

Page: 1 of 194

# SAR TEST REPORT

<b>Equipment Under Test</b>	PDA phone
Model Name	PB99100
Company Name	HTC Corporation
Company Address	No.23, Xinghua Rd., Taoyuan City, Taoyuan County 330,
	Taiwan, R.O.C.
Date of Receipt	2009.08.17
Date of Test(s)	2009.08.17 ~ 2009.08.18 , 2009.09.01
Date of Issue	2009.09.15

Standards:

FCC OET Bulletin 65 supplement C, ANSI/IEEE C95.1, C95.3, IEEE 1528 RSS-102:1999

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

This report details the results of the testing carried out on one sample, the results contained in this test report do not relate to other samples of the same product. The manufacturer should ensure that all products in series production are in conformity with the product sample detailed in this report.

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**Tested by** : Antony Wu

**Date** 

2009.09.15

**Engineer** 

Date

2009.09.15

Approved by : Robert Chang

Tech Manager

Artony Win

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Page: 2 of 194

# **Contents**

1. General Information	3
1.1 Testing Laboratory	3
1.2 Details of Applicant	3
1.3 Description of EUT	3
1.4 Test Environment	6
1.5 Operation description	6
1.6 Positioning Procedure	9
1.7 EVALUATION PROCEDURES	10
1.8 The SAR Measurement System	
1.9 System Components	14
1.10 SAR System Verification	
1.11 Tissue Simulant Fluid for the Frequency Band	17
1.12 Test Standards and Limits	19
2. Summary of Results	22
3. Instruments List	30
4. Measurements	31
5. System Verification	120
6. DAE & Probe Calibration certificate	
7. Uncertainty Analysis	144
3. Phantom description	
9. System Validation from Original equipment supplier	

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Page: 3 of 194

## 1. General Information

### 1.1 Testing Laboratory

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Telephone	+886-2-2299-3279			
Fax	+886-2-2298-0488			
Internet	http://www.tw.sgs.com/			

### 1.2 Details of Applicant

Company Name	HTC Corporation
Commany Adduses	No.23, Xinghua Rd., Taoyuan City, Taoyuan County
Company Address	330, Taiwan, R.O.C.
Contact Person	Charles_Wu
TEL	+886-3-375-3252
Fax	+886-3-375-5530
E-mail	Charles_Wu@htc.com

### 1.3 Description of EUT

EUT Name	PDA phone		
Model Name	PB99100		
Brand Name	HTC		
IMEI Code	Orignal solution : 354957030013489 Second solution : 354957030018850		
FCC ID	NM8PB99100		
IC	4115B-PB99100		
Mode of Operation	GSM /GPRS/EDGE/WCDMA/HSDPA/HSUPA band		

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Page: 4 of 194

Definition	Production unit

Modulation Mode	Mode GSM/GMSK/8PSK/QPSK/16QAM			
Duty Cycle	GSM	GPI (4mult	RS	WCDMA B4
	1/8	1/	'2	1
Maximum RF	GSM 850	GSM1	1900	WCDMA B4
Conducted Power (Average)	32.5dbm	28.70	dbm	23.01dbm
TX Frequency Range	GSM 850	GSM1	1900	WCDMA B4
(MHz)	824.2-	1850	0.2-	1712.4-
(1411 12)	848.8	190	9.8	1752.6
Channel Number	GSM 850	GSM1	1900	WCDMA B4
(ARFCN)	128-251	512-	810	1312-1513
VOIP Function		No		
Battery Type	3.7	7 V Lithi	um-Ion	
Antenna Type	Internal Antenna			
	Second solution(change Housing painting & Camera)			
	Besides the original configuration, this model PB99100			
	also changed another Housing painting & Camera			
Dealeration	component as second solution. In order to find SAR			
Declaration	value whether the same between original and second			
\	solution, we used spot-check method to check it. The			
	result of GSM850/ 1900/WCDMA B4/WALN 802.11 b/g			
	are within 20% deviation.			
	Orignal solution			
	GSM850			
Max. SAR Measured	Head			Body
(1 g)	0.34 mW/ (At GSM 850 Right He _Cheek Position_ 128	ad	(At _ 1	1.39 mW/g GSM 850 Body .90 channel_repeated th Welldone Battery)



Page: 5 of 194

1	GSM1900		
	Head	Body	
3	0.37 mW/g (At GSM 1900 Right Head _Cheek Position_ 512 channel)	<b>0.744 mW/g</b> (At GSM 1900 Body _ 512 channel	
	WCDM	A B4	
	Head	Body	
Max. SAR Measured (1 g)	0.867 mW/g (At WCDMA B4 Right Head _Cheek Position_ 1412 channel repeated with Memory card)	<b>0.519 mW/g</b> (At WCDMA B4 Body _ 1412 channel	
	WLAN 802.11 b		
	Body		
	0.067 mW/g		
	(At WLAN 802.11b Body_ channel 1 repeated with Merry headset		
	WLAN 802.11 g		
	Body		
N N	0.022 mW/g		
	(At WLAN 802.11b Body_ channel 1)		

#### Note:

### 1. WCDMA B4 HSDPA & HSUPA conducted power:

Mode	Sub-test	Band	WCDMA B4		
		Channel	1312	1412	1513
HSDPA	1	$\beta_c/\beta_d$ (2/15)	23.01	22.72	22.5
	2	$\beta_c/\beta_d(12/15)$	22.6	22.32	22.08
	3	$\beta_c/\beta_d(15/8)$	22.53	22.27	21.97
	4	$\beta_c/\beta_d(15/4)$	22.6	22.28	22.09



Page: 6 of 194

		Band		WCDMA B	4
Mode	Sub-test	Channel	1312	1412	1513
	1	$\beta_c/\beta_d(11/15)$	22.64	22.44	22.17
	2	$\beta_c/\beta_d(6/15)$	20.69	20.51	20.21
HSUPA	3	$\beta_c/\beta_d(15/9)$	21.7	21.46	21.25
	4	$\beta_c/\beta_d(2/15)$	20.82	20.56	20.25
	5	$\beta_{c}/\beta_{d}(15/15)$	22.53	22.3	22.08

#### 1.4 Test Environment

Ambient Temperature: 22±2° C Tissue Simulating Liquid: 22±2° C

### 1.5 Operation description

### **General:**

- 1. The EUT is controlled by using a Radio Communication Tester (Agilent 8960), and the communication between the EUT and the tester is established by air link.
- 2. Measurements are performed respectively on the lowest, middle and highest channels of the operating band(s). The EUT is set to maximum power level during all tests, and at the beginning of each test the battery is fully charged.
- 3. The WLAN transmitter is controlled by chip-specific software installed in this PDA phone, to make the EUT transmit at max power.
- 4. During the SAR testing, the DASY5 system checks power drift by comparing the e-field strength of one specific location measured at the beginning with that measured at the end of the SAR testing.
- 5. Testing Head SAR at lowest, middle and highest channel for all bands with LET/LEC/RET/REC conditions.
- 6. Testing body-worn SAR by separating 1.5cm between the back of the EUT and the flat phantom in GPRS mode.

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Page: 7 of 194

### Additional configuration(Head):

- 7. For highest SAR configuration in this band repeated with external Memory card inside.
- 8. For highest SAR configuration in this band repeated with Welldone Battery.

### Additional configuration(Body):

- 9. Testing body-worn SAR with Handset and with Bluetooth transmitter OFF by separating 1.5cm between the front of the EUT and the flat phantom in GPRS mode.
- 10. For highest SAR configuration in this band repeated with external Memory card inside.
- 11. For highest SAR configuration in this band repeated with Cotron headset.
- 12. For highest SAR configuration in this band repeated with Merry headset.
- 13. For highest SAR configuration in this band repeated with Welldone Battery

### SAR evaluation considerations for handsets with multiple transmitters:

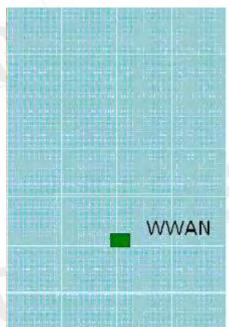
- 14. Since the WLAN function of this device does NOT support VoIP function. Users will not use it close to head. SAR evaluation of head adjacent is unnecessary, only Body condition will be considered for WLAN stand-alone situation.
- 15. The maximum SAR value for licensed transmitter happens on GSM 850 band, Body worn, channel 190 with Welldone Battery, the value is 1.39W/kg(1g). And the max SAR value for un-licensed transmitter WLAN 802.11b happens on Body worn, channel 1 with Merry headset The SAR value is 0.067W/kg (1g) . The summation of the 1g SAR is 1.39+0.067 = 1.457 W/kg, which lower than the limit 1.6W/kg.

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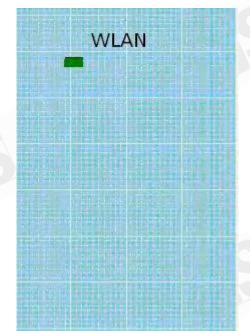


Page: 8 of 194

### GSM 850 Body\_190 channel\_ repeated with Welldone Battery



### WLAN802.11 b\_Body channel 1 \_repeated with Merry headset





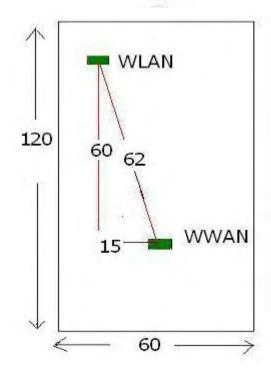
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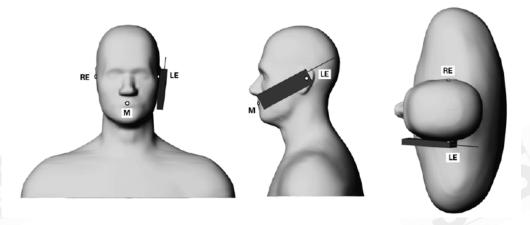


Page: 9 of 194



Unit: mm

### 1.6 Positioning Procedure

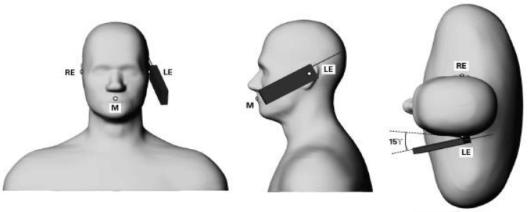


Phone position 1, "cheek" or "touch" position. The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning

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Page: 10 of 194



Phone position 2, "tilted position." The reference points for the right ear (RE), left ear (LE) and mouth (M), which define the reference plane for phone positioning Cheek/Touch Position:

the handset was brought toward the mouth of the head phantom by pivoting against the ear reference point until any point of the mouthpiece or keypad touched the phantom. Ear/Tilt Position:

With the phone aligned in the Cheek/Touch position, the handset was tilted away from the mouth with respect to the test device reference point by 15 degrees.

#### 1.7 EVALUATION PROCEDURES

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

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

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Page: 11 of 194

6. The calculation of the averaged SAR within masses of 1g and 10g. The probe is calibrated at the center of the dipole sensors that is located 1 to 2.7mm away from the probe tip. During measurements, the probe stops shortly above the phantom surface, depending on the probe and the surface detecting system. Both distances are included as parameters in the probe configuration file. The software always knows exactly how far away the measured point is from the surface. As the probe cannot directly measure at the surface, the values between the deepest measured point and the surface must be extrapolated. The angle between the probe axis and the surface normal line is less than 30 degree.

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

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

for most SAR distributions even with relatively large grid spacing. After the area scanning measurement, the probe is automatically moved to a position at the interpolated maximum. The following scan can directly use this position for reference, e.g., for a finer resolution grid or the cube evaluations. The 1g and 10g peak evaluations are only available for the predefined cube 7x7x7 scans.

The routines are verified and optimized for the grid dimensions used in these cube measurements. The measured volume of 30x30x30mm contains about 30g of tissue. The first procedure is an extrapolation (incl. Boundary correction) to get the points between the lowest measured plane and the surface. The next step uses 3D interpolation to get all points within the measured volume. In the last step, a 1g cube is placed numerically into the volume and its averaged SAR is calculated. This cube is the moved around until the highest averaged SAR is found.

If the highest SAR is found at the edge of the measured volume, the system will issue a warning: higher SAR values might be found outside of the measured volume. In that

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Page: 12 of 194

case the cube measurement can be repeated, using the new interpolated maximum as the center.

### 1.8 The SAR Measurement System

A photograph of the SAR measurement System is given in Fig. a. This SAR Measurement System uses a Computer-controlled 3-D stepper motor system (SPEAG DASY 5 professional system ). A Model ES3DV3 field probe is used to determine the internal electric fields. The SAR can be obtained from the equation SAR=  $\sigma$  ( $|Ei|^2$ )/  $\rho$  where  $\sigma$  and p are the conductivity and mass density of the tissue-simulant.

