Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	49.4 Ω - 7.9 jΩ
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 14:11:07

Test Laboratory: SPEAG, Zurich, Switzerland

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

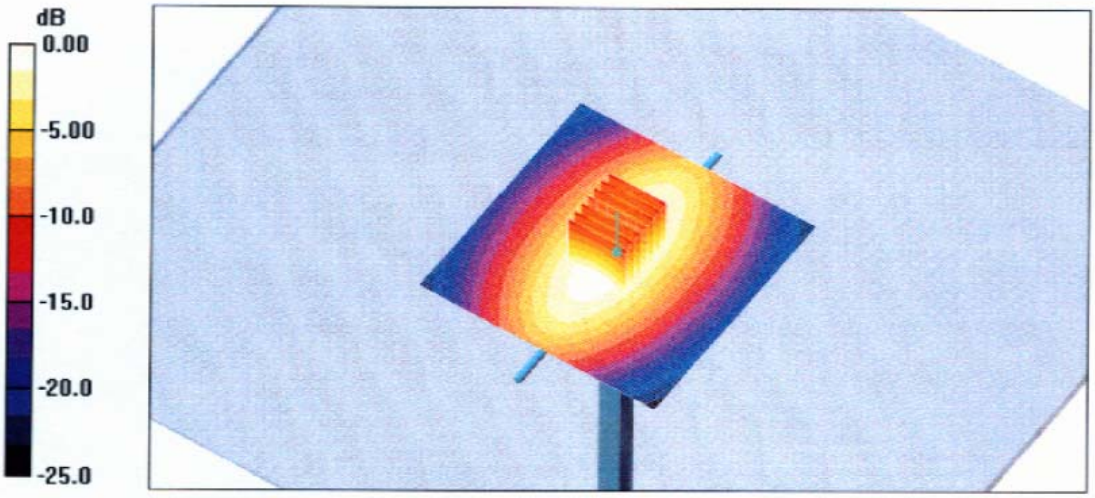
Communication System: CW-900; Frequency: 900 MHz;Duty Cycle: 1:1
Medium: HSL 900 MHz;
Medium parameters used: f = 900 MHz; σ = 0.97 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY4 (High Precision Assessment)

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

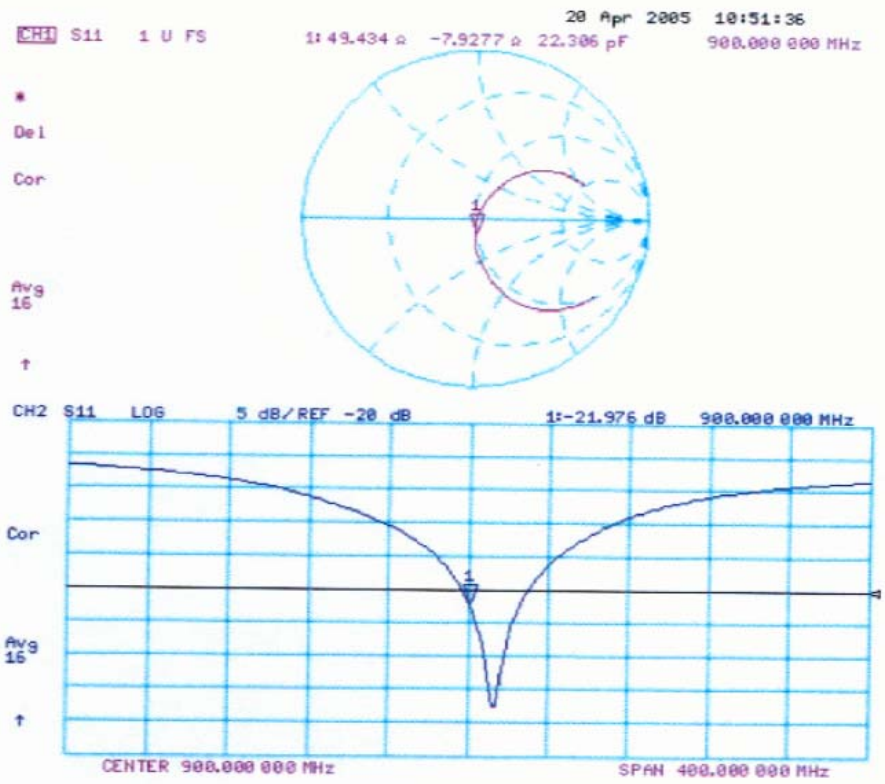
Pin = 250 mW; d = 15 mm/Area Scan (81x81x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 2.91 mW/g

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



Certificate No: D900V2-122_Apr05 Page 5 of 6

Impedance Measurement Plot for Head TSL



Certificate No: D900V2-122_Apr05 Page 6 of 6

NCL CALIBRATION LABORATORIES

Calibration File No: DC-0267
Project Number: BACL-CAL2450-3985

CERTIFICATE OF CALIBRATION

It is certified that the equipment identified below has been calibrated in the **NCL CALIBRATION LABORATORIES** by qualified personnel following recognized procedures and using transfer standards traceable to NRC/NIST.

BACL Validation Dipole

Manufacturer: APREL Laboratories
Part number: D-1800-S-1
Frequency: 1800 MHz
Serial No: BCL-049

Customer: Bay Area Compliance Laboratory

Calibrated: 4th March 2005
Released on: 4th March 2005

Released By: _____

NCL CALIBRATION LABORATORIES
51 SPECTRUM WAY
NEPEAN, ONTARIO
CANADA K2R 1E6
Division of APREL Lab.
TEL: (613) 820-4988
FAX: (613) 820-4161

NCL Calibration Laboratories
Division of APREL Laboratories.

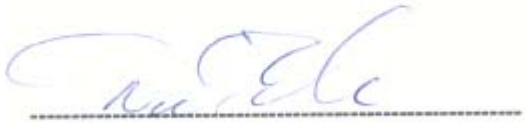
Conditions

Dipole BCL-049 received from customer, with the attribute of having a repair to one radial arm, in good condition for re-calibration. SMA connector cleaned prior to calibration.

Ambient Temperature of the Laboratory: 22 °C +/- 0.5°C
Temperature of the Tissue: 21 °C +/- 0.5°C

We the undersigned attest that to the best of our knowledge the calibration of this device has been accurately conducted and that all information contained within this report has been reviewed for accuracy.

Stuart Nicol
Director Product Development



D. Brooks
Member of Engineering Staff
(Calibration Engineer)

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

Calibration Results Summary

The following results relate the Calibrated Dipole and should be used as a quick reference for the user.

Mechanical Dimensions

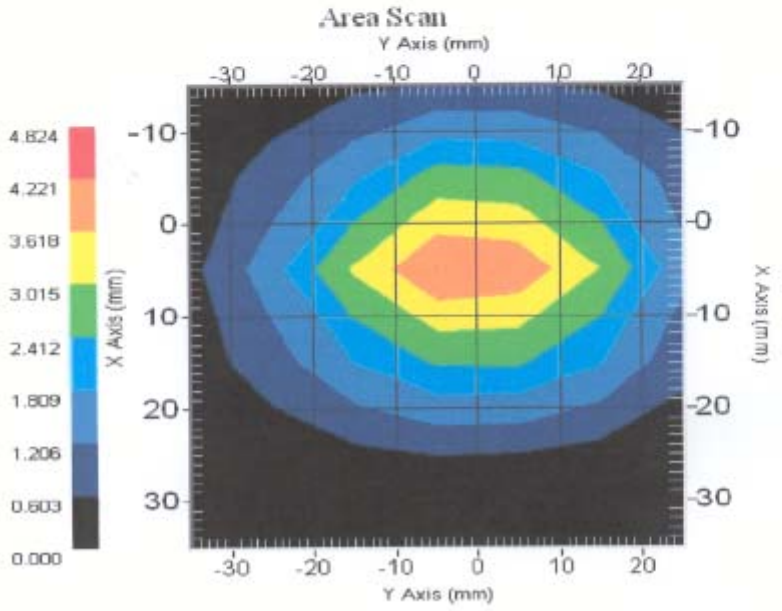
Length:	72.0 mm
Height:	41.7 mm

Electrical Specification

SWR:	1.09 U
Return Loss:	-26.9 dB
Impedance:	50.9 Ω

System Validation Results

Frequency	1 Gram	10 Gram	Peak
1800 MHz	38.81	20.01	71.56



3

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

Introduction

This Calibration Report has been produced in line with the SSI Dipole Calibration Procedure SSI-TP-018-ALSAS. The results contained within this report are for Validation Dipole BCL-049. The calibration routine consisted of a three-step process. Step 1 was a mechanical verification of the dipole to ensure that it meets the mechanical specifications. Step 2 was an Electrical Calibration for the Validation Dipole, where the SWR, Impedance, and the Return loss were assessed. Step 3 involved a System Validation using the ALSAS-10U, along with APREL E-020 130 MHz to 26 GHz E-Field Probe Serial Number 212.

References

SSI-TP-018-ALSAS Dipole Calibration Procedure
SSI-TP-016 Tissue Calibration Procedure
IEEE 1528 "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Body Due to Wireless Communications Devices: Experimental Techniques"

Conditions

Dipole BCL-049 received from customer in good condition, with the attribute of a repair of one radial arm.

