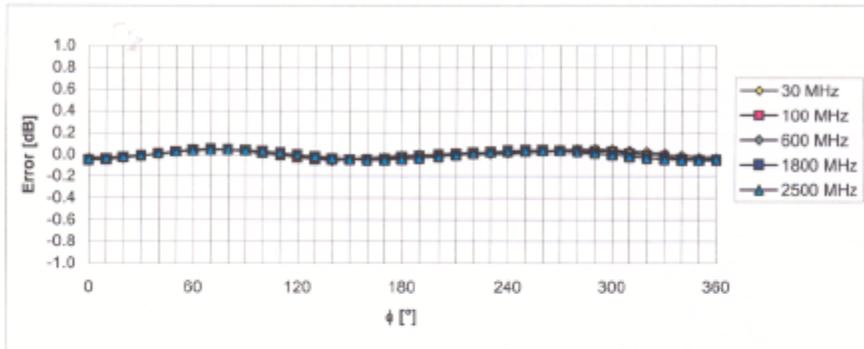
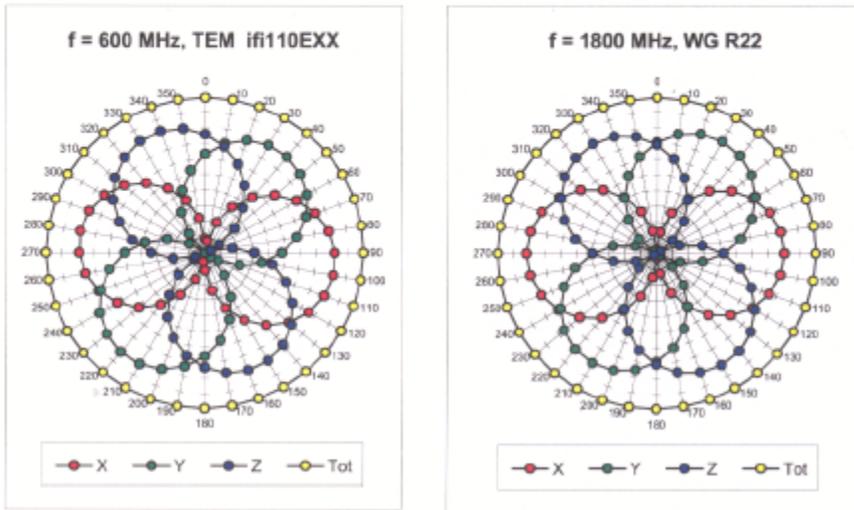


ET3DV6 SN:1604

March 18, 2005

### Receiving Pattern ( $\phi$ ), $\theta = 0^\circ$

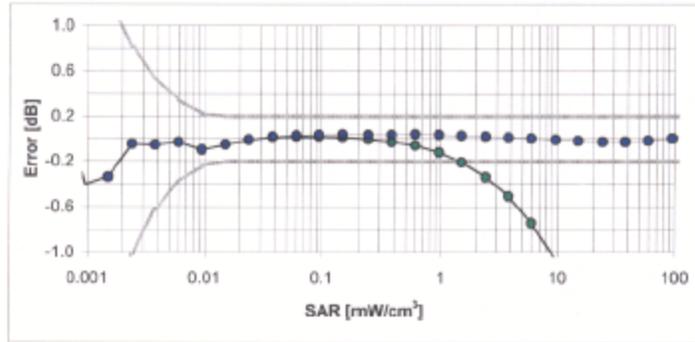
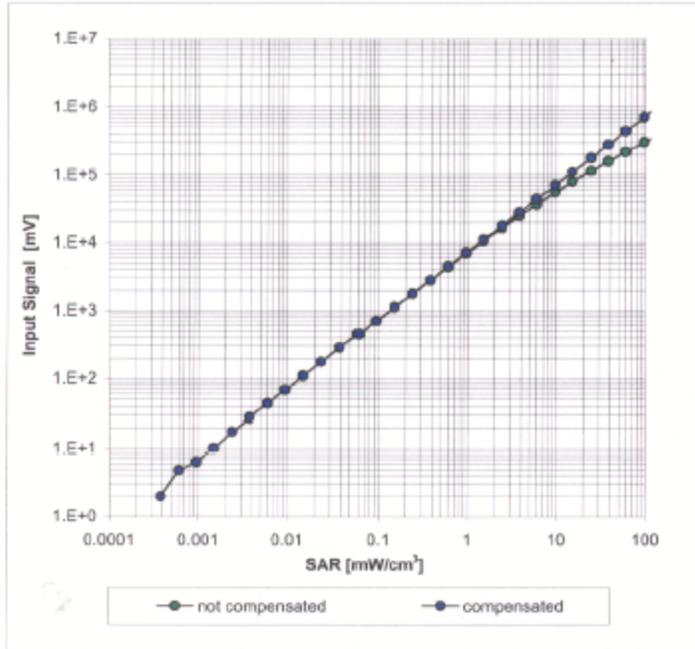


Uncertainty of Axial Isotropy Assessment:  $\pm 0.5\%$  (k=2)

ET3DV6 SN:1604

March 18, 2005

### Dynamic Range f(SAR<sub>head</sub>) (Waveguide R22, f = 1800 MHz)

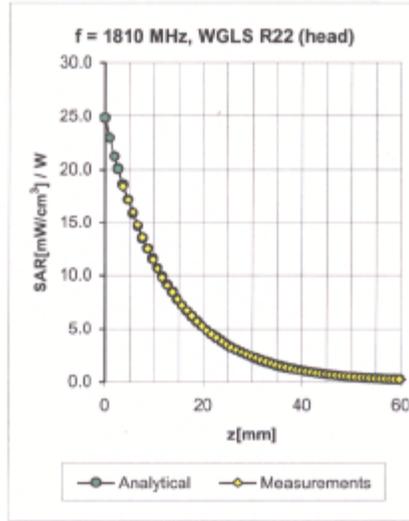
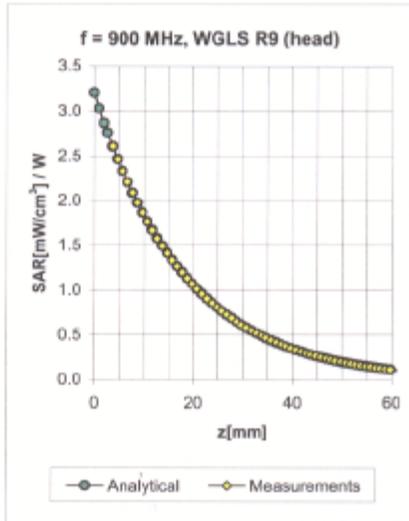


Uncertainty of Linearity Assessment: ± 0.6% (k=2)

ET3DV6 SN:1604

March 18, 2005

### Conversion Factor Assessment



f [MHz]	Validity [MHz] <sup>c</sup>	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
300	± 50 / ± 100	Head	45.3 ± 5%	0.87 ± 5%	0.10	1.14	8.44 ± 13.3% (k=2)
450	± 50 / ± 100	Head	43.5 ± 5%	0.87 ± 5%	0.10	1.10	8.10 ± 13.3% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.63	1.78	6.62 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.58	2.40	5.19 ± 11.0% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.66	2.25	4.58 ± 11.8% (k=2)
450	± 50 / ± 100	Body	56.7 ± 5%	0.94 ± 5%	0.06	1.40	7.54 ± 13.3% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.53	2.02	6.27 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.55	2.75	4.79 ± 11.0% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	0.70	2.13	4.24 ± 11.8% (k=2)