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Page: 13 of 194

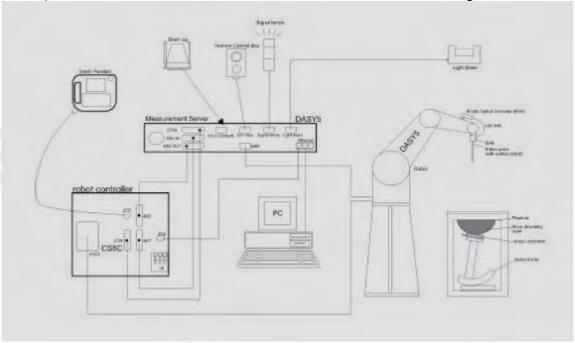


Fig.a The block diagram of SAR system

The DASY5 system for performing compliance tests consists of the following items:

- A standard high precision 6-axis robot (Staubli RX family) with controller, teach pendant and software. An arm extension is for accommodating the data acquisition electronics (DAE).
- A dosimetric probe, i.e., an isotropic E-field probe optimized and calibrated for usage in tissue simulating liquid. The probe is equipped with an optical surface detector system.
- A data acquisition electronics (DAE) which performs the signal amplification, signal multiplexing, AD-conversion, offset measurements, mechanical surface detection, collision detection, etc. The unit is battery powered with standard or rechargeable batteries. The signal is optically transmitted to the EOC.
- The Electro-optical converter (EOC) performs the conversion between optical and electrical of the signals for the digital communication to the DAE and for the analog signal from the optical surface detection. The EOC is connected to the measurement server.
- The function of the measurement server is to perform the time critical tasks such as signal filtering, control of the robot operation and fast movement interrupts.
- A probe alignment unit which improves the (absolute) accuracy of the probe

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Page: 14 of 194

positioning.

- A computer operating Windows 2000 or Windows XP.
- DASY5 software.
- Remote control with teach pendant and additional circuitry for robot safety such as warning lamps, etc.
  - The SAM twin phantom enabling testing left-hand and right-hand usage.
  - The device holder for handheld mobile phones.
  - Tissue simulating liquid mixed according to the given recipes.
  - Validation dipole kits allowing to validate the proper functioning of the system.

### 1.9 System Components

### **ES3DV3 E-Field Probe**

LOOD VO E-I ICIU	11626		
Construction:	Symmetrical design with triangular core Built-in shielding against static charges PEEK enclosure material (resistant to organic solvents, e.g., DGBE)		
Calibration:	Basic Broad Band Calibration in air Conversion Factors (CF) for HSL850/1750/1900/2450 Additional CF for other liquids and frequencies upon request	ES3DV3 E-Field Probe	
Frequency:	10 MHz to > 3 GHz; Linearity: ± 0.6 dB (30 MHz to 6 GHz)		
Directivity:	± 0.3 dB in HSL (rotation around probe axis) ± 0.5 dB in tissue material (rotation normal to probe axis)		
Dynamic Range:	: $10 \mu \text{W/g to} > 100 \text{ mW/g}$ ; Linearity: $\pm 0.6 \text{ dB}$ (noise: typically $< 1 \mu \text{W/g}$ )		
Dimensions:	Overall length: 337 mm (Tip: 10 mm) Tip diameter: 4 mm (Body: 10 mm) Typical distance from probe tip to dipole centers: 2 mm		
Application:	High precision dosimetric measurements in any exposure scenario (e.g., very strong gradient fields). Only probe which enables compliance testing for frequencies up to 6 GHz with precision of better 30%.		

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SAM PHANTOM V4.0C

Report No.: EN/2009/90001

Page: 15 of 194

Constructions	The shell corresponds to the specific	ications of the Specific	
Construction:	The shell corresponds to the specifications of the Specific Anthropomorphic Mannequin (SAM) phantom defined in IEEE		
	1528-200X, CENELEC 50361 and IEC 62209.		
	It enables the dosimetric evaluation		
	usage as well as body mounted usa		
	cover prevents evaporation of the li		
	phantom allow the complete setup		
	positions and measurement grids by manually teaching three points		
	with the robot.		
Shell Thickness:	$2 \pm 0.2 \text{ mm}$		
Filling Volume:	Approx. 25 liters	( USA	
Dimensions:	Height: 850 mm;		
	Length: 1000 mm;	T T	
	Width: 500 mm		
		C.D. War	
		-	

### **DEVICE HOLDER**

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

### 1.10 SAR System Verification

The microwave circuit arrangement for system verification is sketched in Fig. b. The daily system accuracy verification occurs within the flat section of the SAM phantom. A SAR

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Page: 16 of 194

measurement was performed to see if the measured SAR was within +/- 5% from the target SAR values. These tests were done at 850/1750/1900/2450 MHz. The tests were conducted on the same days as the measurement of the DUT. The obtained results from the system accuracy verification are displayed in the table 1. During the tests, the ambient temperature of the laboratory was in the range 22.1°C, the relative humidity was in the range 62% and the liquid depth above the ear reference points was above 15 cm in all the cases. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values.

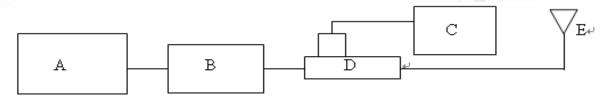


Fig.b The block diagram of SAR system verification

- A. Agilent Model 8648D Signal Generator
- B. Mini circuits Model ZHL-42 Amplifier
- C. Agilent Model U2001B Power Sensor
- D. Agilent Model 778D & 777D Dual directional coupling
- E. Reference dipole antenna



Photograph of the dipole Antenna

Validation Kit	Frequency (MHz)	Target SAR (1g) (Pin=250mW)	Measured SAR (1g)	Measured Date
D835V2 S/N: 4d063	835 MHz (Head)	2.38 mW/g	2.31 mW/g	2009/08/17
D835V2 S/N: 4d063	835 MHz (Body)	2.55 mW/g	2.52 mW/g	2009/08/18
D1900V2 S/N: 5d027	1900 MHz (Head)	10.5 mW/g	10.7 mW/g	2009/08/17
D1900V2 S/N: 5d027	1900 MHz (Body)	10.6 mW/g	11.1mW/g	2009/08/18
D1750V2 S/N: 1008	1750 MHz (Head)	9.59 mW/g	9.87 mW/g	2009/08/17

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Page: 17 of 194

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D1750V2 S/N: 1008	1750 MHz (Body)	9.25 mW/g	9.5 mW/g	2009/08/18
D2450V2 S/N: 735	2450 MHz (Body)	13.2 mW/g	12.8 mW/g	2009/08/18
D835V2 S/N: 4d063	835 MHz (Head)	2.38 mW/g	2.29 mW/g	2009/09/01
D835V2 S/N: 4d063	835 MHz (Body)	2.55 mW/g	2.51mW/g	2009/09/01
D1900V2 S/N: 5d027	1900 MHz (Head)	10.5 mW/g	10.6 mW/g	2009/09/01
D1900V2 S/N: 5d027	1900 MHz (Body)	10.6 mW/g	10.9 mW/g	2009/09/01
D1750V2 S/N: 1008	1750 MHz (Head)	9.59 mW/g	10 mW/g	2009/09/01
D1750V2 S/N: 1008	1750 MHz (Body)	9.25 mW/g	10.2 mW/g	2009/09/01
D2450V2 S/N: 735	2450 MHz (Body)	13.2 mW/g	12.9 mW/g	2009/09/01

Table 1. System validation (follow manufacture target value)

### 1.11 Tissue Simulant Fluid for the Frequency Band

The dielectric properties for this Head-simulant fluid were measured by using the HP Model 85070D Dielectric Probe (rates frequency band 200 MHz to 20 GHz) in conjuncation with HP 8753D Network Analyzer (30 KHz-6000MHz) by using a procedure detailed in Section V.

All dielectric parameters of tissue simulates were measured within 24 hours of SAR measurements. The depth of the tissue simulant in the ear reference point of the phantom was 15cm±5mm during all tests. (Appendix Fig .2)

Eroguenev		Measurement date/	Dielectric Parameters				
Frequency (MHz)	Tissue type	Limits	ρ	σ (S/m)	Simulated Tissue Temperature(° C)		
950	50 Head	Measured, 2009.08.17	40.5	0.879	21.7		
850		Recommended Limits	38.76-42.84	0.85-0.93	20-24		
950	850 Body	Measured, 2009. 08.18	52.6	0.979	21.7		
850		Recommended Limits	51.11-56.49	0.96-1.06	20-24		

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Page	18	$\alpha$ f	194
rage	10	OI	194

					uge . 10 of 17
1000	1900 Head	Measured, 2009. 08.17	38.2	1.46	21.7
1900		Recommended Limits	36.67-40.53	1.4-1.54	20-24
1900	Body	Measured, 2009. 08.18	55.7	1.56	21.7
1900	bouy	Recommended Limits	52.16-57.65	1.48-1.64	20-24
1750	Head	Measured, 2009. 08.17	38.9	1.42	21.7
1730	Heau	Recommended Limits	36.96-40.85	1.3-1.44	20-24
1750	Body	Measured, 2009. 08.18	55.4	1.48	21.7
1730	bouy	Recommended Limits	52.44-57.96	1.36-1.5	20-24
2450	Body	Measured, 2009. 08.18	54.2	1.99	21.7
2430	bouy	Recommended Limits	51.68-57.12	1.88-2.08	20-24
850	Head	Measured, 2009.09.01	40.5	0.88	21.7
630	Heau	Recommended Limits	38.76-42.84	0.85-0.93	20-24
850	Rody	Measured, 2009. 09.01	52.4	0.978	21.7
650	Body	Recommended Limits	51.11-56.49	0.96-1.06	20-24
1900	Head	Measured, 2009. 09.01	38	1.48	21.7
1900	пеаи	Recommended Limits	36.67-40.53	1.4-1.54	20-24
1900	Body	Measured, 2009. 09.01	55.5	1.55	21.7
1900	bouy	Recommended Limits	52.16-57.65	1.48-1.64	20-24
1750	Head	Measured, 2009. 09.01	39	1.43	21.7
1730	Heau	Recommended Limits	36.96-40.85	1.3-1.44	20-24
1750	Body	Measured, 2009. 09.01	55.2	1.49	21.7
1/30	ьойу	Recommended Limits	52.44-57.96	1.36-1.5	20-24
2450	Body	Measured, 2009. 09.01	54.3	2.01	21.7
2730	bouy	Recommended Limits	51.68-57.12	1.88-2.08	20-24

Table 2. Dielectric Parameters of Tissue Simulant Fluid

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Page: 19 of 194

The composition of the brain tissue simulating liquid for 850 & 1750 & 1900 &2450 band:

			o ommanden ig	1			
Ingredient	850MHz (Head)	850MHz (Body)	1750MHz (Head)	1750MHz (Body)	1900MHz (Head)	1900MHz (Body)	2450Mhz (Body)
DGMBE	X	X	444.52 g	300.67g	444.52 g	300.67 g	301.7 ml
Water	532.98 g	631.68 g	552.42 g	716.56 g	552.42 g	716.56 g	698.3 ml
Salt	18.3 g	11.72 g	3.06 g	4.0 g	3.06 g	4.0 g	X
Preventol D-7	2.4 g	1.2 g	X	X	X	x	X
Cellulose	3.2 g	X	Χ	X	X	X	Χ
Sugar	766.0 g	600 g	X	X	X	X	Χ
Total	1 L	1 L	1 L	1 L	1 L	1 L	1 L
amount	(1.0kg)	(1.0kg)	(1.0kg)	(1.0kg)	(1.0kg)	(1.0kg)	(1.0kg)

Table 3. Recipes for tissue simulating liquid

#### 1.12 Test Standards and Limits

According to FCC 47CFR §2.1093(d) The limits to be used for evaluation are based generally on criteria published by the American National Standards Institute (ANSI) for localized specific absorption rate ("SAR") in Section 4.2 of "IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz," ANSI/IEEE C95.1–1992, Copyright 1992 by the Institute of Electrical and Electronics Engineers, Inc., New York, New York 10017. These criteria for SAR evaluation are similar to those recommended by the National Council on Radiation Protection and Measurements (NCRP) in "Biological Effects and Exposure Criteria for Radio frequency Electromagnetic Fields," NCRP Report No. 86, Section 17.4.5. Copyright NCRP, 1986, Bethesda, Maryland 20814. SAR is a measure of the rate of energy absorption due to exposure to an RF transmitting source. SAR values have been related to threshold levels for potential biological hazards. The criteria to be used are specified in paragraphs (d)(1) and (d)(2) of this section and shall apply for portable devices transmitting in the frequency range from 100 kHz to 6 GHz. Portable devices that transmit at frequencies above 6 GHz are to be evaluated in terms of the MPE limits specified in § 1.1310 of this chapter.

Measurements and calculations to demonstrate compliance with MPE field strength or

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Page: 20 of 194

power density limits for devices operating above 6 GHz should be made at a minimum distance of 5 cm from the radiating source.