Ambient Temperature of the Laboratory:	22 °C +/- 0.5°C
Temperature of the Tissue:	20 °C +/- 0.5°C

4

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

Dipole Calibration Results

Mechanical Verification

APREL Length	APREL Height	Measured Length	Measured Height
72.0 mm	41.7 mm	71.6 mm	41.7 mm

Tissue Validation

Head Tissue 1800 MHz	Measured
Dielectric constant, ε_r	40.0
Conductivity, σ [S/m]	1.40

5

This page has been reviewed for content and attested to by signature within this document.

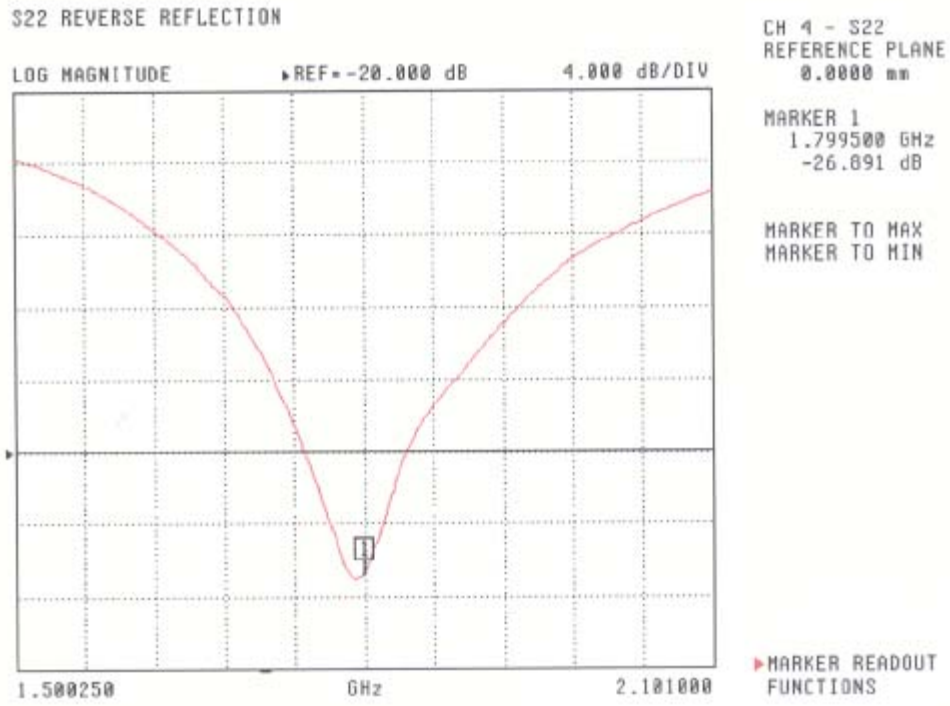
NCL Calibration Laboratories
Division of APREL Laboratories.

Electrical Calibration

Test	Result
S11 R/L	-26.9 dB
SWR	1.09 U
Impedance	50.9 Ω

The Following Graphs are the results as displayed on the Vector Network Analyzer.

S11 Parameter Return Loss

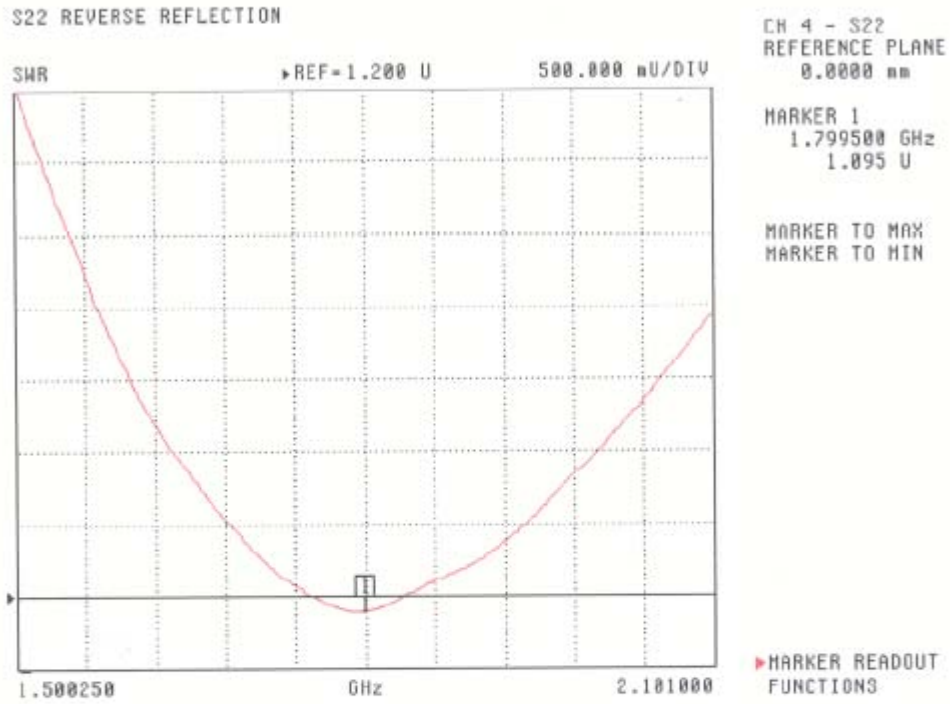


6

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

SWR

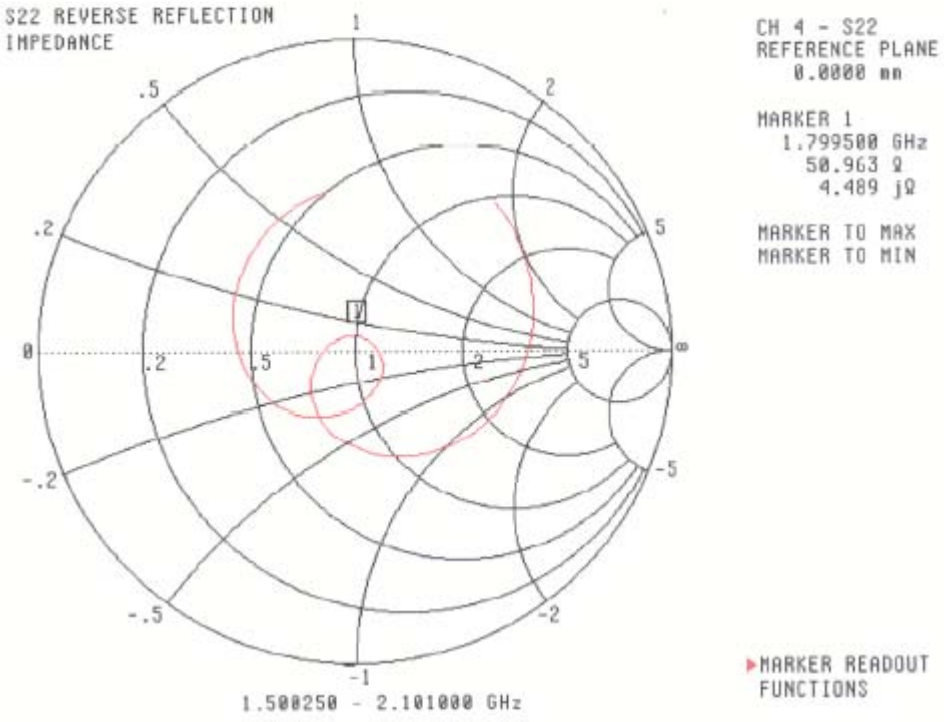


7

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

Smith Chart Dipole Impedance



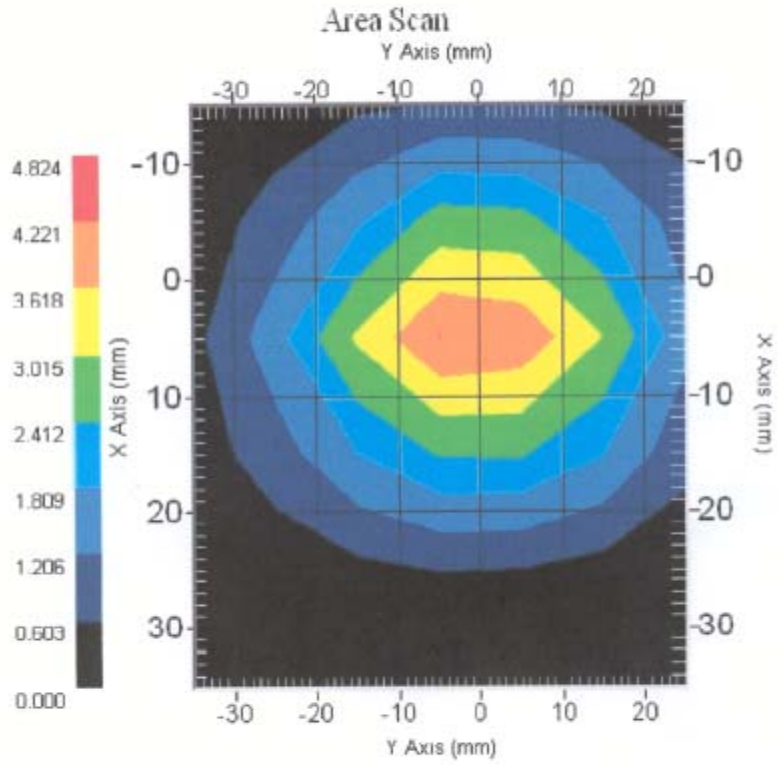
8

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

System Validation Results Using the Electrically Calibrated Dipole

Head Tissue Frequency	1 Gram	10 Gram	Peak Above Feed Point
1800 MHz	38.81	20.01	71.56



9

This page has been reviewed for content and attested to by signature within this document.

