SAR (interpolated) = 0.866 mW/g

Ch512/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.10 V/m; Power Drift = -0.170 dB
Peak SAR (extrapolated) = 1.22 W/kg
SAR(1 g) = 0.728 mW/g; SAR(10 g) = 0.396 mW/g
Maximum value of SAR (measured) = 0.838 mW/g

0 dB = 0.838mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch661_Keypad Down with Holster Touch_GPRS12_Scanner2

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:2
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
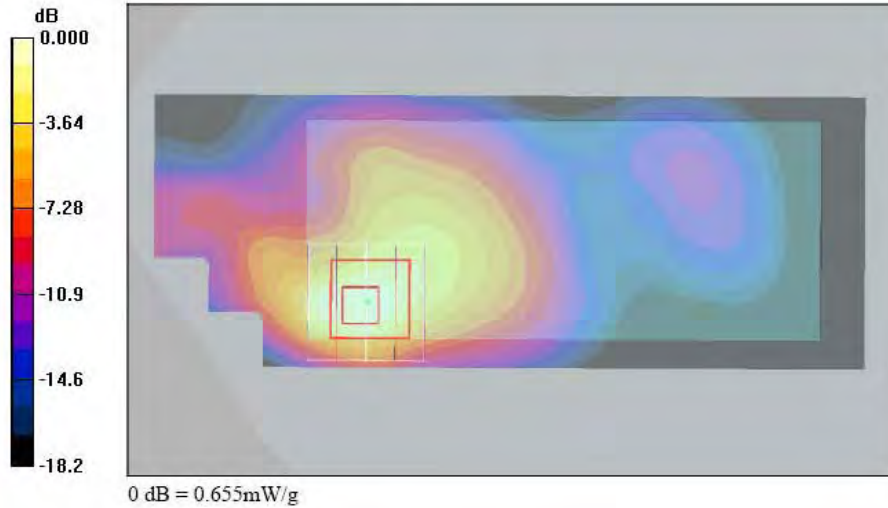Maximum value of SAR (interpolated) = 0.671 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.27 V/m; Power Drift = -0.107 dB
Peak SAR (extrapolated) = 0.977 W/kg
SAR(1 g) = 0.564 mW/g; SAR(10 g) = 0.290 mW/g
Maximum value of SAR (measured) = 0.655 mW/g

0 dB = 0.655mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch661_Keypad Down with Holster Touch_EDGE8_Scanner2

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:8.3
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.6; ρ = 1000 kg/m^3
Ambient Temperature : 22.9 ℃; Liquid Temperature : 21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
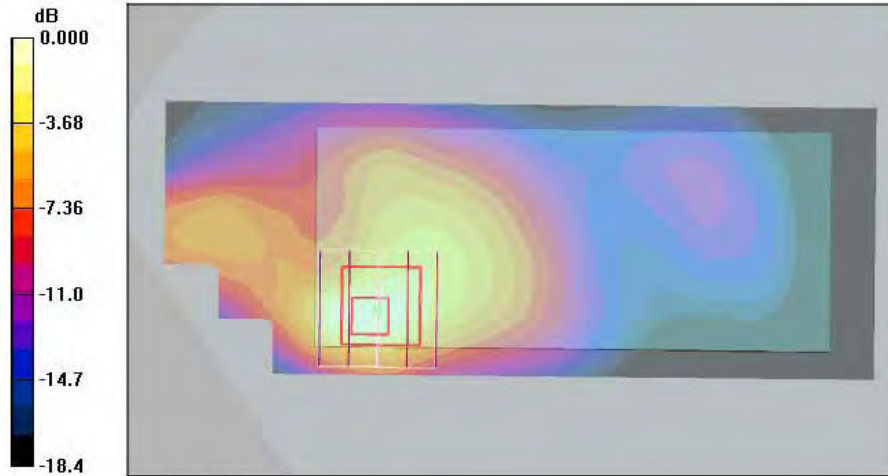Maximum value of SAR (interpolated) = 0.291 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 2.83 V/m; Power Drift = 0.176 dB
Peak SAR (extrapolated) = 0.428 W/kg
SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.129 mW/g
Maximum value of SAR (measured) = 0.288 mW/g