- (1) Limits for Occupational/Controlled exposure: 0.4 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 8 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 20 W/kg, as averaged over an 10 grams of tissue (defined as a tissue volume in the shape of a cube). Occupational/Controlled limits apply when persons are exposed as a consequence of their employment provided these persons are fully aware of and exercise control over their exposure. Awareness of exposure can be accomplished by use of warning labels or by specific training or education through appropriate means, such as an RF safety program in a work environment.
- (2) Limits for General Population/Uncontrolled exposure: 0.08 W/kg as averaged over the whole-body and spatial peak SAR not exceeding 1.6 W/kg as averaged over any 1 gram of tissue (defined as a tissue volume in the shape of a cube). Exceptions are the hands, wrists, feet and ankles where the spatial peak SAR shall not exceed 4 W/kg, as averaged over any 10 grams of tissue (defined as a tissue volume in the shape of a cube).

General Population/Uncontrolled limits apply when the general public may be exposed, or when persons that are exposed as a consequence of their employment may not be fully aware of the potential for exposure or do not exercise control over their exposure. Warning labels placed on consumer devices such as cellular telephones will not be sufficient reason to allow these devices to be evaluated subject to limits for occupational/controlled exposure in paragraph (d)(1) of this section. (Table .6)

	1	
Human Exposure	Uncontrolled Environment	Controlled Environment
	General Population	Occupational
Spatial Peak SAR	1.60 m W/g	8.00 m W/g
(Brain)		
Spatial Average SAR	0.08 m W/g	0.40 m W/g
(Whole Body)		
Spatial Peak SAR	4.00 m W/g	20.00 m W/g
(Hands/Feet/Ankle/Wrist)		

Table 4. RF exposure limits

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Notes:

Report No.: EN/2009/90001 Page: 21 of 194

- 1. Uncontrolled environments are defined as locations where there is potential exposure of individuals who have no knowledge or control of their potential exposure.
- 2. Controlled environments are defined as locations where there is potential exposure of individuals who have knowledge of their potential exposure and can exercise control over their exposure.



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## 2. Summary of Results

Report No.: EN/2009/90001

Page: 22 of 194

## Orignal solution measurement result

### **GSM 850 MHZ**

Right Head	(Cheek Po					
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	128	824.2	32.4dbm	0.289	22.1	21.7
850 MHz	190	836.6	32.5dbm	0.286	22.1	21.7
	251	848.8	32.5dbm	0.259	22.1	21.7
Left Head (0	Cheek Pos	ition)	a FP	<i>\</i>		
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	128	824.2	32.4dbm	0.246	22.1	21.7
850 MHz	190	836.6	32.5dbm	0.253	22.1	21.7
	251	848.8	32.5dbm	0.245	22.1	21.7
Right Head	(15° Tilt I	osition	1)			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	128	824.2	32.4dbm	0.195	22.1	21.7
850 MHz	190	836.6	32.5dbm	0.201	22.1	21.7
	251	848.8	32.5dbm	0.181	22.1	21.7
Left Head (*	15° Tilt Po	sition)				
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
J PPO	128	824.2	32.4dbm	0.216	22.1	21.7
850 MHz	190	836.6	32.5dbm	0.219	22.1	21.7
	251	848.8	32.5dbm	0.201	22.1	21.7

### **Body worn (testing in GPRS mode)**

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Report No.: EN/2009/90001 Page: 23 of 194

					Page : 23	of 194
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
	128	824.2	29.7dbm	1.08	22.1	21.7
850 MHz	190	836.6	29.5dbm	1.22	22.1	21.7
	251	848.8	29.5dbm	1.16	22.1	21.7
Body worn	testing ir	GPRS	mode)_repeated f	or EUT front to p	hantom	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
,			Power (Average)	1g	Temp[°C]	Temp[°C]
850 MHz	190	836.6	29.5dbm	0.558	22.1	21.7
Body worn	(testing ir	GPRS	mode)_repeated \	with Memory car	d	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
850 MHz	190	836.6	29.5dbm	1.21	22.1	21.7
Body worn	(testing ir	GPRS	mode)_repeated \	with Cotron head	lset	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
850 MHz	190	836.6	29.5dbm	0.749	22.1	21.7
Body worn	(testing ir	GPRS	mode)_repeated \	with Merry heads	set	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
850 MHz	190	836.6	29.5dbm	1.06	22.1	21.7
Body worn	(testing ir	GPRS	mode)_repeated \	with Welldone Ba	attery	
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
850 MHz	190	836.6	29.5dbm	1.27	22.1	21.7
Body worn	(testing ir	EGPR	S mode)			
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
_			Power (Average)	1g	Temp[°C]	Temp[°C]
	128	824.2	27dbm	0.357	22.1	21.7
850 MHz	190	836.6	27.2dbm	0.398	22.1	21.7
	251	848.8	27.4dbm	0.393	22.1	21.7

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**PCS 1900 MHZ** 

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Right Head	(Cheek Po	osition)	3 60	\		
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	512	1850.2	28.5dbm	0.37	22.1	21.7
1900 MHz	661	1880	28.4dbm	0.315	22.1	21.7
	810	1909.8	28.7dbm	0.275	22.1	21.7
Left Head (0	Cheek Pos	sition)				
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	512	1850.2	28.5dbm	0.249	22.1	21.7
1900 MHz	661	1880	28.4dbm	0.222	22.1	21.7
	810	1909.8	28.7dbm	0.185	22.1	21.7
Right Head	(15° Tilt I	Position	1)			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	512	1850.2	28.5dbm	0.095	22.1	21.7
1900 MHz	661	1880	28.4dbm	0.077	22.1	21.7
	810	1909.8	28.7dbm	0.067	22.1	21.7
Left Head (*	15° Tilt Po	osition)				
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	512	1850.2	28.5dbm	0.074	22.1	21.7
1900 MHz	661	1880	28.4dbm	0.062	22.1	21.7
	810	1909.8	28.7dbm	0.057	22.1	21.7
Body worn	testing ir	GPRS	mode)			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	512	1850.2	28.1dbm	0.744	22.1	21.7
1900 MHz	661	1880	28.2dbm	0.608	22.1	21.7
	810	1909.8	28.1dbm	0.5	22.1	21.7

### Body worn (testing in EGPRS mode)

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Page: 25 of 194

Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	512	1850.2	25.4dbm	0.316	22.1	21.7
1900 MHz	661	1880	26dbm	0.258	22.1	21.7
	810	1909.8	25.7dbm	0.2	22.1	21.7

## **WCDMA BAND 4**

VVCDIVI	ADAIN					
Right Head	(Cheek Po	osition)				
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	1312	1712.4	22.72dbm	0.6	22.1	21.7
WCDMA B4	1412	1732.4	22.46dbm	0.84	22.1	21.7
	1513	1752.6	22.23dbm	0.554	22.1	21.7
Left Head (0	Cheek Pos	ition)				
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	1312	1712.4	22.72dbm	0.55	22.1	21.7
WCDMA B4	1412	1732.4	22.46dbm	0.696	22.1	21.7
	1513	1752.6	22.23dbm	0.479	22.1	21.7
Left Head (0	Cheek Pos	ition) _	repeated with Me	mory card		
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1q	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B4	1412	1732.4	22.46dbm	0.867	22.1	21.7
Left Head (0	Cheek Pos	ition)_	repeated with We	Ildone Battery		
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WCDMA B4	1412	1732.4	22.46dbm	0.754	22.1	21.7
Right Head	(15° Tilt I	Position	1)		461	
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	1312	1712.4	22.72dbm	0.23	22.1	21.7
WCDMA B4	1412	1732.4	22.46dbm	0.316	22.1	21.7
	1513	1752.6	22.23dbm	0.228	22.1	21.7

### Left Head (15° Tilt Position)

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Page: 26 of 194

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Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
	1312	1712.4	22.72dbm	0.182	22.1	21.7
WCDMA B4	1412	1732.4	22.46dbm	0.265	22.1	21.7
	1513	1752.6	22.23dbm	0.188	22.1	21.7
Body worn						
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
	1312	1712.4	22.72dbm	0.408	22.1	21.7
WCDMA B4	1412	1732.4	22.46dbm	0.519	22.1	21.7
	1513	1752.6	22.23dbm	0.389	22.1	21.7

## WCDMA BAND 4 HSDPA mode(Sub-test 1)

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
	1312	1712.4	23.01dbm	0.356	22.1	21.7
WCDMA B4	1412	1732.4	22.72dbm	0.44	22.1	21.7
	1513	1752.6	22.5dbm	0.308	22.1	21.7

## WCDMA BAND 4 HSUPA mode(Sub-test 5)

Body worn			Q L CAS	<i>\</i>		
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
	1312	1712.4	22.53dbm	0.328	22.1	21.7
WCDMA B4	1412	1732.4	22.3dbm	0.417	22.1	21.7
	1513	1752.6	22.08dbm	0.292	22.1	21.7

## WLAN802.11 b

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Report No.: EN/2009/90001 Page: 27 of 194

					Page: 27	of 194
Body worn						
Frequency	Channel	MHz	Conducted Output	Measured(W/kg)	Amb.	Liquid
			Power (Average)	1g	Temp[°C]	Temp[°C]
\A/I A \	1	2412	17.42dbm	0.065	22.1	21.7
WLAN 802.11 b	6	2437	17.28dbm	0.052	22.1	21.7
002.11 b	11	2462	17.46dbm	0.046	22.1	21.7
Body worn-	repeated	for EU	T front to phantom	1		
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	17.42dbm	0.011	22.1	21.7
Body worn-	repeated	with M	emory card			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	17.42dbm	0.066	22.1	21.7
Body worn-	repeated	with Co	otron headset			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	17.42dbm	0.058	22.1	21.7
Body worn-	repeated	with M	erry headset			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	17.42dbm	0.067	22.1	21.7
Body worn-	repeated	with W	/elldone Battery			
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
WLAN 802.11 b	1	2412	17.42dbm	0.059	22.1	21.7

## WLAN 802.11 g

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Page: 28 of 194

Body worn						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]
\A/I A N I	1	2412	13.09dbm	0.019	22.1	21.7
WLAN 802.11 g	6	2437	13.42dbm	0.013	22.1	21.7
802.11 g	11	2462	13.57dbm	0.011	22.1	21.7

### Second solution measurement result

### **GSM 850 MHZ**

Right Head (Cheek Position)									
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]			
850MHz	128	824.2	32.2dbm	0.34	22.1	21.7			
Body-Worn	(testing in	GPRS	mode)_ repeated	with Welldone B	attery				
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 1g	Amb. Temp[°C]	Liquid Temp[°C]			
850MHz	190	836.6	29.4dbm	1.39	22.1	21.7			

## **PCS1900 MHZ**

Left Head (Cheek Position)								
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 10g	Amb. Temp[°C]	Liquid Temp[°C]		
1800 MHz	512	1850.2	28.2dbm	0.297	22.1	21.7		
Body Worn(	testing in	GPRS I	mode)					
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 10g	Amb. Temp[°C]	Liquid Temp[°C]		
1800 MHz	512	1850.2	28dbm	0.721	22.1	21.7		

## **WCDMA Band 4**

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Page: 29 of 194

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Right Head	Right Head (Cheek Position)_repeated with Memory card								
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 10g	Amb. Temp[°C]	Liquid Temp[°C]			
WCDMA B4	1412	1732.4	22.39dbm	0.815	22.1	21.7			
<b>Body Worn</b>	Body Worn								
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 10g	Amb. Temp[°C]	Liquid Temp[°C]			
WCDMA B4	1412	1732.4	22.42dbm	0.494	22.1	21.7			
Body Worn	_repeated	with F	ISDPA mode						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 10g	Amb. Temp[°C]	Liquid Temp[°C]			
WCDMA B4	1412	1732.4	22.69dbm	0.472	22.1	21.7			
Body Worn_	repeated	with F	ISUPA mode						
Frequency	Channel	MHz	Conducted Output Power (Average)	Measured(W/kg) 10g	Amb. Temp[°C]	Liquid Temp[°C]			
WCDMA B4	1412	1732.4	22.27dbm	0.446	22.1	21.7			

## WLAN802.11 b

Body Worn_repeated with Merry headset								
Frequency	Channel	MHz	Conducted Output Power (Average)	( , ),	Amb. Temp[°C]	Liquid Temp[°C]		
2450MHz	1	2412	17.39dbm	0.065	22.1	21.7		

## WLAN802.11 g

<b>Body Worn</b>						
Frequency	Channel	MHz	Conducted Output Power (Average)		Amb. Temp[°C]	Liquid Temp[°C]
2450MHz	1	2412	13.16dbm	0.023	22.1	21.7

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## 3. Instruments List

Report No.: EN/2009/90001

Page: 30 of 194

Manufacturer	Device	Туре	Serial number	Date of last calibration
Schmid & Partner Engineering AG	Dosimetric E-FieldProbe	ES3DV3	3172	May.27.2009
Schmid & Partner Engineering AG	850/1750/1900/2450MHz System Validation Dipole	D835V2	4d063	May.25.2009
		D1750V2	1008	May.07.2009
		D1900V2	5d027	Apr.27.2009
		D2450V2	727	Apr.27.2009
Schmid & Partner Engineering AG	Data acquisition Electronics	DAE4	856	May.26.2009
Schmid & Partner Engineering AG	Software	DASY 5 V5.0 Build125	N/A	Calibration not required
Schmid & Partner Engineering AG	Phantom	SAM	N/A	Calibration not required
Agilent	Network Analyzer	8753D	3410A05547	Mar.31.2009
Agilent	Dielectric Probe Kit	85070D	US01440168	Calibration not required
Agilent	Dual-directional coupler	778D	50313	Aug.26.2009
		777D	50014	Aug.27.2009
Agilent	RF Signal Generator	8648D	3847M00432	May.25.2009
Agilent	Power Sensor	U2001B	MY48100169	Apr.23.2009
Agilent	Radio Communication Test	E5515c	GB44051912	Nov.05 .2008