NCL Calibration Laboratories
Division of APREL Laboratories.

Test Equipment

The test equipment used during Probe Calibration, manufacturer, model number and, current calibration status are listed and located on the main APREL server R:\NCL\Calibration Equipment\Instrument List May 2004

This page has been reviewed for content and attested to by signature within this document.

APPENDIX D - TEST SYSTEM VERIFICATIONS SCANS

Liquid Measurement Result

2005-11-03

Simulant	Freq [MHz]	Parameters	Liquid Temp [ºC]	Target Value	Measured Value	Deviation	Limits [%]
Body	835	ε_r	22.0	55.2	56.0	1.45	±5
		σ	22.0	0.97	0.97	0	±5
		1g SAR	22.0	8.848	9.42	6.46	±10
Head	835	ε_r	22.0	41.5	41.6	0.24	±5
		σ	22.0	0.90	0.90	0	±5
		1g SAR	22.0	9.5	9.29	-2.21	±10

ε_r = relative permittivity, σ = conductivity and ρ=1000kg/m^3

2005-11-04

Simulant	Freq [MHz]	Parameters	Liquid Temp [ºC]	Target Value	Measured Value	Deviation	Limits [%]
Body	1900	ε_r	22.0	53.3	51.4	-3.56	±5
		σ	22.0	1.52	1.59	4.61	±5
		1g SAR	22.0	24.97	26.0	4.12	±10
Head	1900	ε_r	22.0	40.0	39.5	-1.25	±5
		σ	22.0	1.4	1.37	-2.14	±5
		1g SAR	22.0	39.7	37.0	-6.8	±10

ε_r = relative permittivity, σ = conductivity and ρ=1000kg/m^3

Date/Time: 11/3/2005 2:52:13 PM

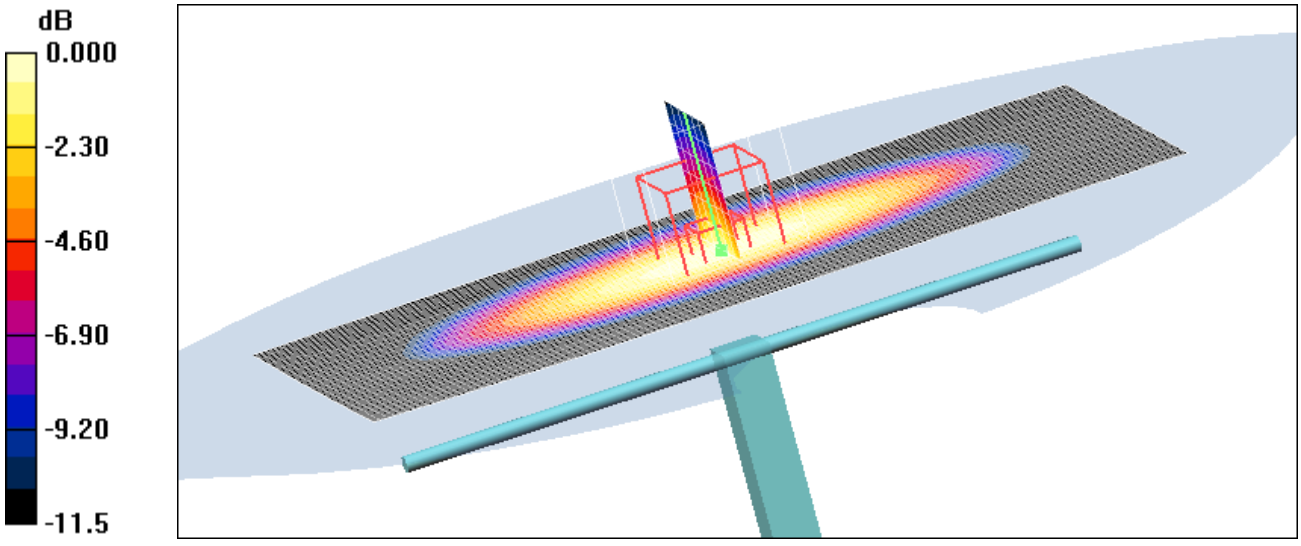
Test Laboratory: Bay Area Compliance Lab Corp.

SystemValidationCheck_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 MHz; σ = 0.97 mho/m; ε_r = 56; ρ = 1000 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) = 10.0 mW/g

d=15mm, Pin=1W/Zoom Scan (5x5x5): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 107.1 V/m; Power Drift = -0.067 dB
Peak SAR (extrapolated) = 14.7 W/kg
SAR(1 g) = 9.42 mW/g; SAR(10 g) = 5.87 mW/g
Maximum value of SAR (measured) = 10.3 mW/g



0 dB = 10.3mW/g

Date/Time: 11/3/2005 10:07:29 AM

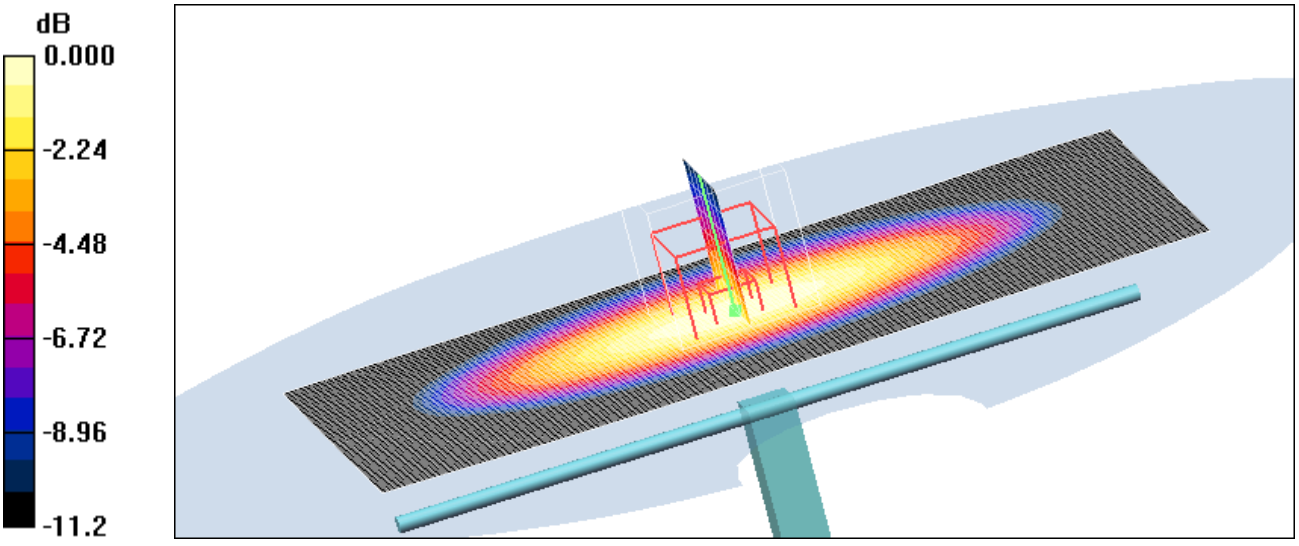
Test Laboratory: Bay Area Compliance Lab Corp.

SystemValidationCheck_D835_Head
DUT: Dipole 900 MHz; Type: D900V2; Serial: SN:122
Communication System: CW; Frequency: 835 MHz;Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.62, 6.62, 6.62); 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) = 10.1 mW/g

d=15mm, Pin=1W/Zoom Scan (5x5x5): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 112.6 V/m; Power Drift = -0.261 dB
Peak SAR (extrapolated) = 14.5 W/kg
SAR(1 g) = 9.29 mW/g; SAR(10 g) = 5.86 mW/g
Maximum value of SAR (measured) = 10.1 mW/g