0 dB = 0.288mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/13

Body_PCS Ch661_Keypad Down with Holster Touch_EDGE10_Scanner2

DUT: 762206

Communication System: PCS; Frequency: 1880 MHz;Duty Cycle: 1:4
Medium: MSL_1900 Medium parameters used: f = 1880 MHz; σ = 1.48 mho/m; ε_r = 52.6; ρ = 1000 kg/m³
Ambient Temperature：23.2 ℃；Liquid Temperature：21.2 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.67, 4.67, 4.67); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch661/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
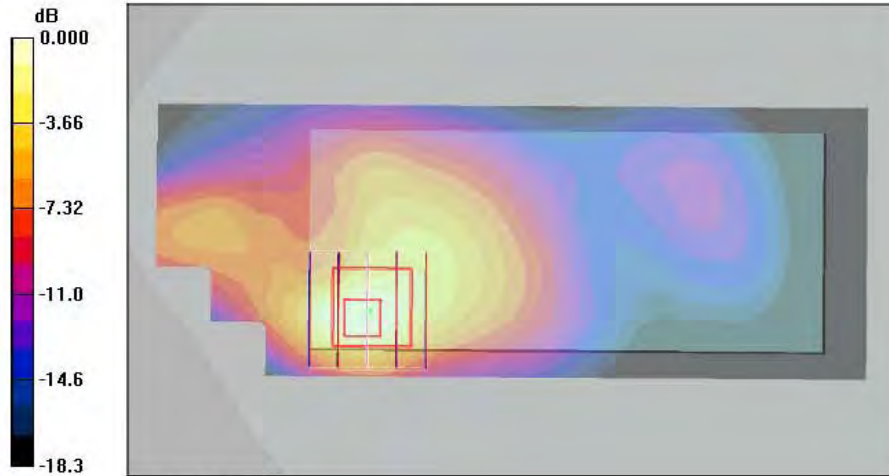Maximum value of SAR (interpolated) = 0.375 mW/g

Ch661/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 3.25 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 0.540 W/kg
SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.159 mW/g
Maximum value of SAR (measured) = 0.359 mW/g

0 dB = 0.359mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/14

Body_802.11b Ch6_Keypad Up with Holster Touch_Scanner2

DUT: 762206

Communication System: 802.11b ; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: $f = 2437$ MHz; $\sigma = 1.93$ mho/m; $\varepsilon_r = 51.6$; $\rho = 1000$ kg/m^3
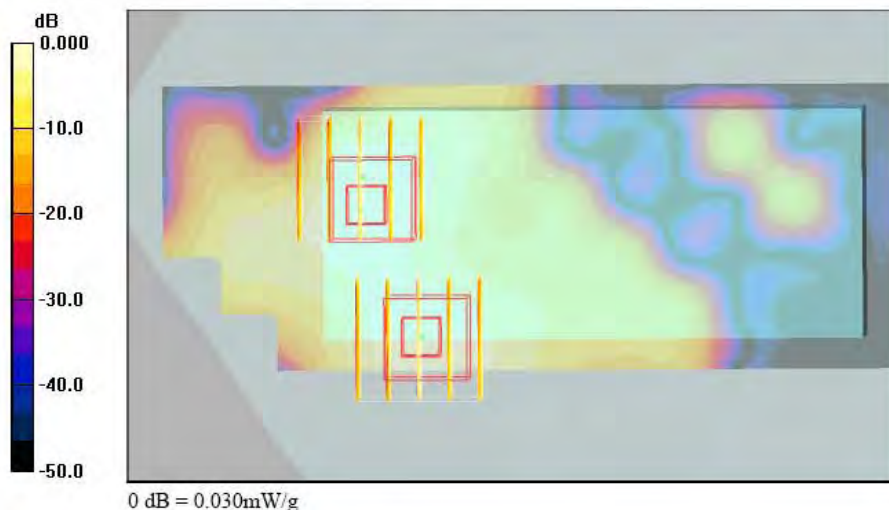Ambient Temperature：23.0 ℃；Liquid Temperature：21.1 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.029 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.503 V/m; Power Drift = -0.121 dB
Peak SAR (extrapolated) = 0.038 W/kg
SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.024 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.503 V/m; Power Drift = -0.121 dB
Peak SAR (extrapolated) = 0.047 W/kg
SAR(1 g) = 0.026 mW/g; SAR(10 g) = 0.012 mW/g
Maximum value of SAR (measured) = 0.030 mW/g