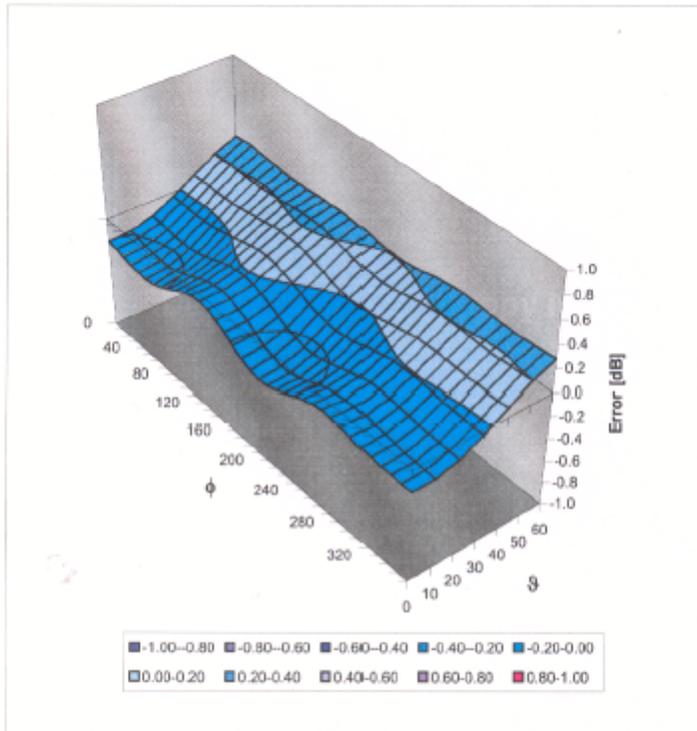
<sup>c</sup> The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

ET3DV6 SN:1604

March 18, 2005

### Deviation from Isotropy in HSL

Error ( $\phi, \theta$ ),  $f = 900$  MHz



Uncertainty of Spherical Isotropy Assessment:  $\pm 2.6\%$  ( $k=2$ )

Schmid & Partner Engineering AG

**s p e a g**

Zaughausstrasse 43, 8004 Zurich, Switzerland  
Phone +41 1 245 9700, Fax +41 1 245 9779  
info@speag.com, http://www.speag.com

### Additional Conversion Factors for Dosimetric E-Field Probe

Type:

**ET3DV6**

Serial Number:

**1604**

Place of Assessment:

**Zurich**

Date of Assessment:

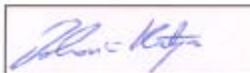
**March 21, 2005**

Probe Calibration Date:

**March 18, 2005**

Schmid & Partner Engineering AG hereby certifies that conversion factor(s) of this probe have been evaluated on the date indicated above. The assessment was performed using the FDTD numerical code SEMCAD of Schmid & Partner Engineering AG. Since the evaluation is coupled with measured conversion factors, it has to be recalculated yearly, i.e., following the re-calibration schedule of the probe. The uncertainty of the numerical assessment is based on the extrapolation from measured value at 900 MHz or at 1800 MHz.

Assessed by:



ET3DV6-SN:1604

Page 1 of 2

March 21, 2005

Schmid & Partner Engineering AG

**s p e a g**

Zeughausstrasse 43, 8004 Zurich, Switzerland  
Phone +41 1 245 9700, Fax +41 1 245 9779  
info@speag.com, http://www.speag.com

**Dosimetric E-Field Probe ET3DV6 SN:1604**

Conversion factor ( $\pm$  standard deviation)

<b>f = 150 MHz</b>	ConvF	<b>9.0 <math>\pm</math> 10%</b>	$\epsilon_r = 52.3 \pm 5\%$ $\sigma = 0.76 \pm 5\%$ mho/m (head tissue)
<b>f = 150 MHz</b>	ConvF	<b>8.6 <math>\pm</math> 10%</b>	$\epsilon_r = 61.9 \pm 5\%$ $\sigma = 0.80 \pm 5\%$ mho/m (body tissue)
<b>f = 300 MHz</b>	ConvF	<b>7.9 <math>\pm</math> 9%</b>	$\epsilon_r = 58.2 \pm 5\%$ $\sigma = 0.92 \pm 5\%$ mho/m (body tissue)

**Important Note:**

**For numerically assessed probe conversion factors, parameters Alpha and Delta in the DASY software must have the following entries: Alpha = 0 and Delta = 1.**

**Please see also Section 4.7 of the DASY4 Manual.**

# APPENDIX C – DIPOLE CALIBRATION CERTIFICATES

**Calibration Laboratory of  
Schmid & Partner  
Engineering AG**  
Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation  
The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **Bay Area (BACL)**

Certificate No: **D900V2-122\_Apr05**

## CALIBRATION CERTIFICATE

Object: **D900V2 - SN: 122**

Calibration procedure(s): **QA CAL-05.v6  
Calibration procedure for dipole validation kits**

Calibration date: **April 20, 2005**

Condition of the calibrated item: **In Tolerance**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter EPM E442	GB37480704	12-Oct-04 (METAS, No. 251-00412)	Oct-05
Power sensor HP 8481A	US37292783	12-Oct-04 (METAS, No. 251-00412)	Oct-05
Reference 20 dB Attenuator	SN: 5086 (20g)	10-Aug-04 (METAS, No 251-00402)	Aug-05
Reference 10 dB Attenuator	SN: 5047.2 (10r)	10-Aug-04 (METAS, No 251-00402)	Aug-05
Reference Probe ET3DV6	SN 1507	26-Oct-04 (SPEAG, No. ET3-1507_Oct04)	Oct-05
DAE4	SN 601	07-Jan-05 (SPEAG, No. DAE4-601_Jan05)	Jan-06
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (SPEAG, in house check Oct-03)	In house check: Oct-05
RF generator R&S SML-03	100698	27-Mar-02 (SPEAG, in house check Dec-03)	In house check: Dec-05
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (SPEAG, in house check Nov-04)	In house check: Nov-05

	<b>Name</b>	<b>Function</b>	<b>Signature</b>
Calibrated by:	<b>Mike Meili</b>	<b>Laboratory Technician</b>	<i>Mike Meili</i>
Approved by:	<b>Katja Pokovic</b>	<b>Technical Manager</b>	<i>Katja Pokovic</i>

Issued: April 25, 2005

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

**Calibration Laboratory of  
Schmid & Partner  
Engineering AG**  
Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation  
The Swiss Accreditation Service is one of the signatories to the EA  
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

**Glossary:**

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

**Calibration is Performed According to the Following Standards:**

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001
- Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

**Additional Documentation:**

- DASY4 System Handbook

**Methods Applied and Interpretation of Parameters:**

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- Feed Point Impedance and Return Loss:** These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- Electrical Delay:** One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

### Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.5
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V4.9	
Distance Dipole Center - TSL	15 mm	with Spacer
Area Scan resolution	dx, dy = 15 mm	
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	900 MHz $\pm$ 1 MHz	

### Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.97 mho/m
Measured Head TSL parameters	(22.0 $\pm$ 0.2) °C	41.4 $\pm$ 6 %	0.97 mho/m $\pm$ 6 %
Head TSL temperature during test	(22.3 $\pm$ 0.2) °C	----	----

### SAR result with Head TSL

SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL	condition	
SAR measured	250 mW input power	2.69 mW / g
SAR normalized	normalized to 1W	10.8 mW / g
SAR for nominal Head TSL parameters <sup>1</sup>	normalized to 1W	<b>10.7 mW / g <math>\pm</math> 17.0 % (k=2)</b>

SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.74 mW / g
SAR normalized	normalized to 1W	6.96 mW / g
SAR for nominal Head TSL parameters <sup>1</sup>	normalized to 1W	<b>6.95 mW / g <math>\pm</math> 16.5 % (k=2)</b>

<sup>1</sup> Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

**Appendix****Antenna Parameters with Head TSL**

Impedance, transformed to feed point	49.4 $\Omega$ - 7.9 j $\Omega$
Return Loss	- 22.0 dB

**General Antenna Parameters and Design**

Electrical Delay (one direction)	1.408 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

**Additional EUT Data**

Manufactured by	SPEAG
Manufactured on	July 4, 2001

**DASY4 Validation Report for Head TSL**

Date/Time: 20.04.2005 14:11:0

Test Laboratory: SPEAG, Zurich, Switzerland

**DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:122**

Communication System: CW-900; Frequency: 900 MHz; Duty Cycle: 1:1

Medium: HSL 900 MHz;

Medium parameters used:  $f = 900$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 41.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

**DASY4 Configuration:**

- Probe: ET3DV6 - SN1507; ConvF(5.95, 5.95, 5.95); Calibrated: 26.10.2004
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 07.01.2005
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

**Pin = 250 mW; d = 15 mm/Area Scan (81x81x1):** Measurement grid: dx=15mm, dy=15mm  
 Maximum value of SAR (interpolated) = 2.91 mW/g

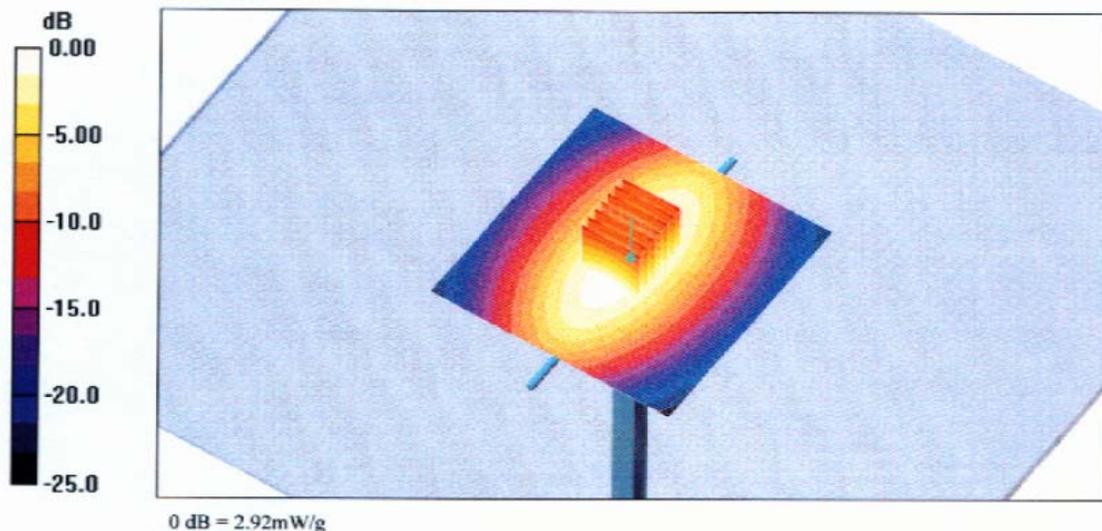
**Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.0 V/m; Power Drift = 0.037 dB

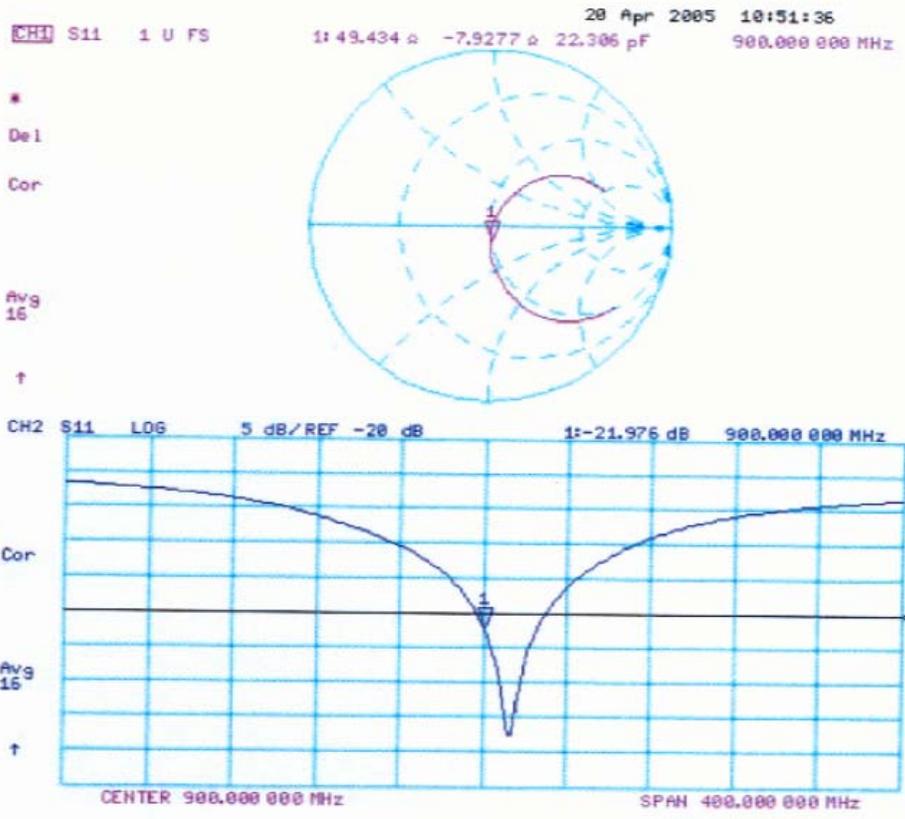
Peak SAR (extrapolated) = 3.96 W/kg

**SAR(1 g) = 2.69 mW/g; SAR(10 g) = 1.74 mW/g**

Maximum value of SAR (measured) = 2.92 mW/g



### Impedance Measurement Plot for Head TSL



## APPENDIX D - TEST SYSTEM VERIFICATIONS SCANS

### Liquid Measurement Result

2005-11-16

Simulant	Freq [MHz]	Parameters	Liquid Temp [°C]	Target Value	Measured Value	Deviation	Limits [%]
Body	835	$\epsilon_r$	22.0	55.2	56.0	1.45	±5
		$\sigma$	22.0	0.97	0.96	-1.03	±5
		1g SAR	22.0	8.872	8.24	-7.12	±10

$\epsilon_r$  = relative permittivity,  $\sigma$  = conductivity and  $\rho=1000\text{kg/m}^3$

Date/Time: 11/16/2005 4:17:19 PM

Test Laboratory: Bay Area Compliance Lab Corp.