0 dB = 10.1mW/g

Date/Time: 11/4/2005 8:55:07 AM

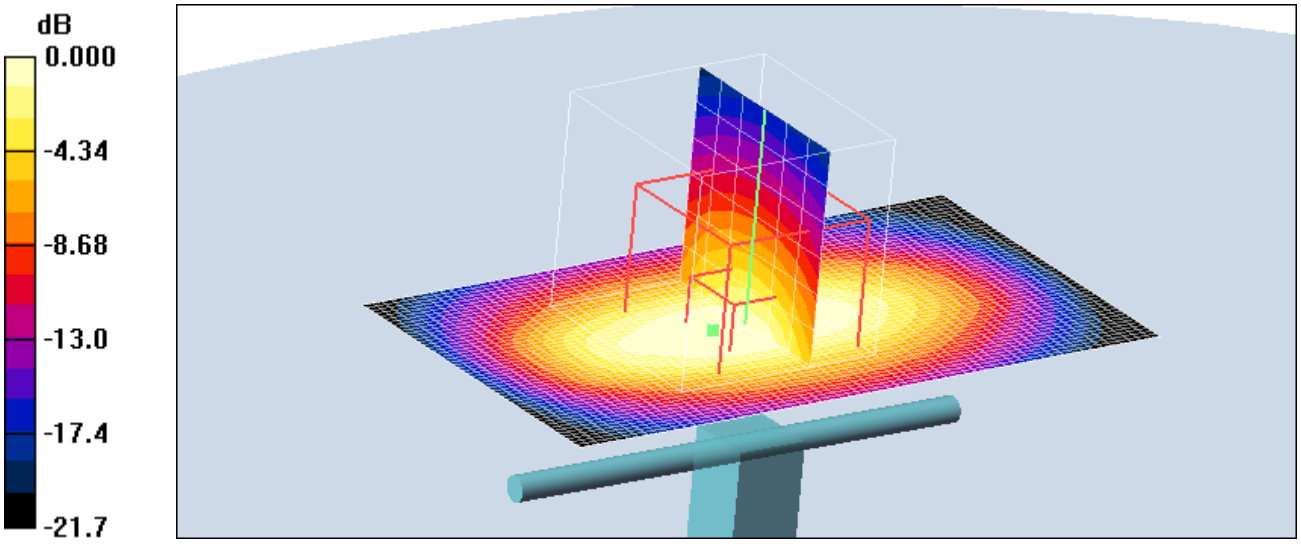
Test Laboratory: Bay Area Compliance Lab Corp.

SystemValidationCheck_D1900_Body
DUT: Dipole 1800 MHz; Type: D1800S2; Serial: BCL-049
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.59 mho/m; ε_r = 51.4; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(4.79, 4.79, 4.79); 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=10mm, Pin=1W/Area Scan: Measurement grid: dx=10mm, dy=15mm
Maximum value of SAR (interpolated) = 33.6 mW/g

d=10mm, Pin=1W/Zoom Scan (5x5x5): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 145.3 V/m; Power Drift = -0.131 dB
Peak SAR (extrapolated) = 51.2 W/kg
SAR(1 g) = 26 mW/g; SAR(10 g) = 12.5 mW/g
Maximum value of SAR (measured) = 29.4 mW/g



0 dB = 29.4mW/g

Date/Time: 11/4/2005 12:32:14 PM

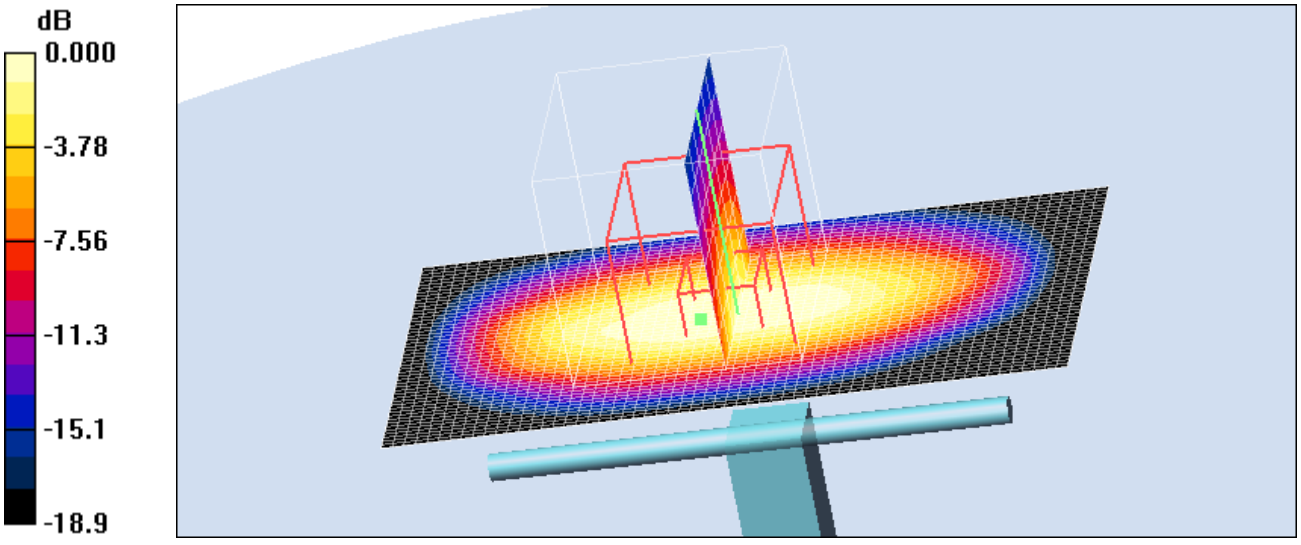
Test Laboratory: Bay Area Compliance Lab Corp.

SystemValidationCheck_D1900_Head
DUT: Dipole 1800 MHz; Type: D1800S2; Serial: BCL-049
Communication System: CW; Frequency: 1900 MHz;Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.37 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(5.19, 5.19, 5.19); 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=10mm, Pin=1W/Area Scan: Measurement grid: dx=10mm, dy=15mm
Maximum value of SAR (interpolated) = 46.8 mW/g

d=10mm, Pin=1W/Zoom Scan (5x5x5): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 184.8 V/m; Power Drift = -0.066 dB
Peak SAR (extrapolated) = 73.2 W/kg
SAR(1 g) = 37 mW/g; SAR(10 g) = 18.1 mW/g
Maximum value of SAR (measured) = 43.2 mW/g



0 dB = 43.2mW/g

APPENDIX E - EUT SCANS

Date/Time: 11/3/2005 3:57:21 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Body 850

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

Communication System: CDMA 835; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.97 mho/m; ε_r = 56; ρ = 1000 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

1.5cm from phantom , Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.044 mW/g

1.5cm from phantom , Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

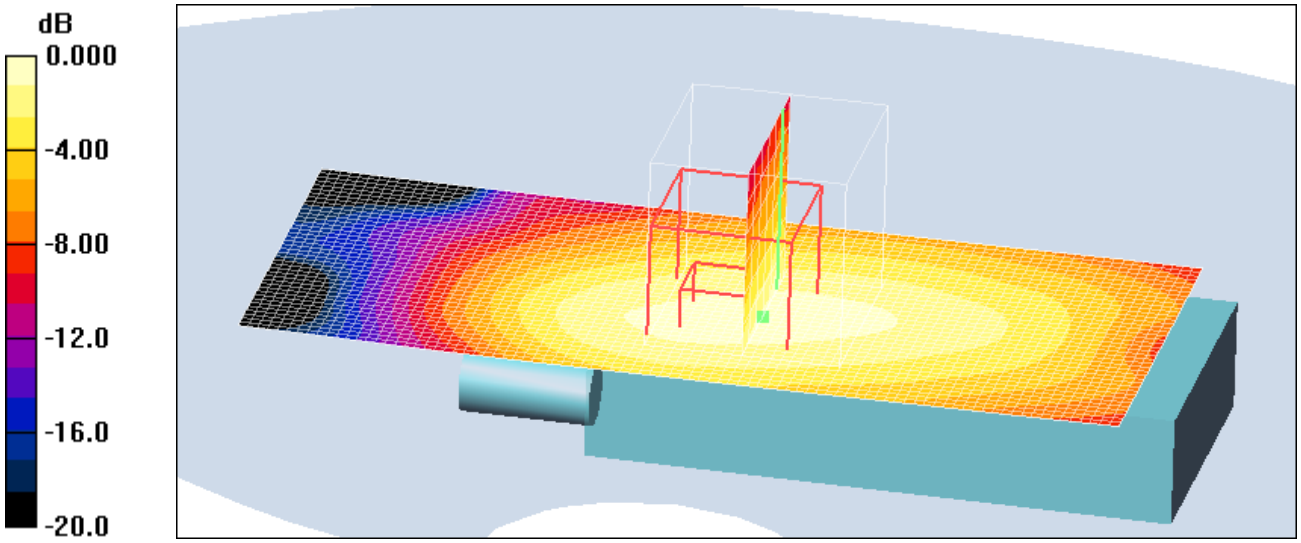
Reference Value = 6.09 V/m; Power Drift = -0.094 dB

Peak SAR (extrapolated) = 0.064 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.026 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.051 mW/g



0 dB = 0.051mW/g

Plot #1

Date/Time: 11/3/2005 11:38:37 AM

Test Laboratory: Bay Area Compliance Lab Corp.