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### 4. Measurements

Report No.: EN/2009/90001

Page: 31 of 194

Date/Time: 08/17/2009 02:46:49

### RE Cheek\_CH128

**DUT: PB99100;** 

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.871$ 

mho/m;  $\varepsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**RE Cheek/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.319 mW/q

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

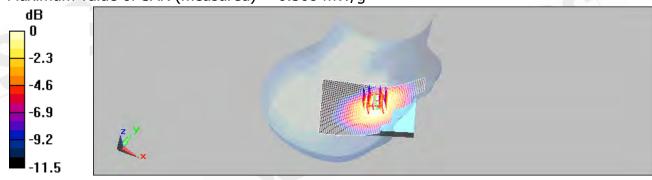
dy=8mm, dz=5mm

Reference Value = 6.47 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.391 W/kg

### SAR(1 g) = 0.289 mW/g; SAR(10 g) = 0.209 mW/g

Maximum value of SAR (measured) = 0.308 mW/g



0 dB = 0.308 mW/q

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Page: 32 of 194

Date/Time: 08/17/2009 03:15:47

### RE Cheek\_CH190

**DUT: PB99100**;

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

Medium: HEAD900 Medium parameters used: f = 837 MHz;  $\sigma = 0.882$  mho/m;  $\epsilon_r = 40.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.312 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

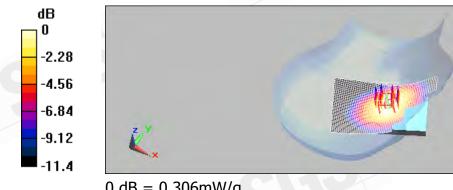
dy=8mm, dz=5mm

Reference Value = 5.89 V/m; Power Drift = 0.146 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.286 mW/g; SAR(10 g) = 0.206 mW/g

Maximum value of SAR (measured) = 0.306 mW/g



0 dB = 0.306 mW/q

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Page: 33 of 194

Date/Time: 08/17/2009 03:43:32

### RE Cheek\_CH251

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used: f = 849 MHz;  $\sigma = 0.895$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.279 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

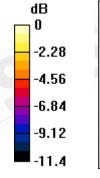
dy=8mm, dz=5mm

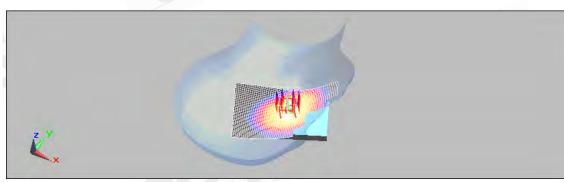
Reference Value = 5.63 V/m; Power Drift = 0.165 dB

Peak SAR (extrapolated) = 0.345 W/kg

SAR(1 g) = 0.259 mW/g; SAR(10 g) = 0.188 mW/g

Maximum value of SAR (measured) = 0.276 mW/g





0 dB = 0.276 mW/q

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Page: 34 of 194

Date/Time: 08/17/2009 05:36:25

### LE Cheek\_CH128

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.871$ 

mho/m;  $\varepsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.265 mW/g

### LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

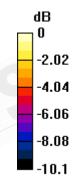
dy=8mm, dz=5mm

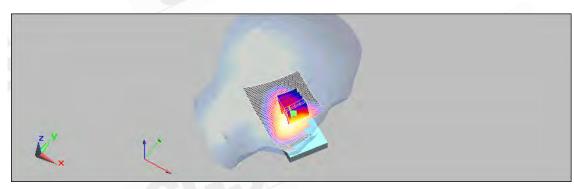
Reference Value = 6.67 V/m; Power Drift = -0.00823 dB

Peak SAR (extrapolated) = 0.308 W/kg

### SAR(1 g) = 0.246 mW/g; SAR(10 g) = 0.181 mW/g

Maximum value of SAR (measured) = 0.255 mW/g





0 dB = 0.255 mW/q

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Page: 35 of 194

Date/Time: 08/17/2009 06:02:33

### LE Cheek\_CH190

**DUT: PB99100**;

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

Medium: HEAD900 Medium parameters used: f = 837 MHz;  $\sigma = 0.882$  mho/m;  $\epsilon_r = 40.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Left Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.267 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

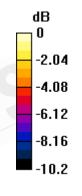
dy=8mm, dz=5mm

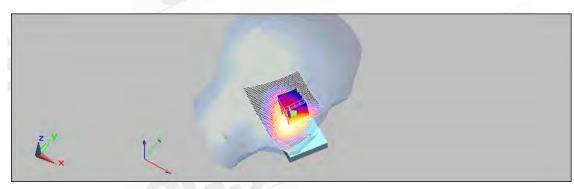
Reference Value = 6.64 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.321 W/kg

SAR(1 g) = 0.253 mW/g; SAR(10 g) = 0.186 mW/g

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





0 dB = 0.262 mW/q

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Page: 36 of 194

Date/Time: 08/17/2009 06:28:02

### LE Cheek\_CH251

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used: f = 849 MHz;  $\sigma = 0.895$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Left Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.283 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

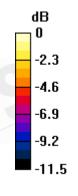
dy=8mm, dz=5mm

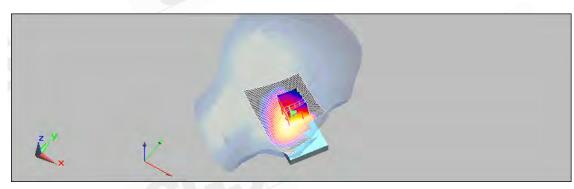
Reference Value = 6.24 V/m; Power Drift = 0.166 dB

Peak SAR (extrapolated) = 0.307 W/kg

SAR(1 g) = 0.245 mW/g; SAR(10 g) = 0.175 mW/g

Maximum value of SAR (measured) = 0.257 mW/g





0 dB = 0.257 mW/q

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Page: 37 of 194

Date/Time: 08/17/2009 04:13:37

#### RE Tilt\_CH128

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.871$ 

mho/m;  $\varepsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.205 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

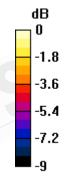
dy=8mm, dz=5mm

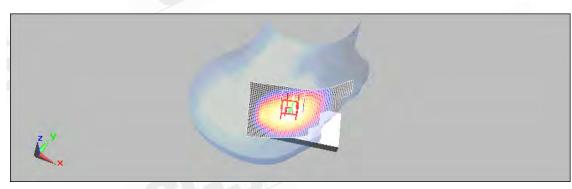
Reference Value = 12.5 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.243 W/kg

SAR(1 g) = 0.195 mW/g; SAR(10 g) = 0.147 mW/g

Maximum value of SAR (measured) = 0.203 mW/g





0 dB = 0.203 mW/q

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Page: 38 of 194

Date/Time: 08/17/2009 04:38:47

## RE Tilt\_CH190

**DUT: PB99100**;

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

Medium: HEAD900 Medium parameters used: f = 837 MHz;  $\sigma = 0.882$  mho/m;  $\epsilon_r = 40.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.208 mW/g

# RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

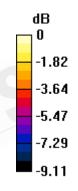
dy=8mm, dz=5mm

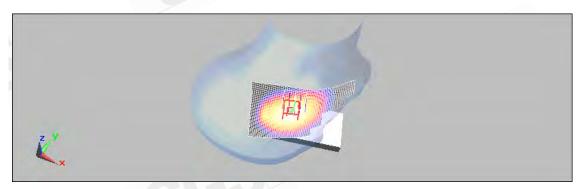
Reference Value = 12.5 V/m; Power Drift = -0.00571 dB

Peak SAR (extrapolated) = 0.252 W/kg

# SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.151 mW/g

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





0 dB = 0.209 mW/q

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Page: 39 of 194

Date/Time: 08/17/2009 05:06:20

## RE Tilt\_CH251

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used: f = 849 MHz;  $\sigma = 0.895$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.189 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

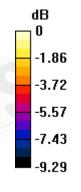
dy=8mm, dz=5mm

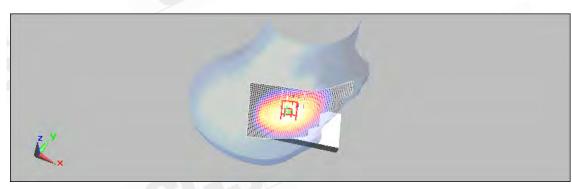
Reference Value = 11.8 V/m; Power Drift = -0.010 dB

Peak SAR (extrapolated) = 0.227 W/kg

SAR(1 g) = 0.181 mW/g; SAR(10 g) = 0.136 mW/g

Maximum value of SAR (measured) = 0.188 mW/g





0 dB = 0.188 mW/q

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Page: 40 of 194

Date/Time: 08/17/2009 06:59:12

#### LE Tilt\_CH128

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.871$ 

mho/m;  $\varepsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.231 mW/g

## **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

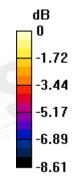
dy=8mm, dz=5mm

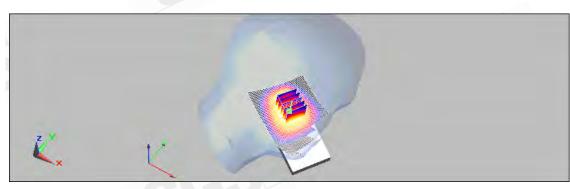
Reference Value = 13.3 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.269 W/kg

#### SAR(1 g) = 0.216 mW/g; SAR(10 g) = 0.162 mW/g

Maximum value of SAR (measured) = 0.226 mW/g





0 dB = 0.226 mW/q

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Page: 41 of 194

Date/Time: 08/17/2009 07:23:44

## LE Tilt\_CH190

**DUT: PB99100**;

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

Medium: HEAD900 Medium parameters used: f = 837 MHz;  $\sigma = 0.882$  mho/m;  $\epsilon_r = 40.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.230 mW/g

# **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

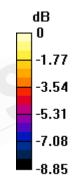
dy=8mm, dz=5mm

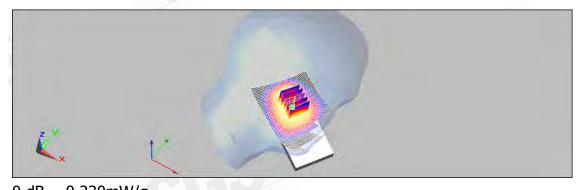
Reference Value = 13.1 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.276 W/kg

# SAR(1 g) = 0.219 mW/g; SAR(10 g) = 0.164 mW/g

Maximum value of SAR (measured) = 0.230 mW/g





0 dB = 0.230 mW/q

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Page: 42 of 194

Date/Time: 08/17/2009 07:51:46

## LE Tilt\_CH251

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3

Medium: HEAD900 Medium parameters used: f = 849 MHz;  $\sigma = 0.895$  mho/m;  $\epsilon_r = 40.3$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.83, 5.83, 5.83); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.211 mW/g

## **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

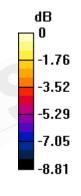
dy=8mm, dz=5mm

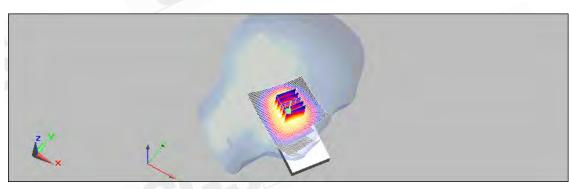
Reference Value = 12.6 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 0.253 W/kg

# SAR(1 g) = 0.201 mW/g; SAR(10 g) = 0.150 mW/g

Maximum value of SAR (measured) = 0.212 mW/g





0 dB = 0.212 mW/q

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Page: 43 of 194

Date/Time: 08/18/2009 12:41:51

#### BODY\_CH128

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.975$ 

mho/m; ε<sub>r</sub> = 52.8; ρ = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.14 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

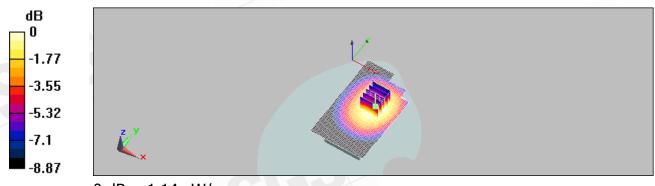
dy=8mm, dz=5mm

Reference Value = 10.4 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.807 mW/g

Maximum value of SAR (measured) = 1.14 mW/g



0 dB = 1.14 mW/g

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Page: 44 of 194

Date/Time: 08/18/2009 13:07:37

#### BODY\_CH190

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.28 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