0 dB = 0.030mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/14

Body_802.11b Ch11_Keypad Down with Holster Touch_Scanner2

DUT: 762206

Communication System: 802.11b ; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; $ε_r$ = 51.6; ρ = 1000 kg/m^3
Ambient Temperature：22.8 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch11/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
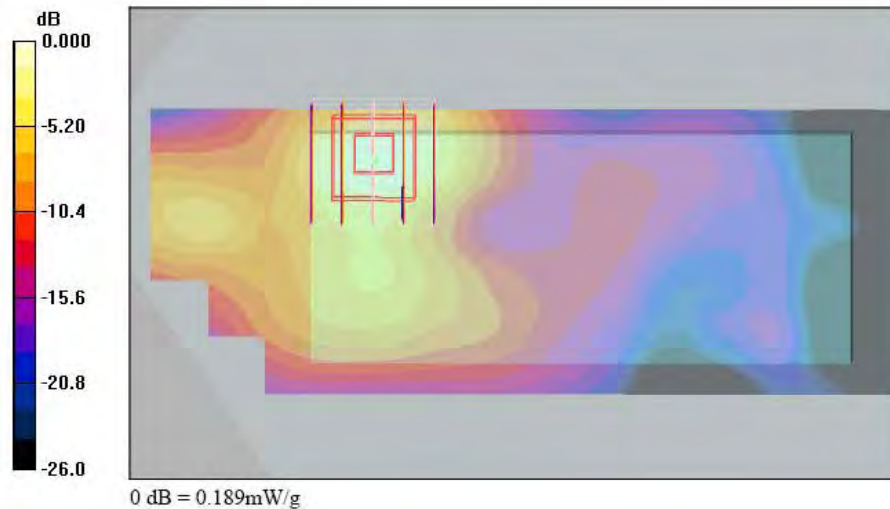Maximum value of SAR (interpolated) = 0.181 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.49 V/m; Power Drift = 0.050 dB
Peak SAR (extrapolated) = 0.366 W/kg
SAR(1 g) = 0.168 mW/g; SAR(10 g) = 0.080 mW/g
Maximum value of SAR (measured) = 0.189 mW/g

0 dB = 0.189mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/14

Body_802.11b Ch11_Keypad Down with Holster Touch_Scanner2_Bluetooth On

DUT: 762206

Communication System: 802.11b ; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2462 MHz; σ = 1.95 mho/m; $ε_r$ = 51.6; ρ = 1000 kg/m^3
Ambient Temperature：22.8 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch11/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
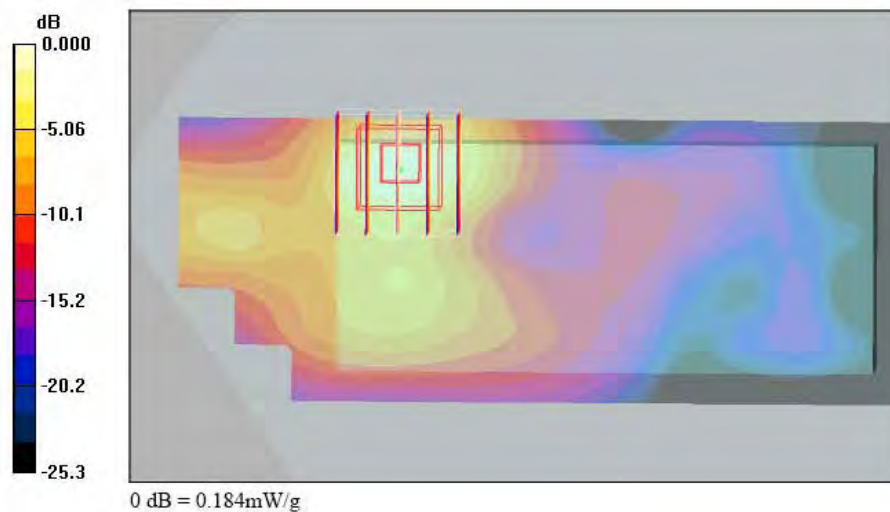Maximum value of SAR (interpolated) = 0.171 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 1.50 V/m; Power Drift = -0.150 dB
Peak SAR (extrapolated) = 0.363 W/kg
SAR(1 g) = 0.164 mW/g; SAR(10 g) = 0.078 mW/g
Maximum value of SAR (measured) = 0.184 mW/g