Left Head 850 Touch

DUT: Amoi V810; Type: Cellular Phone; Serial: 001

Communication System: CDMA 835; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.90 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.62, 6.62, 6.62); 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

Touch Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.041 mW/g

Touch Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

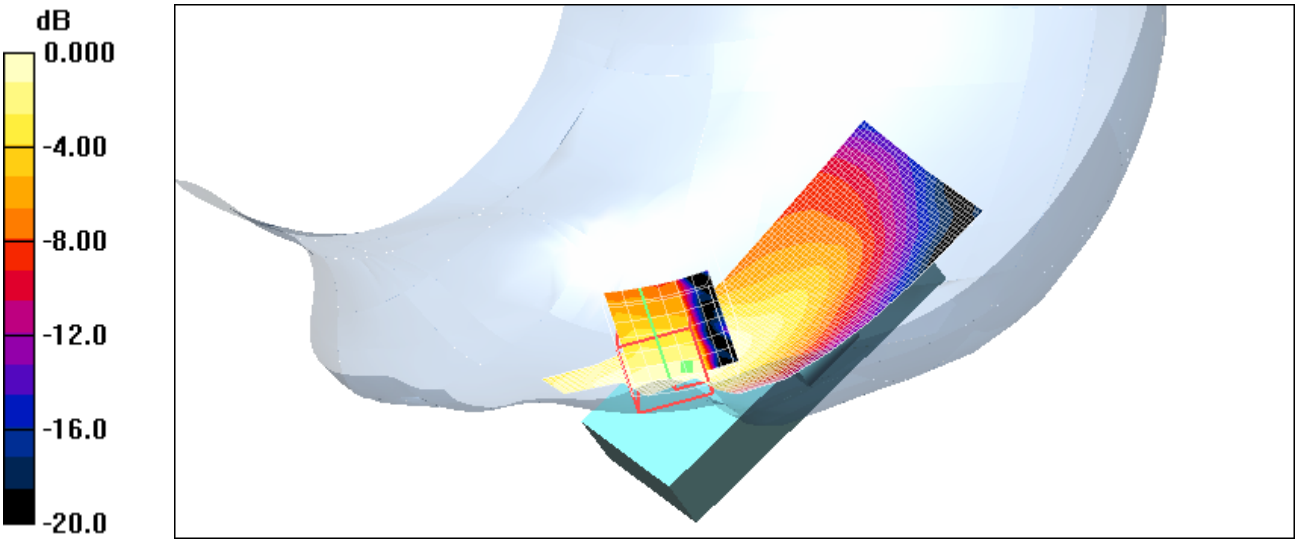
Reference Value = 2.36 V/m; Power Drift = 0.175 dB

Peak SAR (extrapolated) = 0.061 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.027 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.042 mW/g



0 dB = 0.042mW/g

Plot #2

Date/Time: 11/3/2005 12:10:54 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Left Head 850 Tilt

DUT: Amoi V810; Type: Cellular Phone; Serial: 001

Communication System: CDMA 835; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.90 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.62, 6.62, 6.62); 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

Tilt Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.029 mW/g

Tilt Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

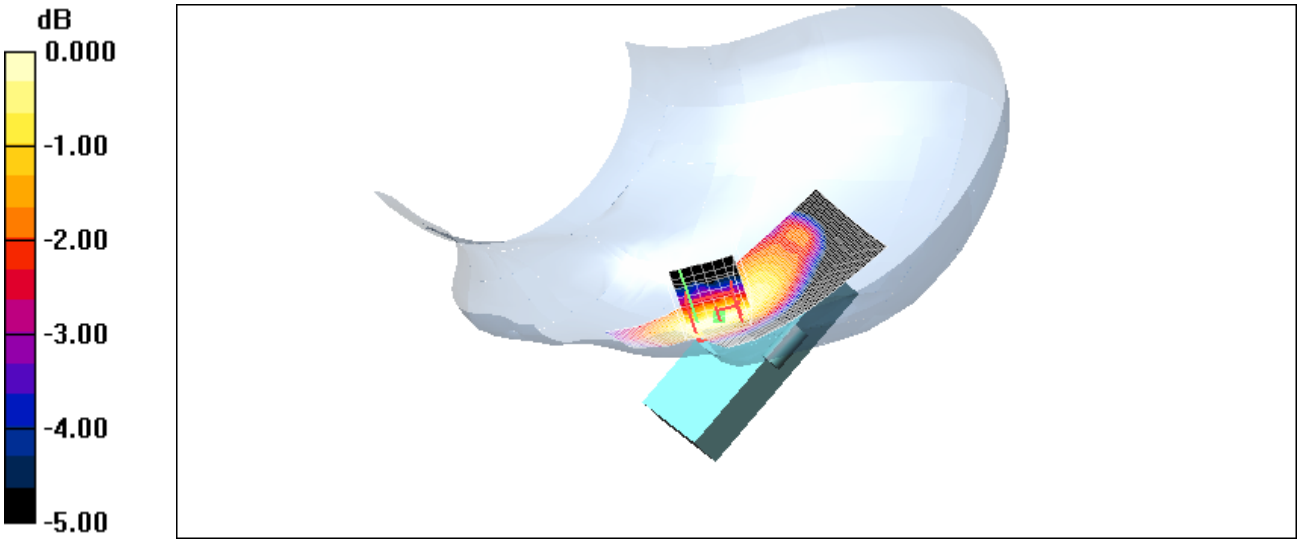
Reference Value = 4.42 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 0.038 W/kg

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.021 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.030 mW/g



0 dB = 0.030mW/g

Plot #3

Date/Time: 11/3/2005 1:00:03 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Right Head 850 Touch

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

Communication System: CDMA 835; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.90 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.62, 6.62, 6.62); 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

Touch Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.050 mW/g

Touch Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

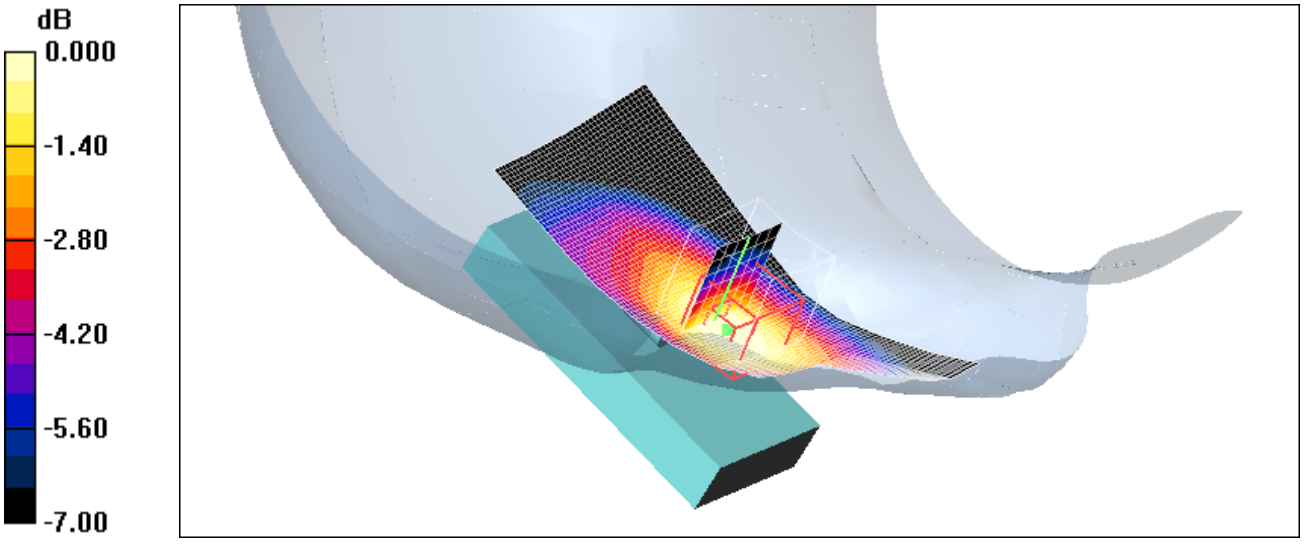
Reference Value = 3.56 V/m; Power Drift = 0.264 dB

Peak SAR (extrapolated) = 0.066 W/kg

SAR(1 g) = 0.046 mW/g; SAR(10 g) = 0.032 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



0 dB = 0.048mW/g

Plot #4

Date/Time: 11/3/2005 1:29:29 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Right Head 850 Tilt

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

Communication System: CDMA 835; Frequency: 836.52 MHz;Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.52 MHz; σ = 0.90 mho/m; ε_r = 41.6; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(6.62, 6.62, 6.62); 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

Tilt Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Interpolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.046 mW/g