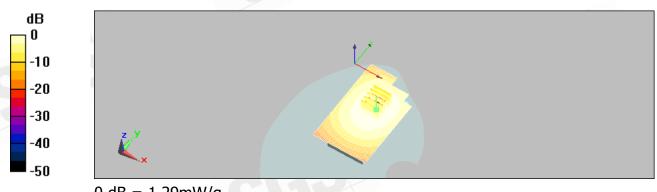
dy=8mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 1.22 mW/g; SAR(10 g) = 0.857 mW/g

Maximum value of SAR (measured) = 1.29 mW/g



0 dB = 1.29 mW/g

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Page: 45 of 194

Date/Time: 08/18/2009 13:32:44

#### BODY\_CH251

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 849 MHz;  $\sigma = 0.982$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.23 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

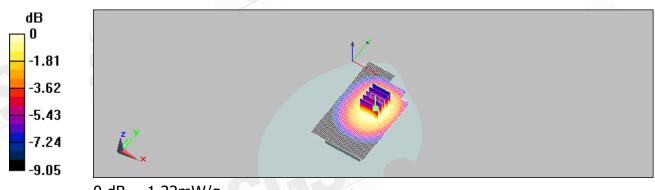
dy=8mm, dz=5mm

Reference Value = 11.1 V/m; Power Drift = 0.046 dB

Peak SAR (extrapolated) = 1.47 W/kg

SAR(1 g) = 1.16 mW/g; SAR(10 g) = 0.860 mW/g

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



0 dB = 1.22 mW/q

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Page: 46 of 194

Date/Time: 08/18/2009 15:37:15

## BODY\_CH190\_repeated for EUT front to phantom

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.595 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

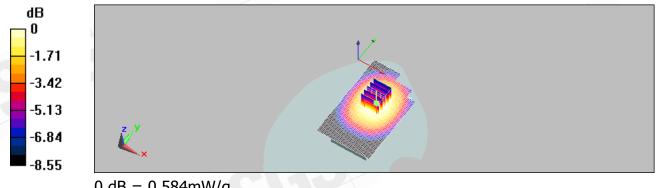
dy=8mm, dz=5mm

Reference Value = 7.87 V/m; Power Drift = -0.184 dB

Peak SAR (extrapolated) = 0.701 W/kg

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

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



0 dB = 0.584 mW/q

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Page: 47 of 194

Date/Time: 08/18/2009 16:01:36

# BODY\_CH190\_repeated with Memory card

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.29 mW/g

# BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

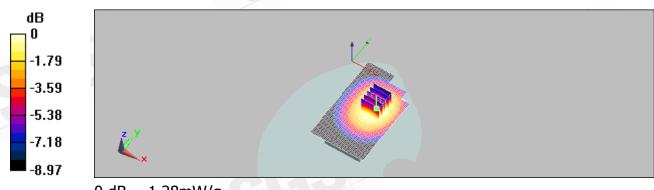
dy=8mm, dz=5mm

Reference Value = 11.1 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 1.56 W/kg

# SAR(1 g) = 1.21 mW/g; SAR(10 g) = 0.903 mW/g

Maximum value of SAR (measured) = 1.28 mW/g



0 dB = 1.28 mW/q

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Page: 48 of 194

Date/Time: 08/18/2009 16:32:51

## **BODY\_CH190\_repeated with Cotron headset**

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\varepsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.781 mW/g

# BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

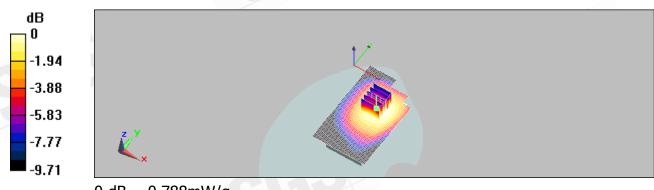
dy=8mm, dz=5mm

Reference Value = 6.47 V/m; Power Drift = 0.207 dB

Peak SAR (extrapolated) = 0.973 W/kg

# SAR(1 g) = 0.749 mW/g; SAR(10 g) = 0.551 mW/g

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



0 dB = 0.788 mW/q

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Page: 49 of 194

Date/Time: 08/18/2009 17:00:24

# **BODY\_CH190\_repeated with Merry headset**

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.15 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

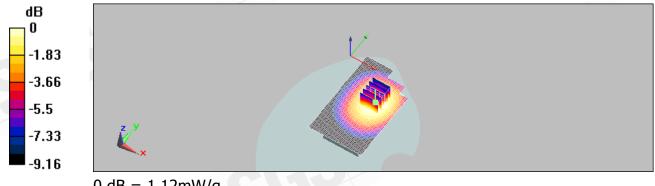
dy=8mm, dz=5mm

Reference Value = 9.92 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 1.36 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.790 mW/g

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



0 dB = 1.12 mW/q

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Page: 50 of 194

Date/Time: 08/18/2009 17:26:52

## BODY\_CH190\_repeated with Welldone Battery

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.37 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

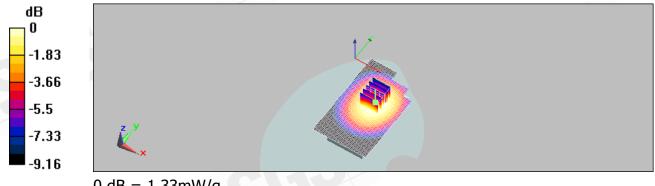
dy=8mm, dz=5mm

Reference Value = 11.1 V/m; Power Drift = -0.187 dB

Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 1.27 mW/g; SAR(10 g) = 0.947 mW/g

Maximum value of SAR (measured) = 1.33 mW/g



0 dB = 1.33 mW/q

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Page: 51 of 194



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Page: 52 of 194

Date/Time: 08/18/2009 13:54:31

# BODY\_CH128\_repeated with EGPRS mode

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used (interpolated): f = 824.2 MHz;  $\sigma = 0.975$ 

mho/m; ε<sub>r</sub> = 52.8; ρ = 1000 kg/m<sup>3</sup> Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.404 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

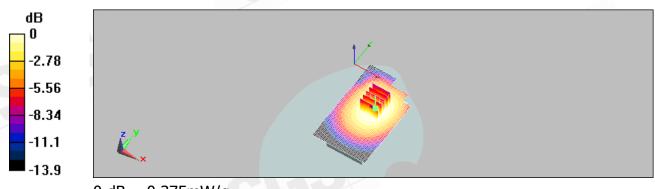
dy=8mm, dz=5mm

Reference Value = 5.65 V/m; Power Drift = -0.214 dB

Peak SAR (extrapolated) = 0.466 W/kg

SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.265 mW/g

Maximum value of SAR (measured) = 0.375 mW/g



0 dB = 0.375 mW/q

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Page: 53 of 194

Date/Time: 08/18/2009 14:21:36

# BODY\_CH190\_repeated with EGPRS mode

#### **DUT: PB99100**;

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 837 MHz;  $\sigma = 0.979$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.435 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

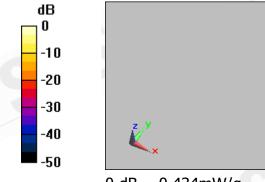
dy=8mm, dz=5mm

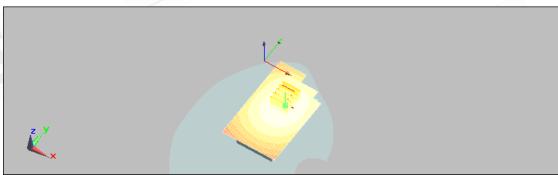
Reference Value = 5.69 V/m; Power Drift = 0.194 dB

Peak SAR (extrapolated) = 0.539 W/kg

SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.268 mW/g

Maximum value of SAR (measured) = 0.434 mW/g





0 dB = 0.434 mW/q

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Page: 54 of 194

Date/Time: 08/18/2009 14:50:19

## BODY\_CH251\_repeated with EGPRS mode

**DUT: PB99100**;

Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:2

Medium: BODY900 Medium parameters used: f = 849 MHz;  $\sigma = 0.982$  mho/m;  $\epsilon_r = 52.4$ ;  $\rho =$ 

1000 kg/m<sup>3</sup>

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(5.81, 5.81, 5.81); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.418 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 5.89 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.496 W/kg

SAR(1 g) = 0.393 mW/g; SAR(10 g) = 0.288 mW/g

Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420 mW/q

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Page: 55 of 194

Date/Time: 08/17/2009 10:10:49

#### RE Cheek\_CH512

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.47$ 

mho/m;  $\varepsilon_r = 38.9$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.435 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

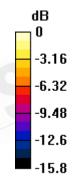
dy=8mm, dz=5mm

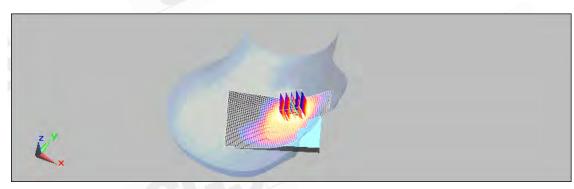
Reference Value = 3.36 V/m; Power Drift = 0.138 dB

Peak SAR (extrapolated) = 0.633 W/kg

SAR(1 g) = 0.370 mW/g; SAR(10 g) = 0.215 mW/g

Maximum value of SAR (measured) = 0.386 mW/g





0 dB = 0.386 mW/q

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Page: 56 of 194

Date/Time:08/17/2009 10:37:17

#### RE Cheek\_CH661

**DUT: PB99100**;

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

Medium: Head1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.368 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

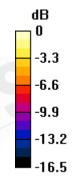
dy=8mm, dz=5mm

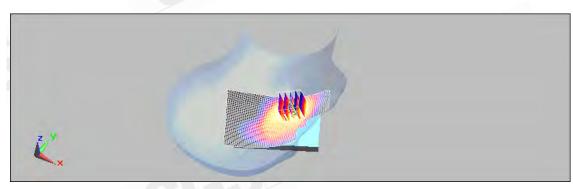
Reference Value = 2.72 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.315 mW/g; SAR(10 g) = 0.177 mW/g

Maximum value of SAR (measured) = 0.350 mW/g





0 dB = 0.350 mW/q

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Page: 57 of 194

Date/Time: 08/17/2009 11:05:59

#### RE Cheek\_CH810

**DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.322 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

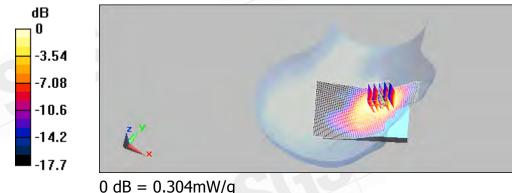
dy=8mm, dz=5mm

Reference Value = 2.82 V/m; Power Drift = -0.120 dB

Peak SAR (extrapolated) = 0.485 W/kg

SAR(1 g) = 0.275 mW/g; SAR(10 g) = 0.151 mW/g

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



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Page: 58 of 194

Date/Time: 08/17/2009 13:14:09

#### LE Cheek\_CH512

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.47$ 

mho/m; ε<sub>r</sub> = 38.9; ρ = 1000 kg/m<sup>3</sup> Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.272 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

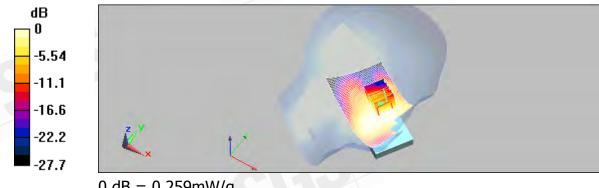
dy=8mm, dz=5mm

Reference Value = 3.1 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.458 W/kg

SAR(1 g) = 0.249 mW/g; SAR(10 g) = 0.150 mW/g

Maximum value of SAR (measured) = 0.259 mW/g



0 dB = 0.259 mW/q

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Page: 59 of 194

Date/Time: 08/17/2009 13:43:59

#### LE Cheek\_CH661

**DUT: PB99100**;

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

Medium: Head1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.247 mW/g

# LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

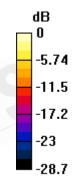
dy=8mm, dz=5mm

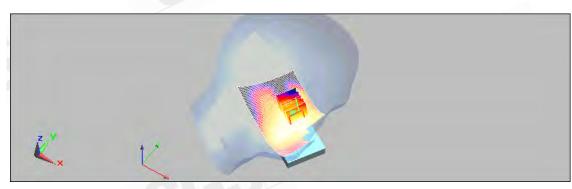
Reference Value = 2.87 V/m; Power Drift = 0.078 dB

Peak SAR (extrapolated) = 0.412 W/kg

# SAR(1 g) = 0.222 mW/g; SAR(10 g) = 0.132 mW/g

Maximum value of SAR (measured) = 0.229 mW/g





0 dB = 0.229 mW/q

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Page: 60 of 194

Date/Time: 08/17/2009 15:30:48

#### LE Cheek\_CH810

**DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.207 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

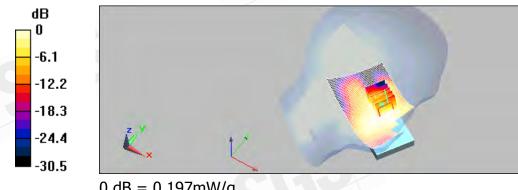
dy=8mm, dz=5mm

Reference Value = 3.15 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.330 W/kg

SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.110 mW/g

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



0 dB = 0.197 mW/q

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Page: 61 of 194

Date/Time: 08/17/2009 11:32:19

## RE Tilt\_CH512

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.47$ 

mho/m;  $\varepsilon_r = 38.9$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.116 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

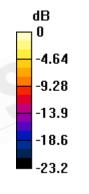
dy=8mm, dz=5mm

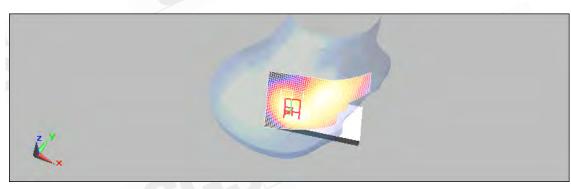
Reference Value = 7.34 V/m; Power Drift = 0.161 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.056 mW/g

Maximum value of SAR (measured) = 0.098 mW/g





0 dB = 0.098 mW/q

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Page: 62 of 194

Date/Time: 08/17/2009 12:00:04

#### RE Tilt\_CH661

**DUT: PB99100**;

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

Medium: Head1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.094 mW/g

## RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

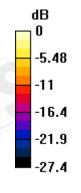
dy=8mm, dz=5mm

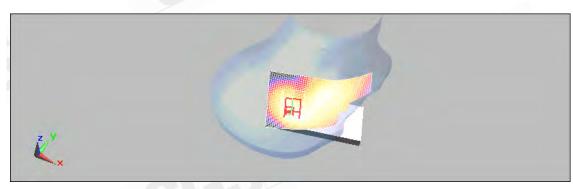
Reference Value = 6.69 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.130 W/kg

#### SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.080 mW/g





0 dB = 0.080 mW/q

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Page: 63 of 194

Date/Time: 08/17/2009 12:46:09

#### RE Tilt\_CH810

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.081 mW/g

# RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

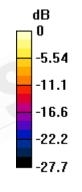
dy=8mm, dz=5mm

Reference Value = 6.41 V/m; Power Drift = 0.071 dB

Peak SAR (extrapolated) = 0.114 W/kg

#### SAR(1 g) = 0.067 mW/g; SAR(10 g) = 0.038 mW/g

Maximum value of SAR (measured) = 0.071 mW/g





0 dB = 0.071 mW/q

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Page: 64 of 194

Date/Time: 08/17/2009 14:37:00

#### LE Tilt\_CH512

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.47$ 

mho/m; ε<sub>r</sub> = 38.9; ρ = 1000 kg/m<sup>3</sup> Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.081 mW/g

## **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

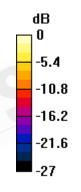
dy=8mm, dz=5mm

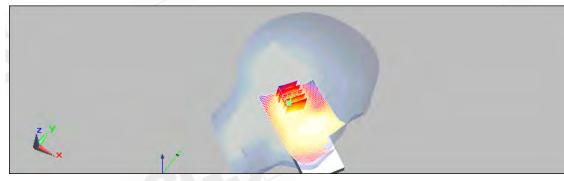
Reference Value = 7.46 V/m; Power Drift = 0.077 dB

Peak SAR (extrapolated) = 0.118 W/kg

# SAR(1 g) = 0.074 mW/g; SAR(10 g) = 0.044 mW/g

Maximum value of SAR (measured) = 0.083 mW/g





0 dB = 0.083 mW/q

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Page: 65 of 194

Date/Time: 08/17/2009 15:04:39

#### LE Tilt\_CH661

#### **DUT: PB99100**;

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

Medium: Head1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.067 mW/g

## **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 6.86 V/m; Power Drift = -0.043 dB

Peak SAR (extrapolated) = 0.099 W/kg

#### SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.069 mW/g



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Page: 66 of 194

Date/Time: 08/17/2009 15:30:43

## LE Tilt\_CH810

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3

Medium: Head1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.47$  mho/m;  $\epsilon_r = 38.6$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.86, 4.86, 4.86); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.064 mW/g

# **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

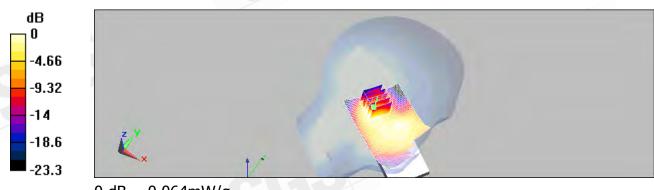
dy=8mm, dz=5mm

Reference Value = 6.55 V/m; Power Drift = 0.083 dB

Peak SAR (extrapolated) = 0.093 W/kg

#### SAR(1 g) = 0.057 mW/g; SAR(10 g) = 0.032 mW/g

Maximum value of SAR (measured) = 0.064 mW/g



0 dB = 0.064 mW/q

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Page: 67 of 194

Date/Time: 08/18/2009 02:14:24

#### BODY\_CH512

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: BODY1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.51$ 

mho/m;  $ε_r = 55.8$ ;  $ρ = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.54, 4.54, 4.54); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.854 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

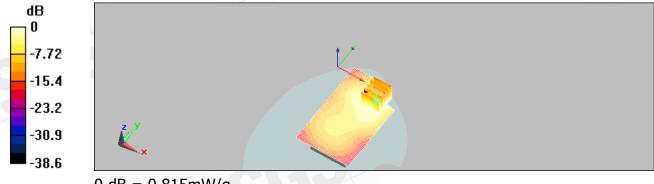
dy=8mm, dz=5mm

Reference Value = 7.07 V/m; Power Drift = -0.201 dB

Peak SAR (extrapolated) = 1.24 W/kg

SAR(1 g) = 0.744 mW/g; SAR(10 g) = 0.430 mW/g

Maximum value of SAR (measured) = 0.815 mW/g



0 dB = 0.815 mW/q

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Page: 68 of 194

Date/Time: 08/18/2009 02:31:22

#### BODY\_CH661

**DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: BODY 1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 55.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.54, 4.54, 4.54); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.686 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

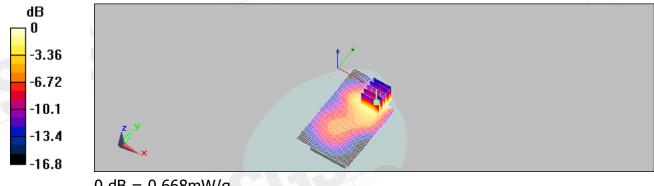
dy=8mm, dz=5mm

Reference Value = 5.91 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.608 mW/g; SAR(10 g) = 0.348 mW/g

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



0 dB = 0.668 mW/q

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Page: 69 of 194

Date/Time: 08/18/2009 02:56:26

#### BODY\_CH810

**DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: BODY 1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.57$  mho/m;  $\epsilon_r = 55.6$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.54, 4.54, 4.54); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.579 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

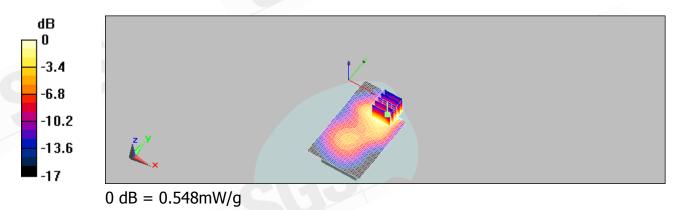
dy=8mm, dz=5mm

Reference Value = 5.82 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.834 W/kg

SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.284 mW/g

Maximum value of SAR (measured) = 0.548 mW/g



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Page: 70 of 194

Date/Time: 08/18/2009 03:27:14

## BODY\_CH512\_repeated with EGPRS mode

#### **DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:2

Medium: BODY1900 Medium parameters used (interpolated): f = 1850.2 MHz;  $\sigma = 1.51$ 

mho/m;  $ε_r = 55.8$ ;  $ρ = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.54, 4.54, 4.54); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.357 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

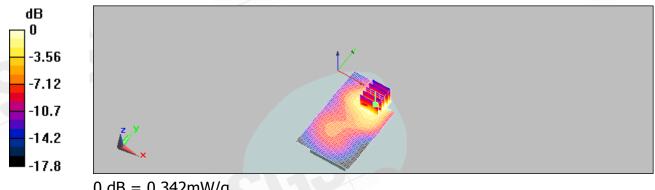
dy=8mm, dz=5mm

Reference Value = 4.69 V/m; Power Drift = 0.150 dB

Peak SAR (extrapolated) = 0.661 W/kg

SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.185 mW/g

Maximum value of SAR (measured) = 0.342 mW/g



0 dB = 0.342 mW/q

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Page: 71 of 194

Date/Time: 08/18/2009 03:51:21

# BODY\_CH661\_ repeated with EGPRS mode

**DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1880 MHz; Duty Cycle: 1:2

Medium: BODY1900 Medium parameters used: f = 1880 MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 55.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.54, 4.54, 4.54); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.290 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

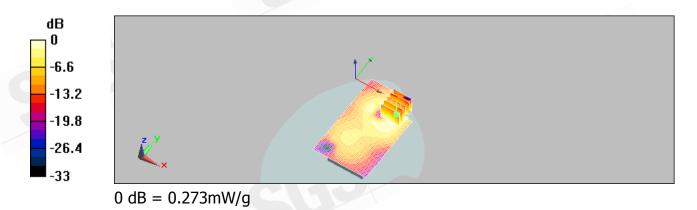
dy=8mm, dz=5mm

Reference Value = 4.16 V/m; Power Drift = 0.164 dB

Peak SAR (extrapolated) = 0.420 W/kg

SAR(1 g) = 0.258 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.273 mW/g



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Page: 72 of 194

Date/Time: 08/18/2009 04:16:29

# BODY\_CH810\_ repeated with EGPRS mode

**DUT: PB99100**;

Communication System: GSM 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:2

Medium: BODY1900 Medium parameters used: f = 1910 MHz;  $\sigma = 1.57$  mho/m;  $\epsilon_r = 55.6$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.54, 4.54, 4.54); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.228 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

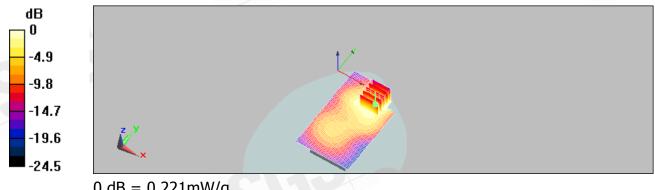
dy=8mm, dz=5mm

Reference Value = 3.75 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 0.318 W/kg

SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.119 mW/g

Maximum value of SAR (measured) = 0.221 mW/g



0 dB = 0.221 mW/q

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Page: 73 of 194

Date/Time: 08/17/2009 17:43:34

### RE\_Cheek\_CH1312

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.4$ 

mho/m;  $\varepsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.715 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

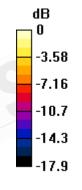
dy=8mm, dz=5mm

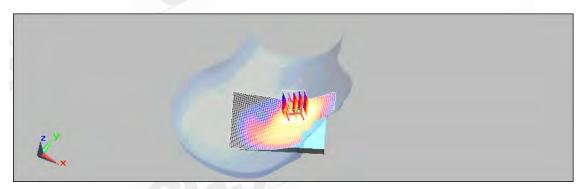
Reference Value = 6.13 V/m; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.974 W/kg

SAR(1 g) = 0.600 mW/g; SAR(10 g) = 0.378 mW/g

Maximum value of SAR (measured) = 0.655 mW/g





0 dB = 0.655 mW/q

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Page: 74 of 194

Date/Time: 08/17/2009 18:08:05

### RE\_Cheek\_CH1412

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.41$ 

mho/m;  $\varepsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

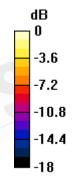
dy=8mm, dz=5mm

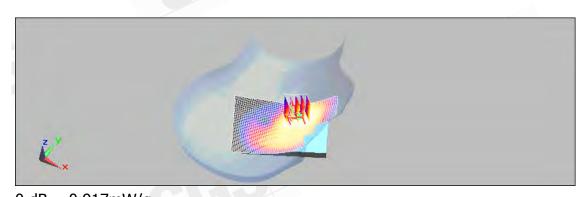
Reference Value = 7.15 V/m; Power Drift = -0.089 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.840 mW/g; SAR(10 g) = 0.527 mW/g

Maximum value of SAR (measured) = 0.917 mW/g





0 dB = 0.917 mW/q

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Page: 75 of 194

Date/Time: 08/17/2009 18:34:28

### RE\_Cheek\_CH1513

**DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Head1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.650 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

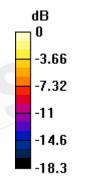
dy=8mm, dz=5mm

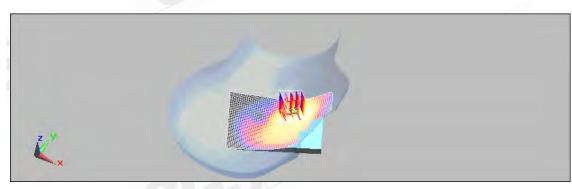
Reference Value = 5.65 V/m; Power Drift = -0.031 dB