**System Validation Check\_D835\_Body**

**DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:122**

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

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.96 \text{ mho/m}$ ;  $\epsilon_r = 56$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 10/18/2005
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**d=15mm, Pin=1W/Area Scan:** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 8.77 mW/g

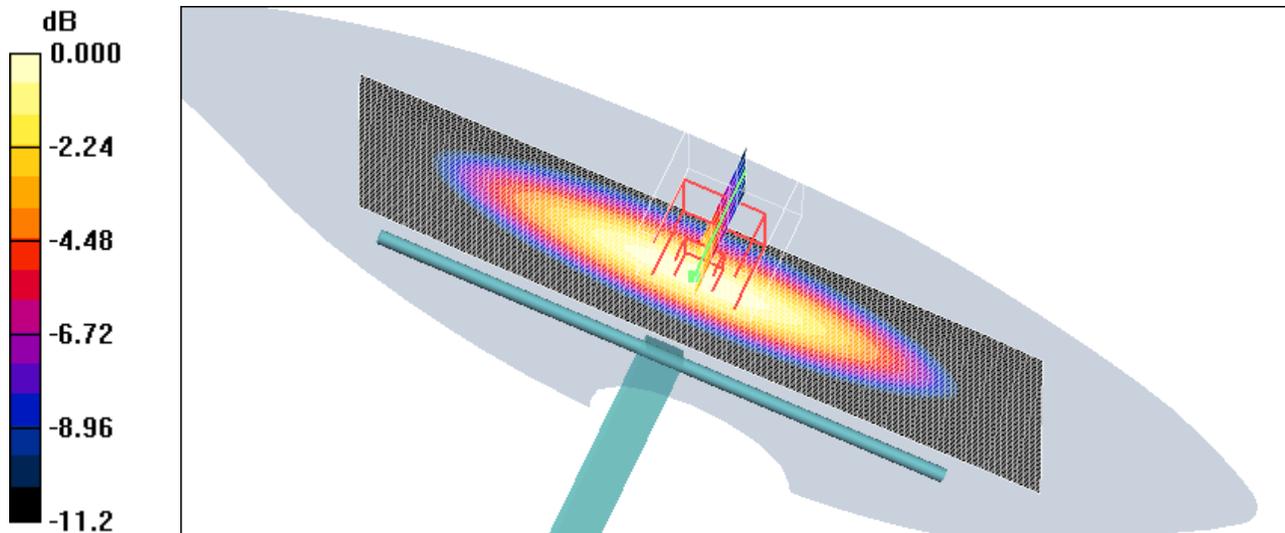
**d=15mm, Pin=1W/Zoom Scan(7x7x7):** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 100.9 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 12.3 W/kg

**SAR(1 g) = 8.24 mW/g; SAR(10 g) = 5.27 mW/g**

Maximum value of SAR (measured) = 8.92 mW/g



0 dB = 8.92mW/g

## APPENDIX E - EUT SCANS

Date/Time: 11/17/2005 1:32:54 PM

Test Laboratory: Bay Area Compliance Lab Corp.

### ZTE\_Body\_MidCH

**DUT: ZTE MC315+; Type: CDMA Network Card; Serial: 291518530050**

Communication System: CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn456; Calibrated: 10/18/2005
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body Laptop Touch MidCH Data/Area Scan:** Measurement grid: dx=15mm, dy=15mm

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

**Body Laptop Touch MidCH Data/Z Scan:** Measurement grid: dx=20mm, dy=20mm, dz=10mm

Maximum value of SAR (interpolated) = 0.085 mW/g

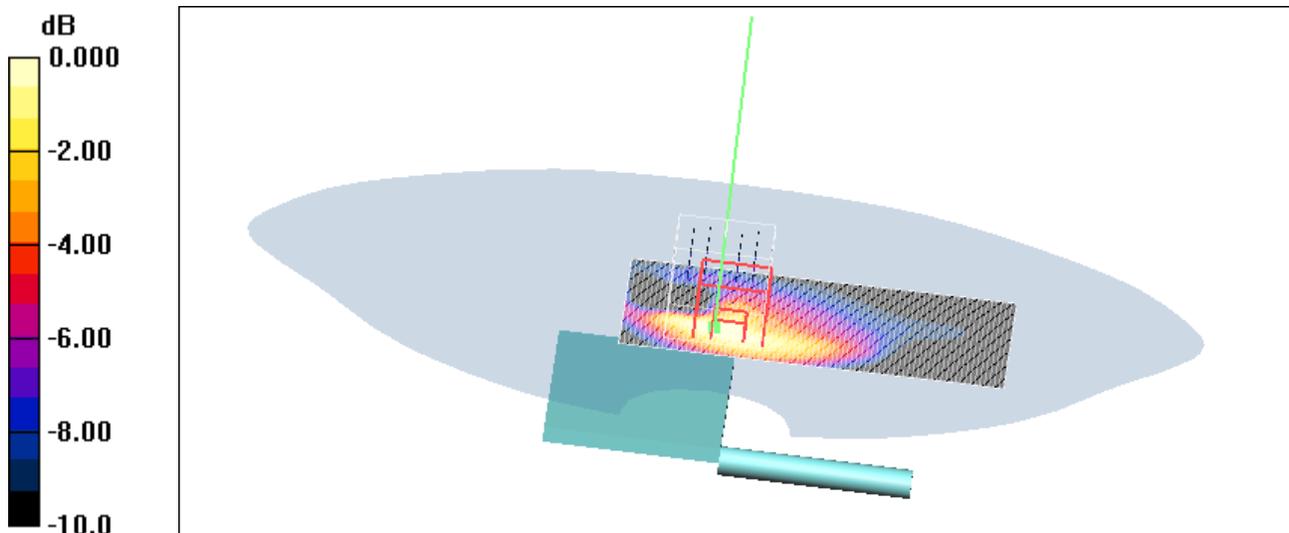
**Body Laptop Touch MidCH Data/Zoom Scan:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.69 V/m; Power Drift = 0.13 dB

Peak SAR (extrapolated) = 0.243 W/kg

**SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.079 mW/g**

Maximum value of SAR (measured) = 0.150 mW/g



0 dB = 0.150mW/g

Plot # 1

Date/Time: 11/17/2005 2:38:39 PM

Test Laboratory: Bay Area Compliance Lab Corp.