Tilt Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

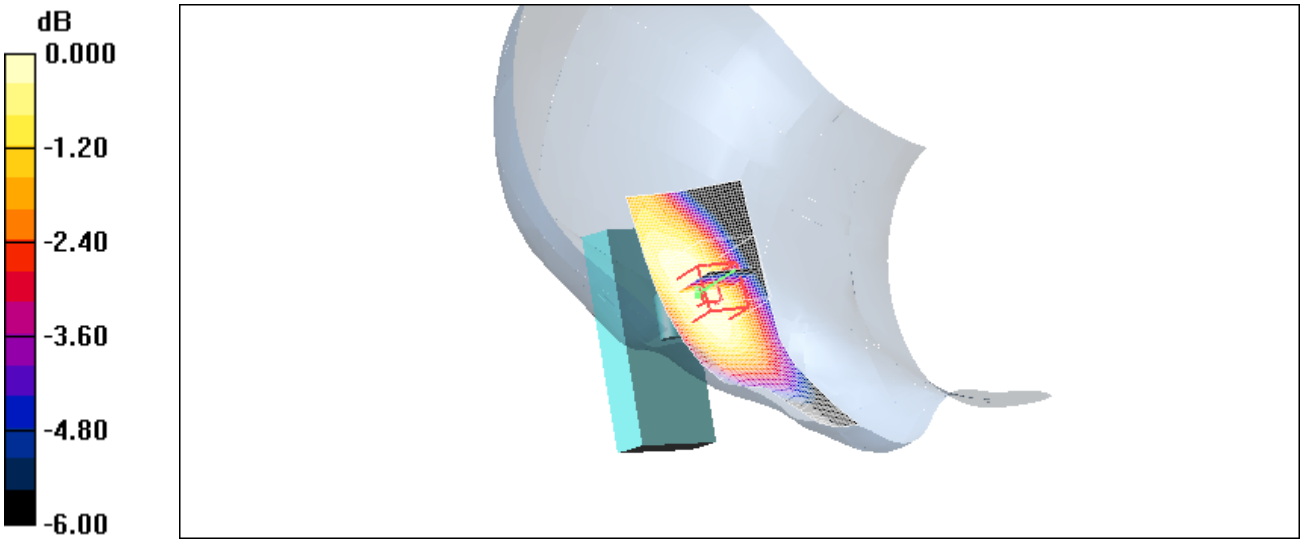
Reference Value = 6.26 V/m; Power Drift = -0.220 dB

Peak SAR (extrapolated) = 0.055 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.032 mW/g

Info: Interpolated medium parameters used for SAR evaluation.

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



0 dB = 0.045mW/g

Plot #5

Date/Time: 11/4/2005 10:12:48 AM

Test Laboratory: Bay Area Compliance Lab Corp.

Body 1900

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

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

Medium parameters used: f = 1880 MHz; σ = 1.59 mho/m; ε_r = 51.4; ρ = 1000 kg/m^3

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(4.79, 4.79, 4.79); 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

1.5cm from phantom , Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.745 mW/g

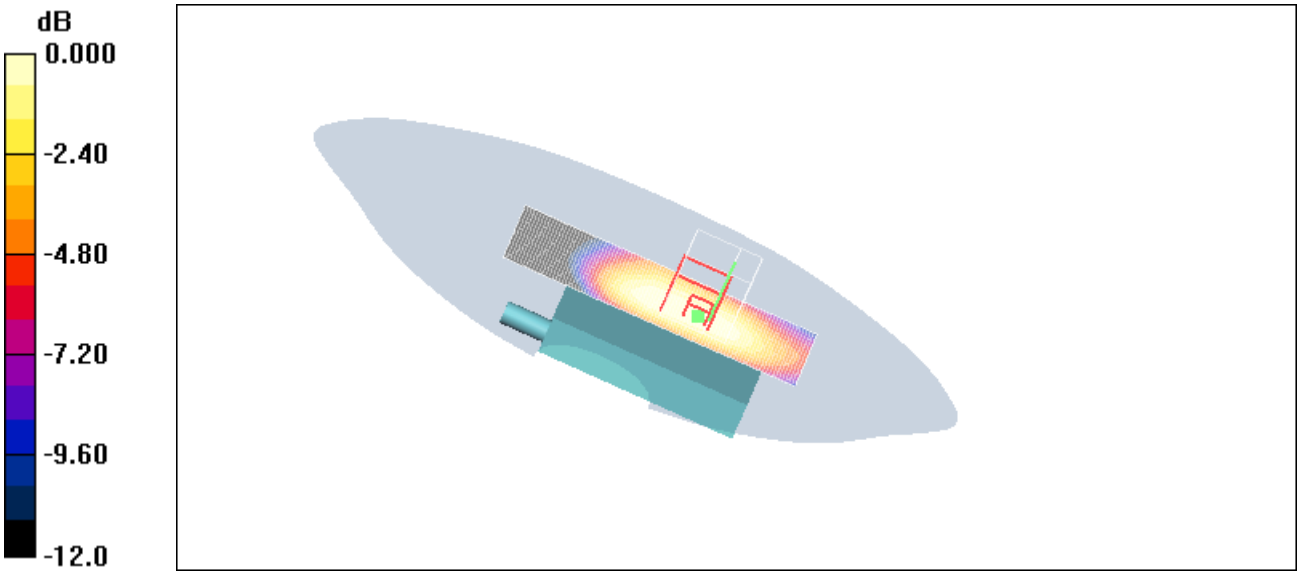
1.5cm from phantom , Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 20.4 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.27 W/kg

SAR(1 g) = 0.693 mW/g; SAR(10 g) = 0.408 mW/g

Maximum value of SAR (measured) = 0.749 mW/g



0 dB = 0.749mW/g

Plot #6

Date/Time: 11/4/2005 4:43:00 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Left Head 1900 Touch

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

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

Medium parameters used (extrapolated): f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(5.19, 5.19, 5.19); 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

Touch Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.532 mW/g

Touch Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

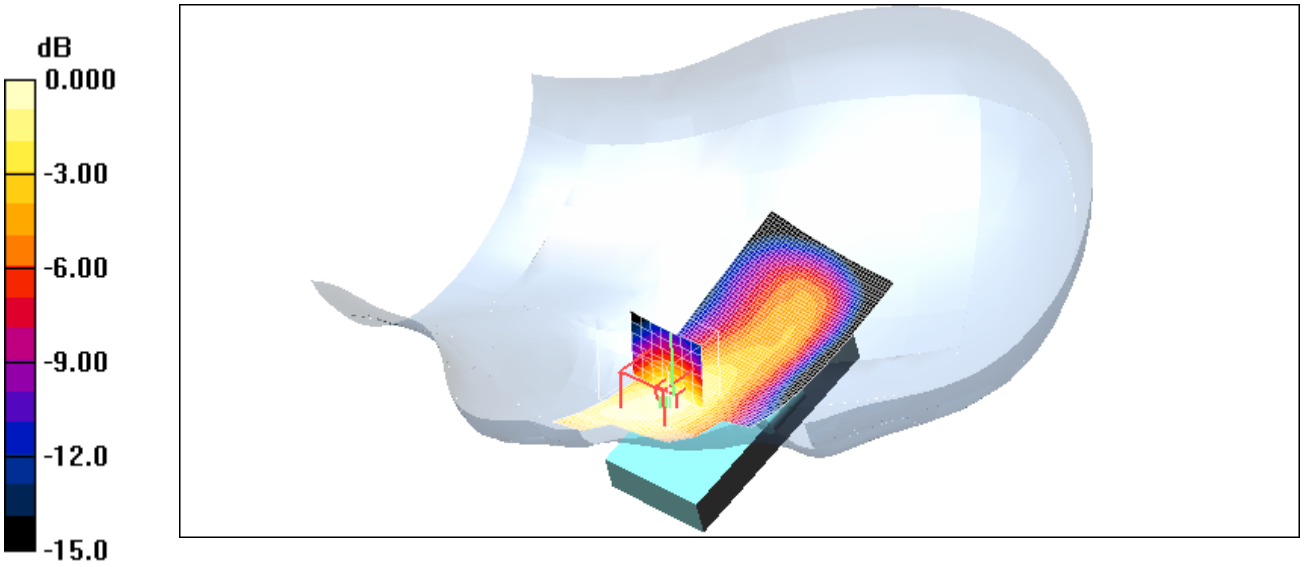
Reference Value = 9.86 V/m; Power Drift = -0.084 dB

Peak SAR (extrapolated) = 0.725 W/kg

SAR(1 g) = 0.484 mW/g; SAR(10 g) = 0.305 mW/g

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.540 mW/g



0 dB = 0.540mW/g

Plot #7

Date/Time: 11/4/2005 3:53:13 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Left Head 1900 Tilt

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

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

Medium parameters used (extrapolated): f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3

Phantom section: Left Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(5.19, 5.19, 5.19); 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

Tilt Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.335 mW/g

Tilt Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

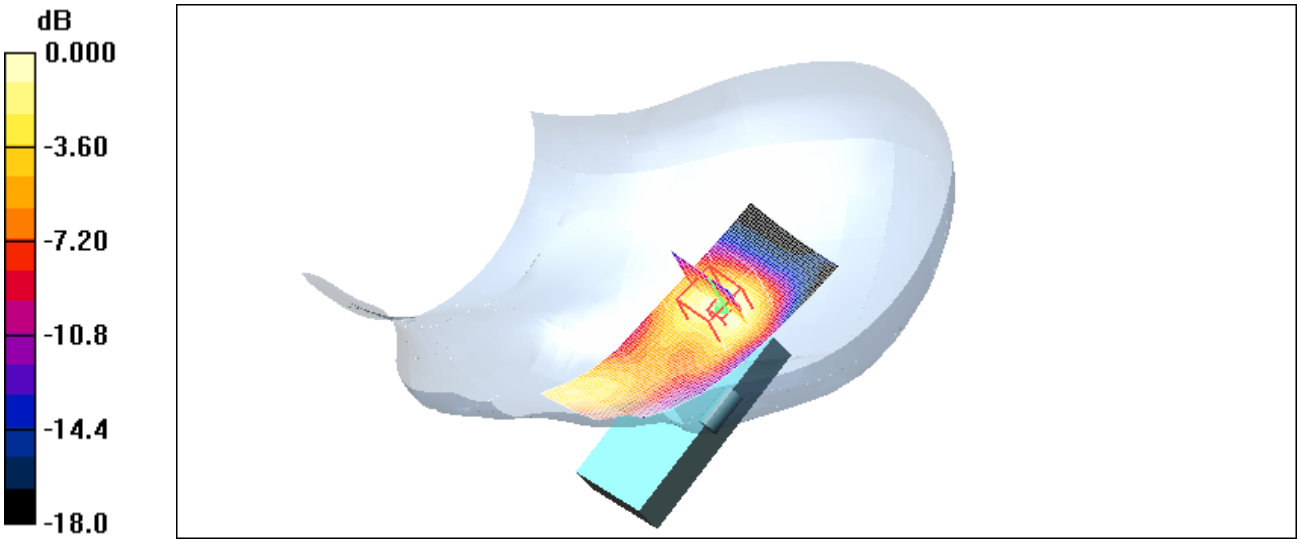
Reference Value = 14.3 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 0.667 W/kg