dB
0.000
-5.06
-10.1
-15.2
-20.2
-25.3

0 dB = 0.184mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date : 2007/8/14

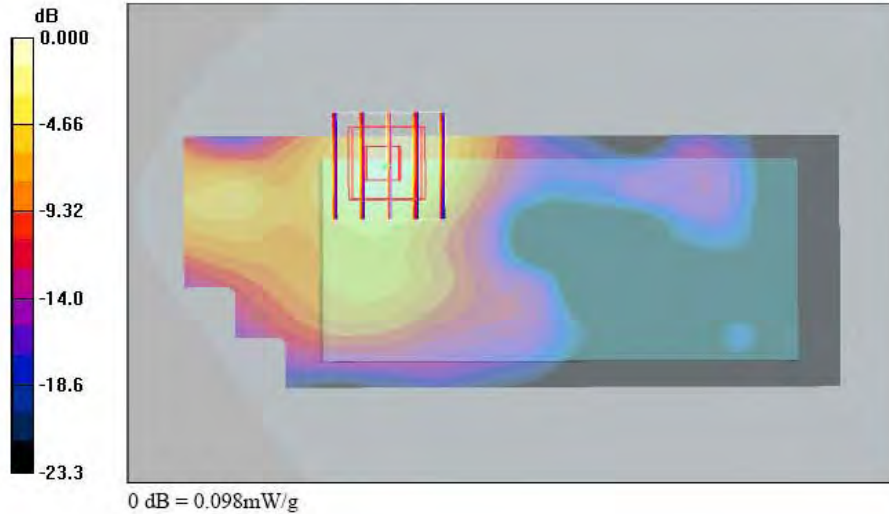**Body_802.11b Ch11_Keypad Down with Holster Touch_Scanner1**

DUT: 762206

Communication System: 802.11b ; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.95$ mho/m; $\varepsilon_r = 51.6$; $\rho = 1000$ kg/m^3
Ambient Temperature：22.9 ℃；Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch11/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.085 mW/g

Ch11/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.349 V/m; Power Drift = 0.131 dB
Peak SAR (extrapolated) = 0.186 W/kg
SAR(1 g) = 0.087 mW/g; SAR(10 g) = 0.042 mW/g
Maximum value of SAR (measured) = 0.098 mW/g

0 dB = 0.098mW/g

Test Laboratory: Sporton International Inc. SAR Testing Lab   Date: 2007/8/14

Body_802.11g Ch6_Keypad Down with Holster Touch_Scanner2

DUT: 762206

Communication System: 802.11g; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium: MSL_2450 Medium parameters used: f = 2437 MHz; σ = 1.93 mho/m; ε_r = 51.6; ρ = 1000 kg/m^3
Ambient Temperature：22.9 ℃; Liquid Temperature：21.4 ℃

DASY4 Configuration:
- Probe: ET3DV6 - SN1788; ConvF(4.11, 4.11, 4.11); Calibrated: 2006/9/19
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn577; Calibrated: 2006/11/21
- Phantom: SAM-B; Type: QD 000 P40 C; Serial: TP-1383
- Measurement SW: DASY4, V4.7 Build 53; Postprocessing SW: SEMCAD, V1.8 Build 172

Ch6/Area Scan (51x131x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.019 mW/g

Ch6/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 0.256 V/m; Power Drift = 0.148 dB
Peak SAR (extrapolated) = 0.030 W/kg
SAR(1 g) = 0.016 mW/g; SAR(10 g) = 0.00735 mW/g
Maximum value of SAR (measured) = 0.020 mW/g

0 dB = 0.020mW/g