**ZTE\_Body\_MidCH****DUT: ZTE MC315+; Type: CDMA Network Card; Serial: 291518530050**

Communication System: CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn456; Calibrated: 10/18/2005
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body Laptop Touch MidCH Voice/Area Scan:** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.173 mW/g

**Body Laptop Touch MidCH Voice/Z Scan:** Measurement grid: dx=20mm, dy=20mm, dz=10mm

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

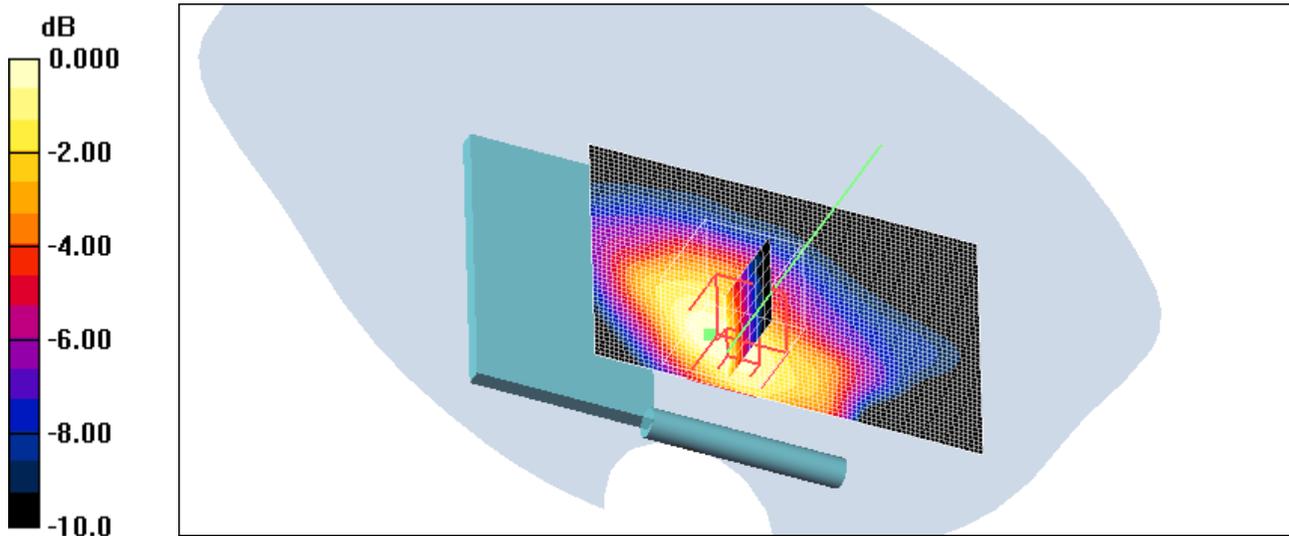
**Body Laptop Touch MidCH Voice/Zoom Scan:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.23 V/m; Power Drift = -0.095 dB

Peak SAR (extrapolated) = 0.295 W/kg

**SAR(1 g) = 0.154 mW/g; SAR(10 g) = 0.090 mW/g**

Maximum value of SAR (measured) = 0.172 mW/g



0 dB = 0.172mW/g

**Plot #2**

Test Laboratory: Bay Area Compliance Lab Corp.

### ZTE\_Body\_MidCH

**DUT: ZTE MC315+; Type: CDMA Network Card; Serial: 291518530050**

Communication System: CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 10/18/2005
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body Averatec Laptop Touch MidCH Data/Area Scan:** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.091 mW/g

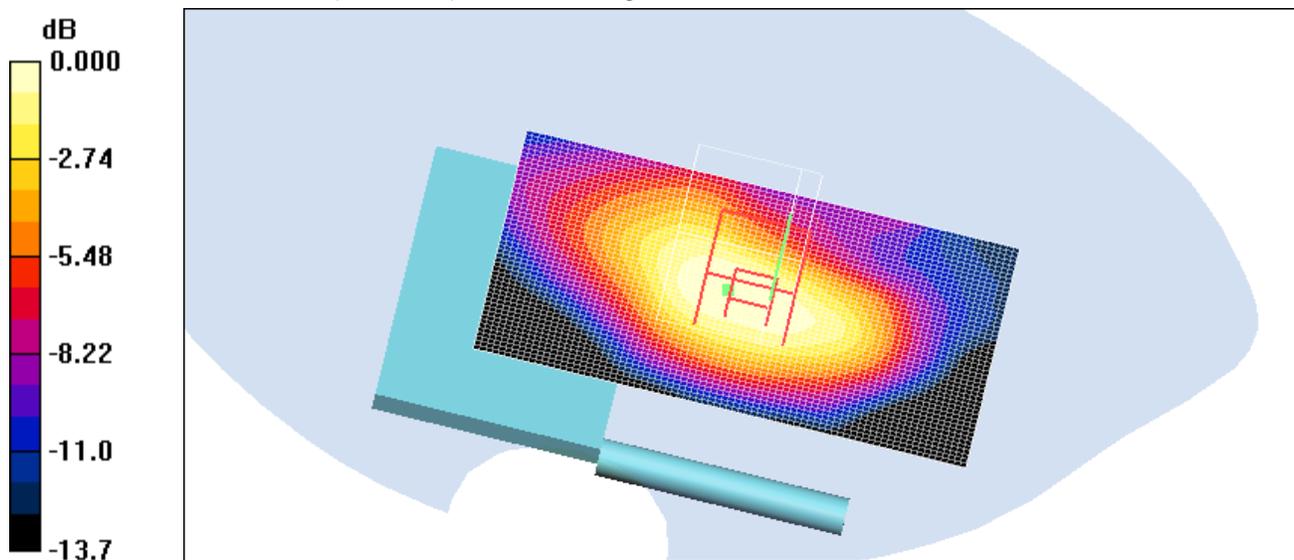
**Body Averatec Laptop Touch MidCH Data/Zoom Scan (7x7x7):** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.88 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 0.122 W/kg

**SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.047 mW/g**

Maximum value of SAR (measured) = 0.087 mW/g



0 dB = 0.087mW/g

**Plot #3**

Date/Time: 11/17/2006 5:24:37 PM

Test Laboratory: Bay Area Compliance Lab Corp.

**ZTE\_Body\_MidCH****DUT: ZTE MC315+; Type: CDMA Network Card; Serial: 291518530050**

Communication System: CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn456; Calibrated: 10/18/2005
- Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body Averatec Laptop Touch MidCH Voice/Area Scan:** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.114 mW/g