Peak SAR (extrapolated) = 0.923 W/kg

SAR(1 g) = 0.554 mW/g; SAR(10 g) = 0.345 mW/g

Maximum value of SAR (measured) = 0.609 mW/g





0 dB = 0.609 mW/q

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Page: 76 of 194

Date/Time: 08/17/2009 23:05:07

## RE\_Cheek\_CH1412\_repeated with Memory card

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.41$ 

mho/m;  $\varepsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 1.03 mW/g

RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

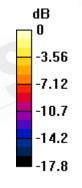
dy=8mm, dz=5mm

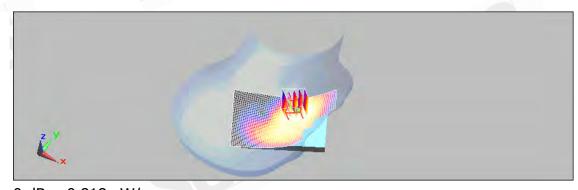
Reference Value = 7.13 V/m; Power Drift = -0.205 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.867 mW/g; SAR(10 g) = 0.546 mW/g

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





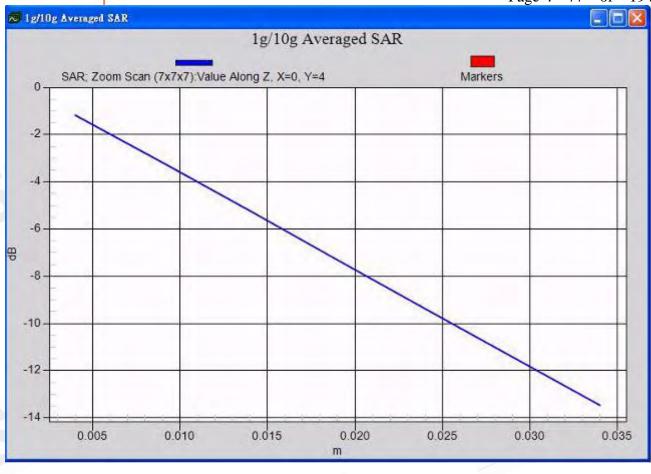
0 dB = 0.818 mW/q

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Page: 77 of 194



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Page: 78 of 194

Date/Time: 08/17/2009 23:33:07

## RE\_Cheek\_CH1412 \_repeated with Welldone Battery

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.41$ 

mho/m;  $\varepsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.907 mW/g

## RE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

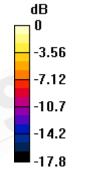
dy=8mm, dz=5mm

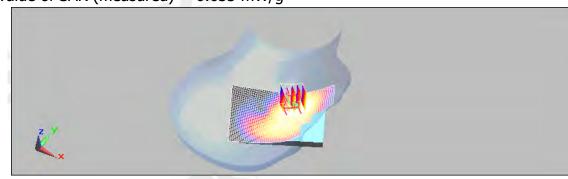
Reference Value = 7.24 V/m; Power Drift = -0.205 dB

Peak SAR (extrapolated) = 1.19 W/kg

## SAR(1 g) = 0.754 mW/g; SAR(10 g) = 0.489 mW/g

Maximum value of SAR (measured) = 0.633 mW/g





0 dB = 0.633 mW/g

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Page: 79 of 194

Date/Time: 08/17/2009 20:23:55

### LE\_Cheek\_CH1312

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.4$ 

mho/m;  $ε_r = 39.5$ ;  $ρ = 1000 \text{ kg/m}^3$ Phantom section: Left Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.586 mW/g

## LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

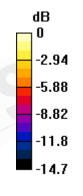
dy=8mm, dz=5mm

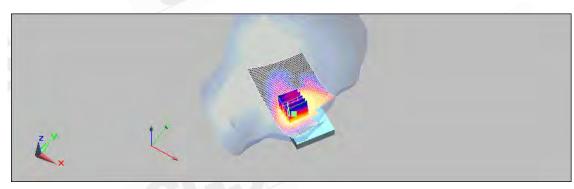
Reference Value = 6.43 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 0.832 W/kg

## SAR(1 g) = 0.550 mW/g; SAR(10 g) = 0.339 mW/g

Maximum value of SAR (measured) = 0.596 mW/g





0 dB = 0.596 mW/g

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Page: 80 of 194

Date/Time: 08/17/2009 20:52:55

### LE\_Cheek\_CH1412

**DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.41$ 

mho/m;  $\varepsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Left Section

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Cheek/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.738 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

dy=8mm, dz=5mm

Reference Value = 7.28 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 1.06 W/kg

SAR(1 g) = 0.696 mW/g; SAR(10 g) = 0.428 mW/g

Maximum value of SAR (measured) = 0.755 mW/g

LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 1: Measurement grid: dx=8mm,

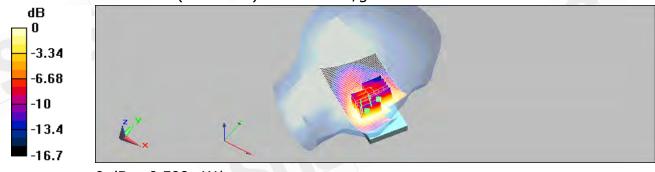
dy=8mm, dz=5mm

Reference Value = 7.28 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 0.690 W/kg

SAR(1 g) = 0.450 mW/g; SAR(10 g) = 0.315 mW/g

Maximum value of SAR (measured) = 0.508 mW/g



0 dB = 0.508 mW/q

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Page: 81 of 194

Date/Time: 08/17/2009 21:19:39

## LE\_Cheek\_CH1513

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Head1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

LE Cheek/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.510 mW/g

## LE Cheek/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

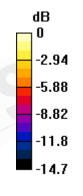
dy=8mm, dz=5mm

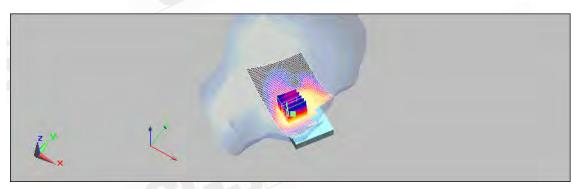
Reference Value = 5.87 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.734 W/kg

## SAR(1 g) = 0.479 mW/g; SAR(10 g) = 0.294 mW/g

Maximum value of SAR (measured) = 0.523 mW/g





0 dB = 0.523 mW/g

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Page: 82 of 194

Date/Time: 08/17/2009 19:01:12

## RE\_Tilt\_CH1312

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.4$ 

mho/m;  $\varepsilon_r = 39.5$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.262 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

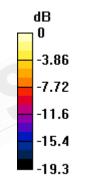
dy=8mm, dz=5mm

Reference Value = 12.6 V/m; Power Drift = -0.16 dB

Peak SAR (extrapolated) = 0.360 W/kg

SAR(1 g) = 0.230 mW/g; SAR(10 g) = 0.147 mW/g

Maximum value of SAR (measured) = 0.244 mW/g





0 dB = 0.244 mW/q

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Page: 83 of 194

Date/Time: 08/17/2009 19:27:31

## RE\_Tilt\_CH1412

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.41$ 

mho/m;  $\varepsilon_r = 39.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Right Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.344 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

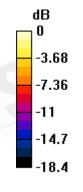
dy=8mm, dz=5mm

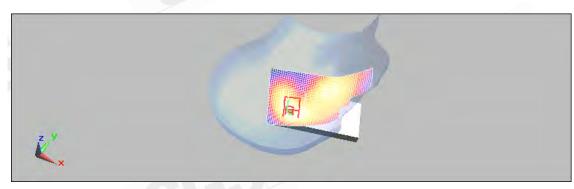
Reference Value = 12.9 V/m; Power Drift = 0.134 dB

Peak SAR (extrapolated) = 0.509 W/kg

SAR(1 g) = 0.316 mW/g; SAR(10 g) = 0.193 mW/g

Maximum value of SAR (measured) = 0.338 mW/g





0 dB = 0.338 mW/q

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Page: 84 of 194

Date/Time: 08/17/2009 19:55:13

## RE\_Tilt\_CH1513

**DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Head1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Right Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

RE Tilt/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.250 mW/g

RE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

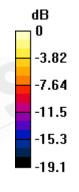
dy=8mm, dz=5mm

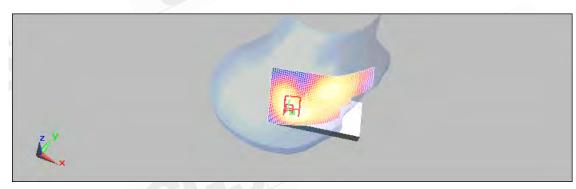
Reference Value = 11.1 V/m; Power Drift = 0.141 dB

Peak SAR (extrapolated) = 0.374 W/kg

SAR(1 g) = 0.228 mW/g; SAR(10 g) = 0.138 mW/g

Maximum value of SAR (measured) = 0.243 mW/g





0 dB = 0.243 mW/q

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Page: 85 of 194

Date/Time: 08/17/2009 21:49:13

## LE\_Tilt\_CH1312

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.4$ 

mho/m;  $ε_r = 39.5$ ;  $ρ = 1000 \text{ kg/m}^3$ Phantom section: Left Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.208 mW/g

## **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

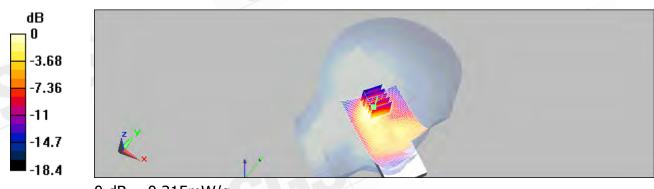
dy=8mm, dz=5mm

Reference Value = 12.3 V/m; Power Drift = 0.211 dB

Peak SAR (extrapolated) = 0.310 W/kg

## SAR(1 g) = 0.182 mW/g; SAR(10 g) = 0.108 mW/g

Maximum value of SAR (measured) = 0.215 mW/g



0 dB = 0.215 mW/q

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Page: 86 of 194

Date/Time: 08/17/2009 22:17:33

### LE\_Tilt\_CH1412

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Head 1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.41$ 

mho/m; ε<sub>r</sub> = 39.4; ρ = 1000 kg/m<sup>3</sup> Phantom section: Left Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.298 mW/g

**LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

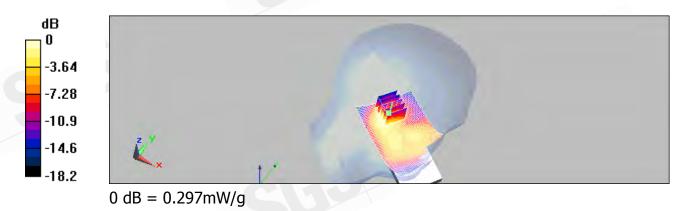
dy=8mm, dz=5mm

Reference Value = 14.9 V/m; Power Drift = -0.142 dB

Peak SAR (extrapolated) = 0.432 W/kg

SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.153 mW/g

Maximum value of SAR (measured) = 0.297 mW/g



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Page: 87 of 194

Date/Time: 08/17/2009 22:33:42

## LE\_Tilt\_CH1513

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Head1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.43$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Left Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.99, 4.99, 4.99); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

**LE Tilt/Area Scan (61x101x1):** Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.214 mW/g

## **LE Tilt/Zoom Scan (7x7x7) (5x5x7)/Cube 0:** Measurement grid: dx=8mm,

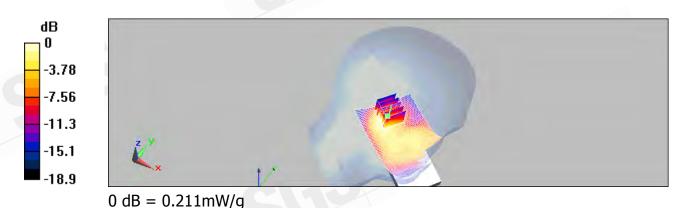
dy=8mm, dz=5mm

Reference Value = 12.4 V/m; Power Drift = 0.030 dB

Peak SAR (extrapolated) = 0.306 W/kg

### SAR(1 g) = 0.188 mW/g; SAR(10 g) = 0.109 mW/g

Maximum value of SAR (measured) = 0.211 mW/g



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Page: 88 of 194

Date/Time: 08/18/2009 06:26:31

## BODY\_CH1312

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Body1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.46$ 

mho/m;  $\varepsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

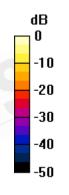
BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.451 mW/g

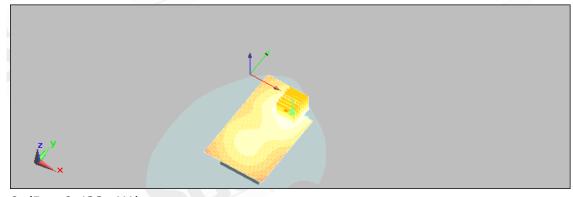
BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.99 V/m; Power Drift = -0.120 dB Peak SAR (extrapolated) = 0.644 W/kg

SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.249 mW/g

Maximum value of SAR (measured) = 0.433 mW/g





0 dB = 0.433 mW/q

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Page: 89 of 194

Date/Time: 08/18/2009 06:52:27

### BODY\_CH1412

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Body1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.45$ 

mho/m;  $\varepsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

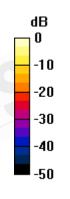
Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

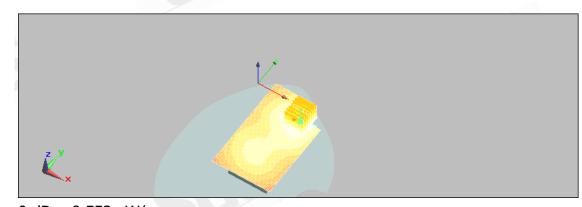
BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.567 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mmReference Value = 6.88 V/m; Power Drift = -0.116 dB

Peak SAR (extrapolated) = 0.840 W/kg

SAR(1 g) = 0.519 mW/g; SAR(10 g) = 0.314 mW/gMaximum value of SAR (measured) = 0.552 mW/g





0 dB = 0.552 mW/q

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Page: 90 of 194

Date/Time: 08/18/2009 07:19:57

### BODY\_CH1513

**DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Body1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.47$  mho/m;  $\varepsilon_r = 55.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.390 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

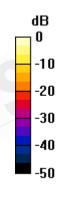
dy=8mm, dz=5mm

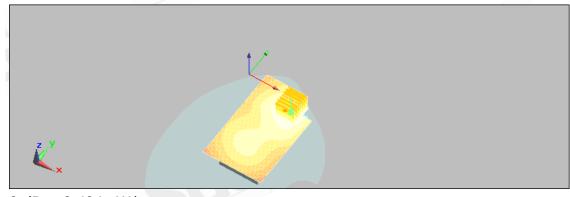
Reference Value = 5.72 V/m; Power Drift = 0.201 dB

Peak SAR (extrapolated) = 0.628 W/kg

SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.404 mW/g





0 dB = 0.404 mW/q

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Page: 91 of 194

Date/Time: 08/18/2009 07:47:45

## BODY\_CH1312\_repeated with HSDPA mode

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Body1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.46$ 

mho/m;  $\varepsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.395 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

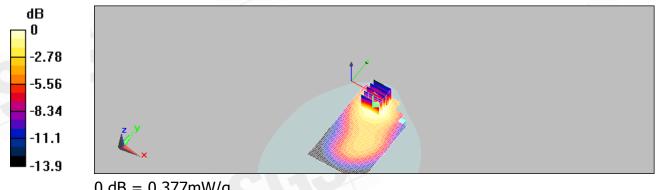
dy=8mm, dz=5mm

Reference Value = 6.91 V/m; Power Drift = 0.033 dB

Peak SAR (extrapolated) = 0.531 W/kg

SAR(1 g) = 0.356 mW/g; SAR(10 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.377 mW/g



0 dB = 0.377 mW/q

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Page: 92 of 194

Date/Time: 08/18/2009 08:13:31

## BODY\_CH1412\_repeated with HSDPA mode

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Body1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.45$ 

mho/m;  $\varepsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

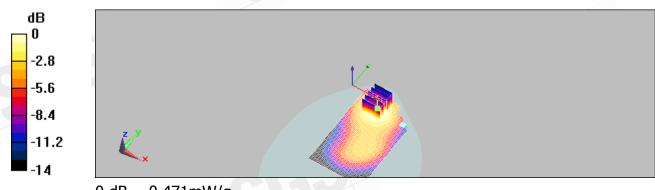
BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.488 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.99 V/m; Power Drift = -0.062 dB Peak SAR (extrapolated) = 0.662 W/kg

SAR(1 g) = 0.440 mW/g; SAR(10 g) = 0.284 mW/g

Maximum value of SAR (measured) = 0.471 mW/g



0 dB = 0.471 mW/q

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Page: 93 of 194

Date/Time: 08/18/2009 08:38:49

## BODY\_CH1513\_repeated with HSDPA mode

**DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Body1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.47$  mho/m;  $\varepsilon_r = 55.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.336 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

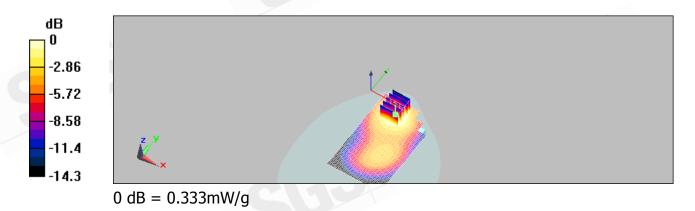
dy=8mm, dz=5mm

Reference Value = 6.84 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.466 W/kg

SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.197 mW/g

Maximum value of SAR (measured) = 0.333 mW/g



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Page: 94 of 194

Date/Time: 08/18/2009 09:07:58

## BODY\_CH1312\_repeated with HSUPA mode

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1712.4 MHz; Duty Cycle: 1:1 Medium: Body1800 Medium parameters used (interpolated): f = 1712.4 MHz;  $\sigma = 1.46$ 

mho/m;  $\varepsilon_r = 55.6$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.357 mW/g

BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

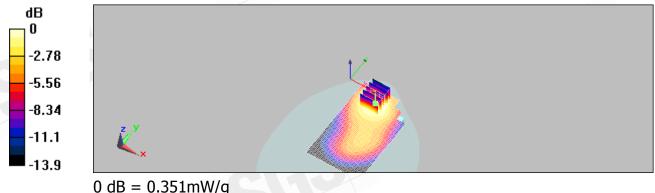
dy=8mm, dz=5mm

Reference Value = 6.37 V/m; Power Drift = 0.105 dB

Peak SAR (extrapolated) = 0.491 W/kg

SAR(1 g) = 0.328 mW/g; SAR(10 g) = 0.214 mW/g

Maximum value of SAR (measured) = 0.351 mW/g



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Page: 95 of 194

Date/Time: 08/18/2009 09:35:13

## BODY\_CH1412\_repeated with HSUPA mode

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1732.4 MHz; Duty Cycle: 1:1 Medium: Body1800 Medium parameters used (interpolated): f = 1732.4 MHz;  $\sigma = 1.45$ 

mho/m;  $\varepsilon_r = 55.4$ ;  $\rho = 1000 \text{ kg/m}^3$ Phantom section: Flat Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mmMaximum value of SAR (interpolated) = 0.460 mW/g

## BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

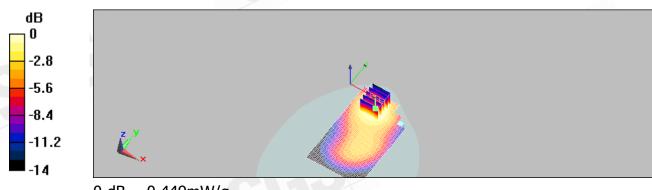
dy=8mm, dz=5mm

Reference Value = 7.72 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 0.630 W/kg

## SAR(1 g) = 0.417 mW/g; SAR(10 g) = 0.269 mW/g

Maximum value of SAR (measured) = 0.449 mW/g



0 dB = 0.449 mW/q

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Page: 96 of 194

Date/Time: 08/18/2009 10:02:53

## BODY\_CH1513\_repeated with HSUPA mode

#### **DUT: PB99100**;

Communication System: WCDMA BAND4; Frequency: 1752.6 MHz; Duty Cycle: 1:1

Medium: Body1800 Medium parameters used: f = 1753 MHz;  $\sigma = 1.47$  mho/m;  $\varepsilon_r = 55.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.69, 4.69, 4.69); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.318 mW/g

## BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

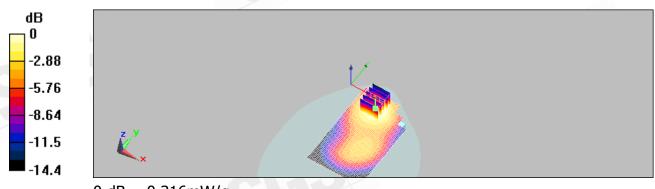
dy=8mm, dz=5mm

Reference Value = 6.73 V/m; Power Drift = 0.036 dB

Peak SAR (extrapolated) = 0.443 W/kg

# SAR(1 g) = 0.292 mW/g; SAR(10 g) = 0.187 mW/g

Maximum value of SAR (measured) = 0.316 mW/g



0 dB = 0.316 mW/q

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Page: 97 of 194

Date/Time: 08/18/2009 19:39:23

## BODY\_WLAN 802.11 b\_CH1

#### **DUT: PB99100**;

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: BODY2450 Medium parameters used: f = 2412 MHz;  $\sigma = 1.92$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

#### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.02, 4.02, 4.02); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.073 mW/g

## BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

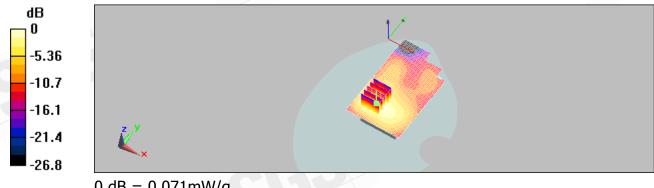
dy=8mm, dz=5mm

Reference Value = 3.53 V/m; Power Drift = 0.152 dB

Peak SAR (extrapolated) = 0.114 W/kg

## SAR(1 g) = 0.065 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.071 mW/g



0 dB = 0.071 mW/q

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Page: 98 of 194

Date/Time: 08/18/2009 20:04:43

## BODY\_WLAN 802.11 b\_CH6

#### **DUT: PB99100**;

Communication System: Wireless LAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium: BODY2450 Medium parameters used: f = 2437 MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 54.3$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

### **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.02, 4.02, 4.02); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.058 mW/g

## BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

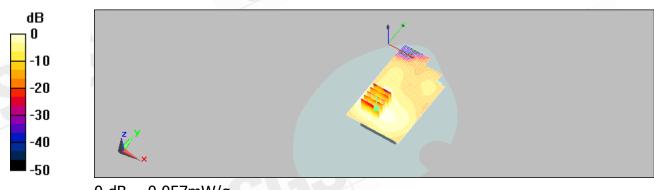
dy=8mm, dz=5mm

Reference Value = 3.21 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.094 W/kg

## SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.028 mW/g

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



0 dB = 0.057 mW/q

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Page: 99 of 194

Date/Time: 08/18/2009 20:28:40

## BODY\_WLAN 802.11 b \_CH11

#### **DUT: PB99100**;

Communication System: Wireless LAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: BODY2450 Medium parameters used: f = 2462 MHz;  $\sigma = 2.01$  mho/m;  $\epsilon_r = 54.2$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.02, 4.02, 4.02); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.051 mW/g

## BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

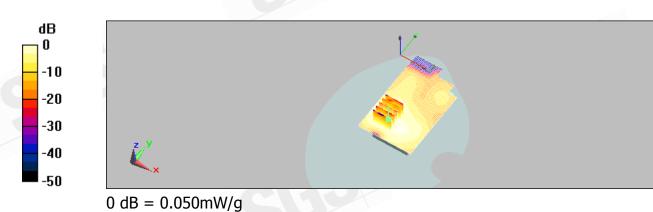
dy=8mm, dz=5mm

Reference Value = 3 V/m; Power Drift = 0.214 dB

Peak SAR (extrapolated) = 0.087 W/kg

# SAR(1 g) = 0.046 mW/g; SAR(10 g) = 0.025 mW/g

Maximum value of SAR (measured) = 0.050 mW/g



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Page: 100 of 194

Date/Time: 08/18/2009 22:15:44

# BODY\_WLAN 802.11 b\_CH1\_repeated for EUT front to phantom

**DUT: PB99100**;

Communication System: Wireless LAN; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium: BODY2450 Medium parameters used: f = 2412 MHz;  $\sigma = 1.92$  mho/m;  $\epsilon_r = 54.8$ ;  $\rho$ 

 $= 1000 \text{ kg/m}^3$ 

Phantom section: Flat Section

## **DASY5** Configuration:

Probe: ES3DV3 - SN3172; ConvF(4.02, 4.02, 4.02); Calibrated: 5/27/2009

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE4 Sn856; Calibrated: 5/26/2009

Phantom: SAM1; Type: SAM;

Measurement SW: DASY5, V5.0 Build 125; SEMCAD X Version 13.4 Build 125

BODY/Area Scan (61x101x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.013 mW/g

## BODY/Zoom Scan (7x7x7) (5x5x7)/Cube 0: Measurement grid: dx=8mm,

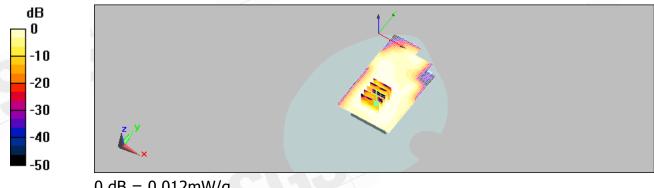
dy=8mm, dz=5mm

Reference Value = 1.93 V/m; Power Drift = 0.190 dB

Peak SAR (extrapolated) = 0.022 W/kg

### SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00682 mW/g

Maximum value of SAR (measured) = 0.012 mW/g



0 dB = 0.012 mW/q

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