SAR(1 g) = 0.308 mW/g; SAR(10 g) = 0.190 mW/g

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.333 mW/g



0 dB = 0.333mW/g

Plot #8

Date/Time: 11/4/2005 2:49:05 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Right Head 1900 Touch

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

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

Medium parameters used (extrapolated): f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(5.19, 5.19, 5.19); 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

Touch Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.797 mW/g

Touch Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

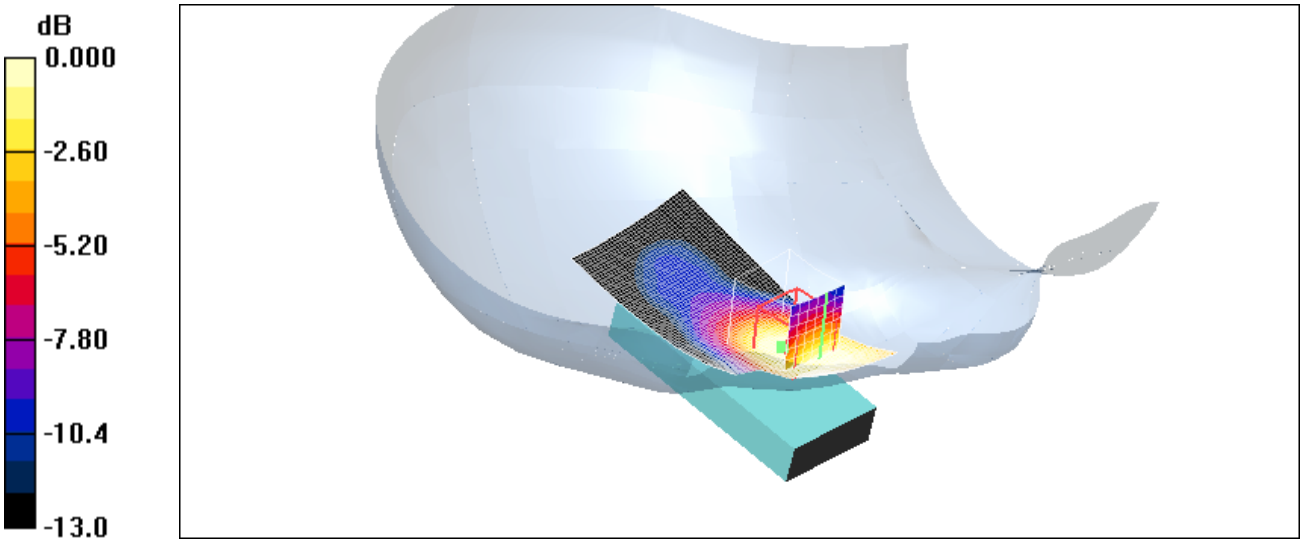
Reference Value = 6.97 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 0.959 W/kg

SAR(1 g) = 0.675 mW/g; SAR(10 g) = 0.424 mW/g

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.736 mW/g



0 dB = 0.736mW/g

Plot #9

Date/Time: 11/4/2005 3:14:31 PM

Test Laboratory: Bay Area Compliance Lab Corp.

Right Head 1900 Tilt

DUT: AmoiCDMA V810; Type: Cellular Phone; Serial: 001

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

Medium parameters used (extrapolated): f = 1880 MHz; σ = 1.37 mho/m; ε_r = 39.5; ρ = 1000 kg/m^3

Phantom section: Right Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1604; ConvF(5.19, 5.19, 5.19); 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

Tilt Middle Channel/Area Scan: Measurement grid: dx=15mm, dy=15mm

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (interpolated) = 0.301 mW/g

Tilt Middle Channel/Zoom Scan: Measurement grid: dx=5mm, dy=5mm, dz=5mm

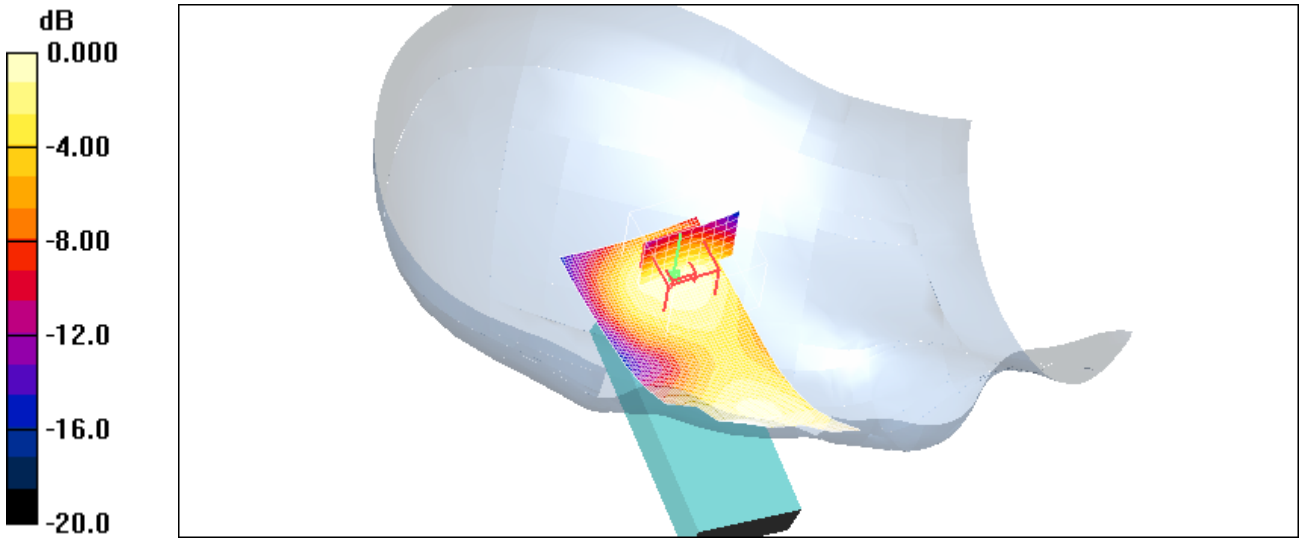
Reference Value = 13.9 V/m; Power Drift = -0.203 dB

Peak SAR (extrapolated) = 0.334 W/kg

SAR(1 g) = 0.237 mW/g; SAR(10 g) = 0.153 mW/g

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.261 mW/g



0 dB = 0.261mW/g

Plot #10

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

Hewlett Packard HP8564E Spectrum Analyzer, Calibration Due Date: 2005-10-04.
Hewlett Packard HP 7470A Plotter, Calibration not required.
Agilent E5515C Analyzer, Communications, Calibration Due Date: 2005-08-08.