**Body Averatec Laptop Touch MidCH Voice/Zoom Scan (7x7x7):** Measurement grid: dx=5mm,

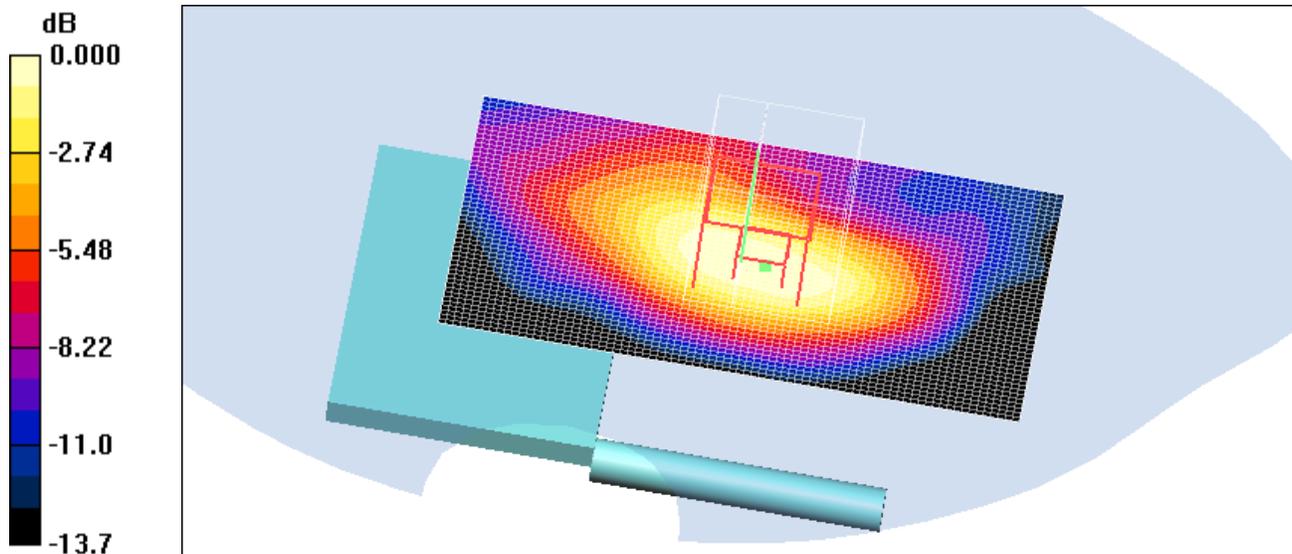
dy=5mm, dz=5mm

Reference Value = 6.25 V/m; Power Drift = 0.494 dB

Peak SAR (extrapolated) = 0.159 W/kg

**SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.061 mW/g**

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



0 dB = 0.111mW/g

**Plot #4**

Date/Time: 11/17/2005 3:45:58 PM

Test Laboratory: Bay Area Compliance Lab Corp.

ZTE\_Body\_MidCH

**DUT: ZTE MC315+; Type: CDMA Network Card; Serial: 291518530050**

Communication System: CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn456; Calibrated: 10/18/2005

Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body Compaq Laptop Touch MidCH Data/Area Scan:** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.107 mW/g

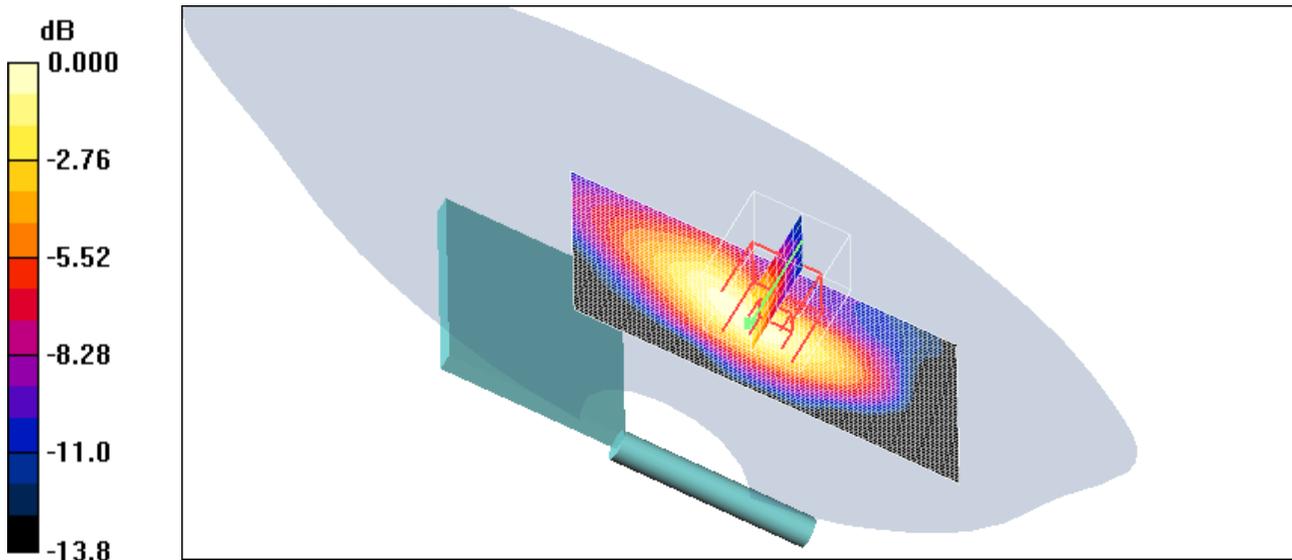
**Body Compaq Laptop Touch MidCH Data/Zoom Scan (7x7x7):** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.89 V/m; Power Drift = 0.069 dB

Peak SAR (extrapolated) = 0.183 W/kg

**SAR(1 g) = 0.104 mW/g; SAR(10 g) = 0.061 mW/g**

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



0 dB = 0.115mW/g

**Plot #5**

Date/Time: 11/17/2005 4:27:50 PM

Test Laboratory: Bay Area Compliance Lab Corp.

ZTE\_Body\_MidCH

**DUT: ZTE MC315+; Type: CDMA Network Card; Serial: 291518530050**

Communication System: CDMA; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 836.52$  MHz;  $\sigma = 0.97$  mho/m;  $\epsilon_r = 56.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1604; ConvF(6.27, 6.27, 6.27); Calibrated: 3/18/2005

Sensor-Surface: 4mm (Mechanical Surface Detection)

Electronics: DAE3 Sn456; Calibrated: 10/18/2005

Phantom: SAM with CRP; Type: Twin SAM; Serial: TP-1032

Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body Compaq Laptop Touch MidCH Voice/Area Scan:** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (interpolated) = 0.136 mW/g

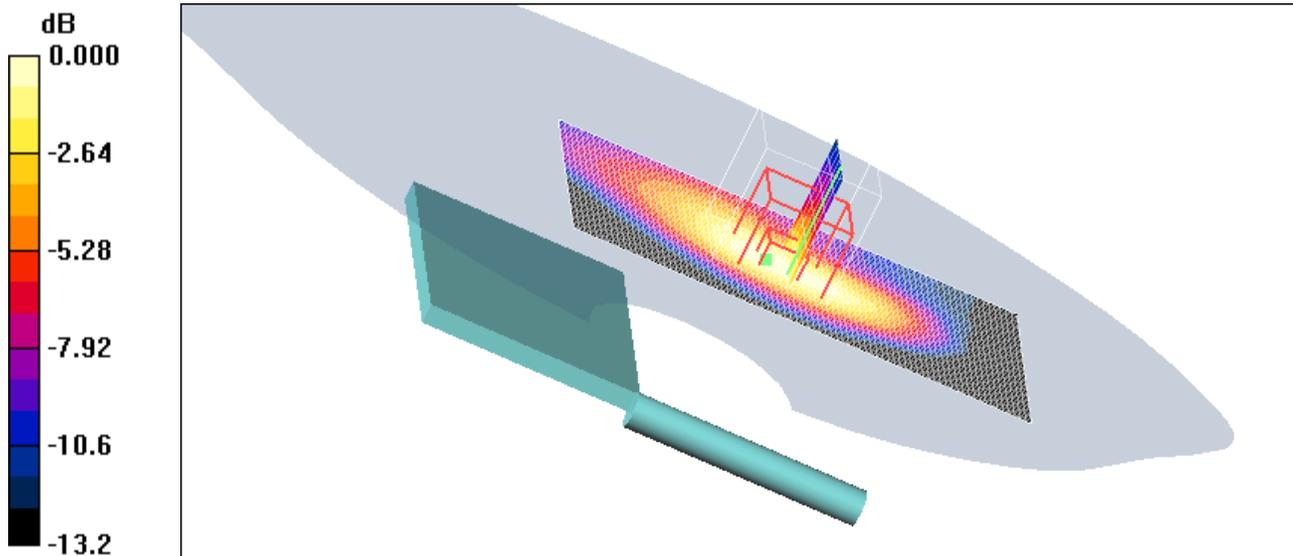
**Body Compaq Laptop Touch MidCH Voice/Zoom Scan (7x7x7):** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.95 V/m; Power Drift = 0.419 dB

Peak SAR (extrapolated) = 0.212 W/kg

**SAR(1 g) = 0.126 mW/g; SAR(10 g) = 0.077 mW/g**

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



0 dB = 0.140mW/g

**Plot #6**

## **APPENDIX F – CONDUCTED OUTPUT POWER MEASUREMENT**

### **Provision Applicable**

The measured peak output power should be greater and within 5% than EMI measurement.

### **Test Procedure**

The RF output of the transmitter was connected to the input of the spectrum analyzer through sufficient attenuation.

### **Test equipment**

<b>Manufacturer</b>	<b>Description</b>	<b>Model</b>	<b>Serial Number</b>	<b>Cal. Date</b>
Agilent	Spectrum Analyzer	E4446A	US44300386	2005-11-10

### **Test Results**

<b>Channel</b>	<b>Frequency (MHz)</b>	<b>Output Power in dBm</b>	<b>Output Power in W</b>	<b>Limit in W</b>
MIDDLE	836.52	24.55	0.285	7

## APPENDIX G – EUT TEST POSITION PHOTOS

### Laptop Touch 1

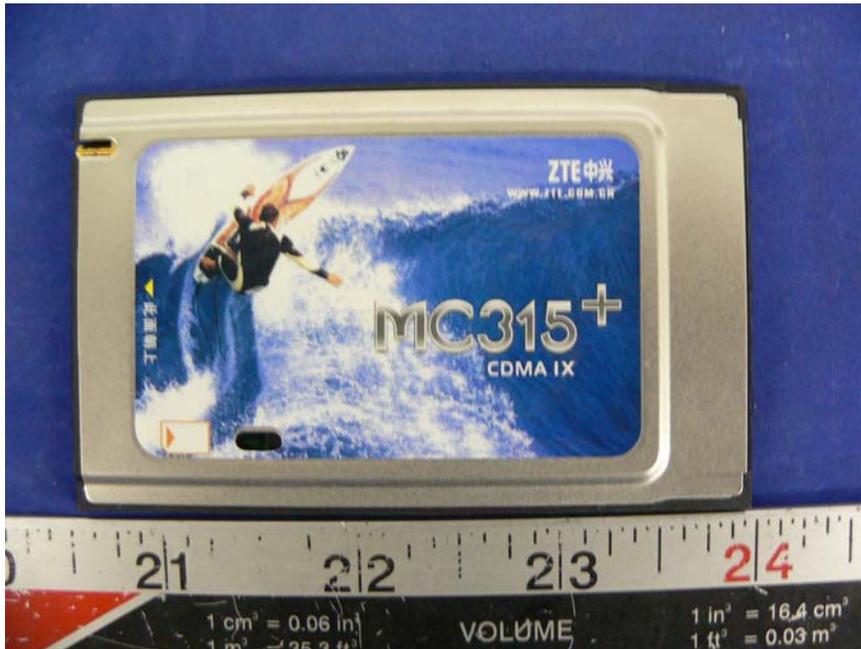


### Laptop Touch 2



## APPENDIX H – EUT & ACCESSORIES PHOTOS

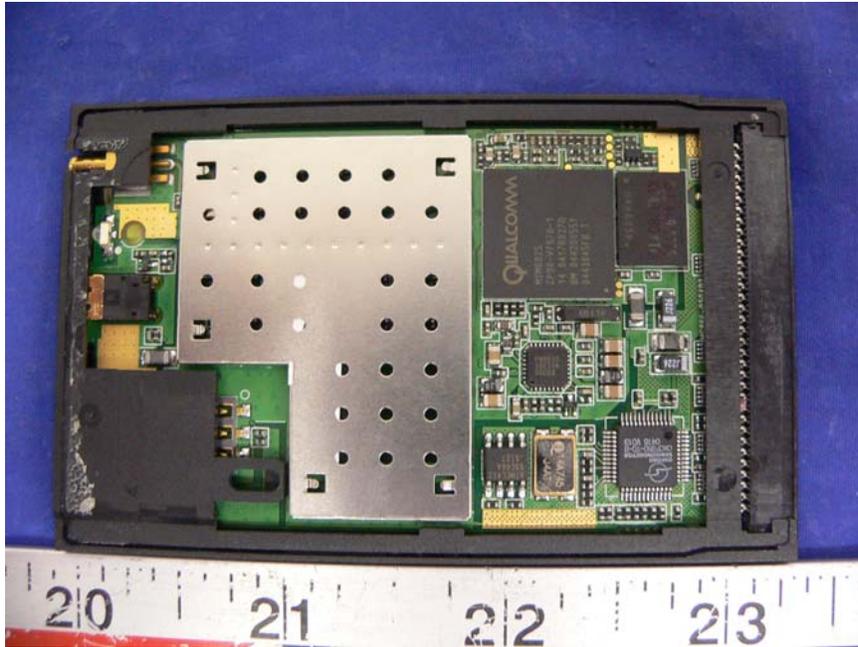
### EUT - Front View



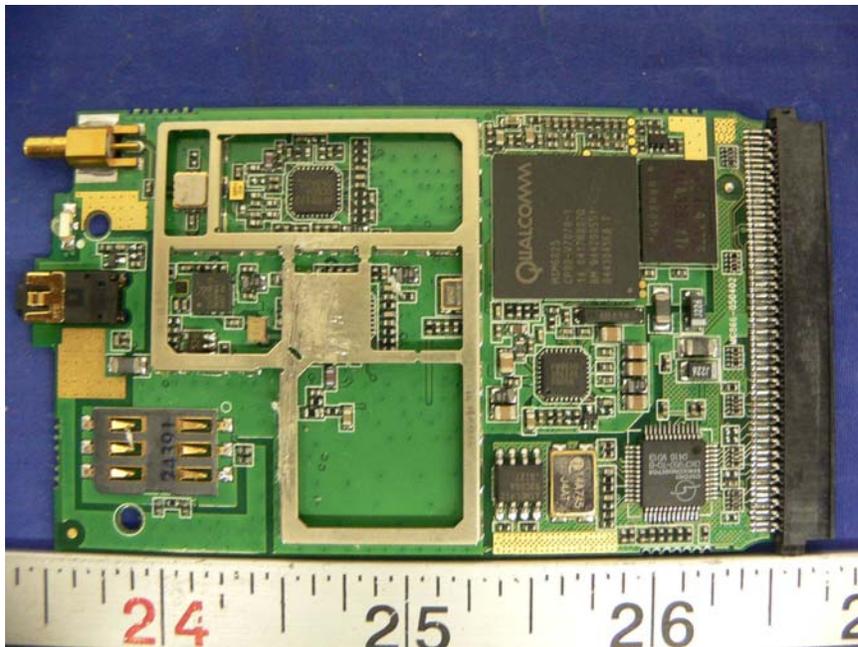
### EUT – Rear View



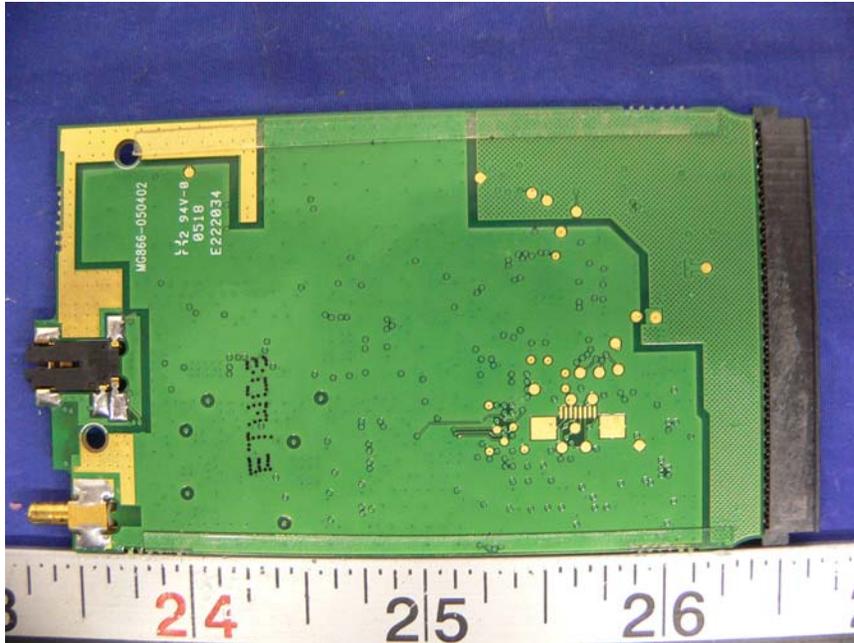
**EUT – Cover off View**



**EUT – Component View**



**EUT – Solder View**



**EUT – Port View 1**



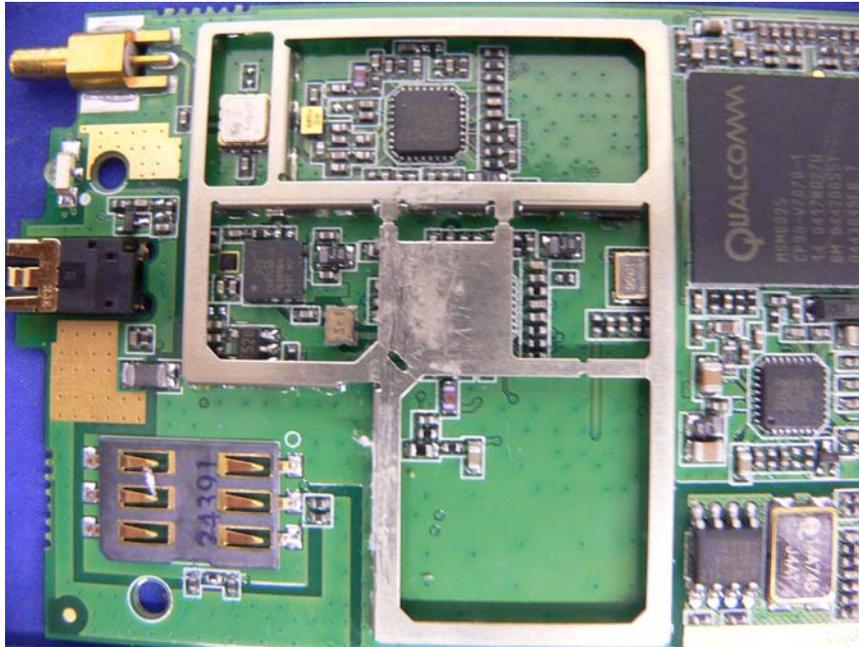
**EUT – Port View 2**



**EUT – Port View 3**



### EUT – Transmitter Closer View



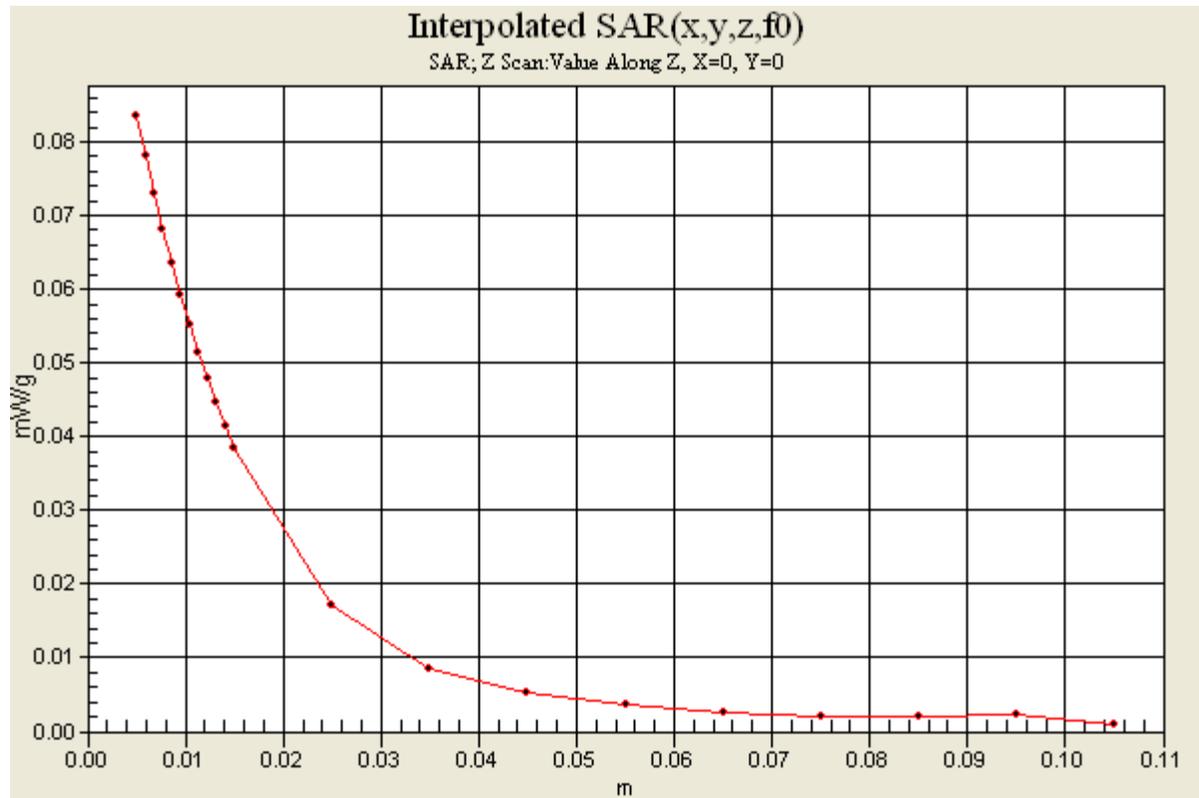
### Antenna View



### Earphone View



### APPENDIX I – Z AXIS



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## APPENDIX J- INFORMATIVE REFERENCES

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