Test Results

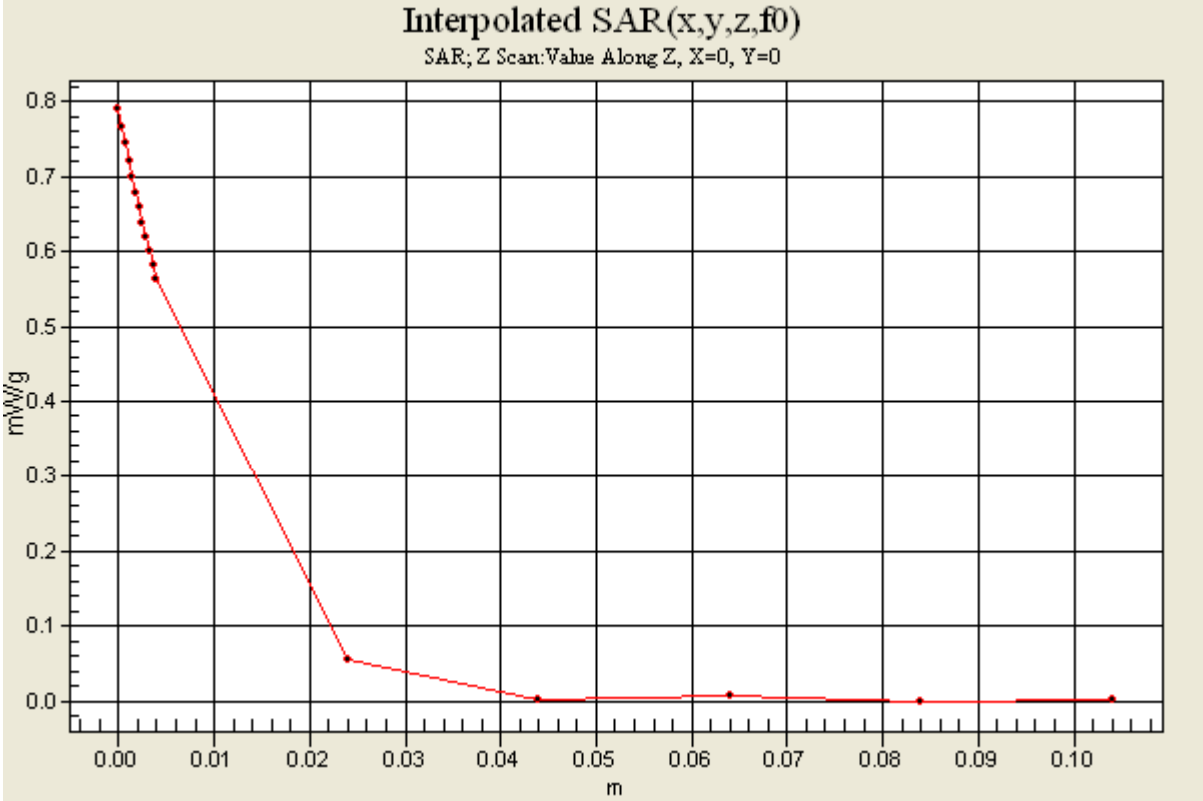
CDMA Cellular Band:

Channel	Frequency (MHz)	Output Power in dBm	Output Power in W
MIDDLE	836.52	24.08	0.256

CDMA PCS Band:

Channel	Frequency (MHz)	Output Power in dBm	Output Power in W
MIDDLE	1880	23.68	0.233

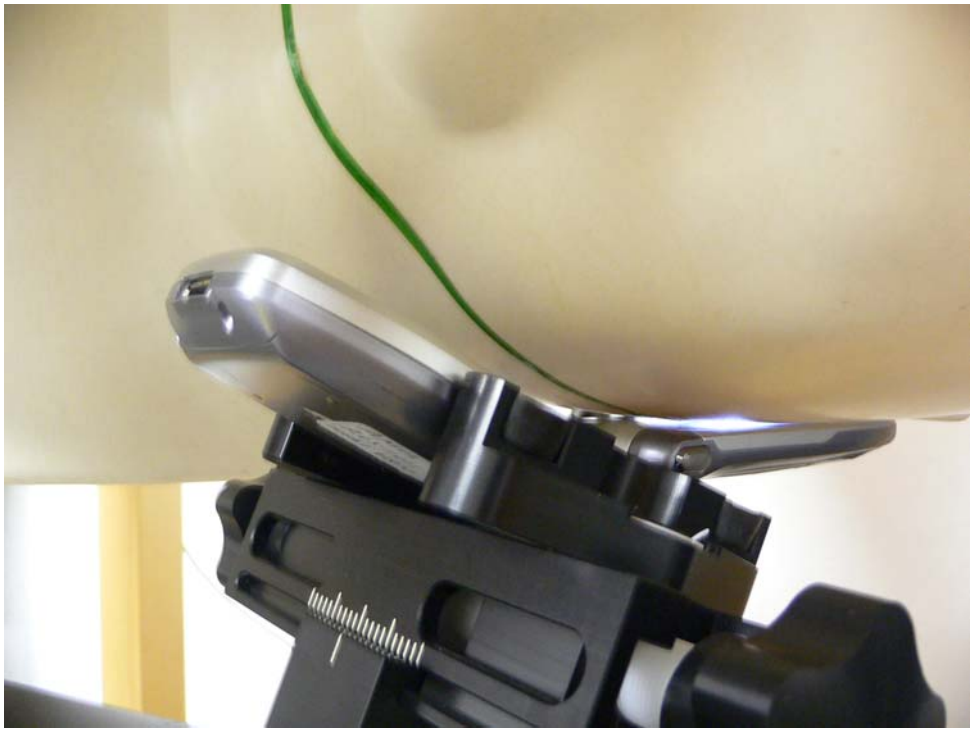
APPENDIX G – Z-AXIS PLOT



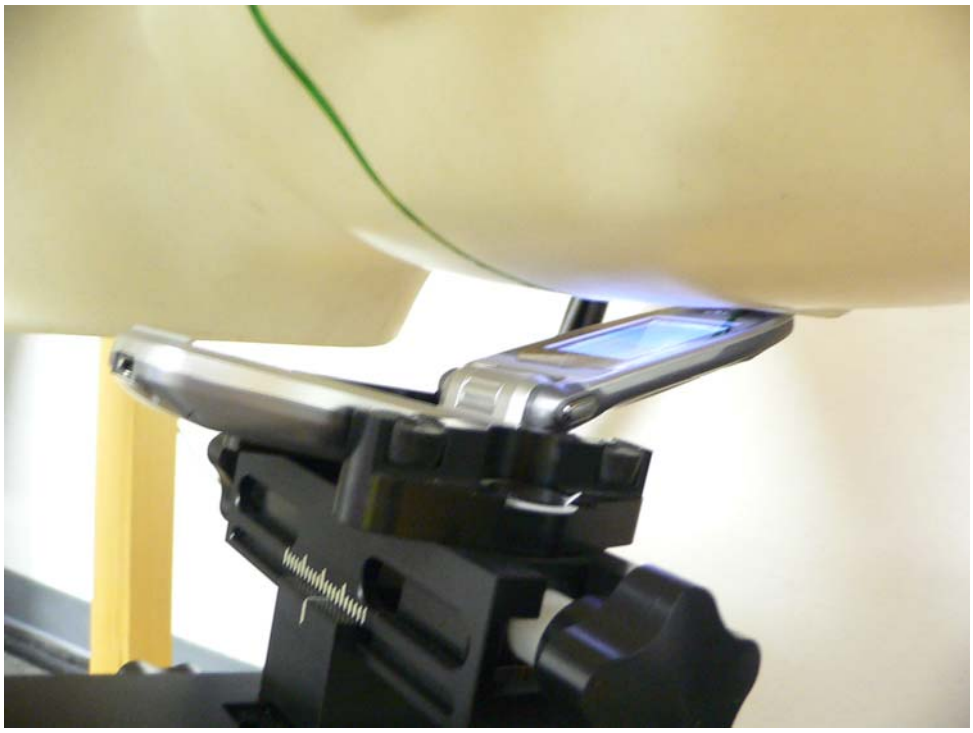
APPENDIX H – EUT TEST POSITION PHOTOS

Test Setup

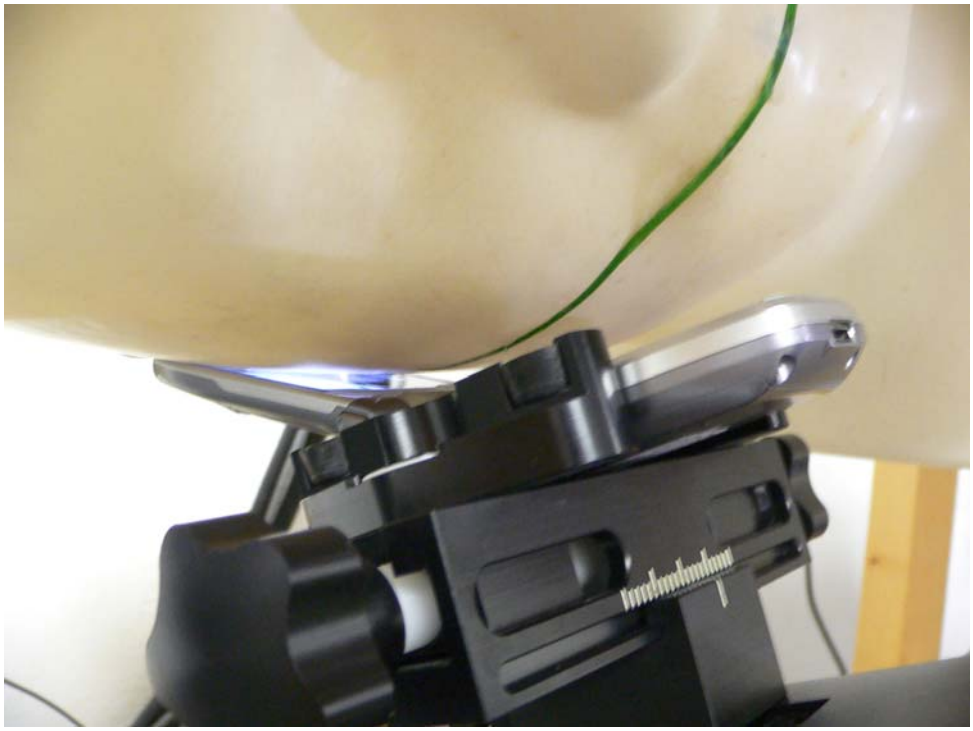
Left Head Touch



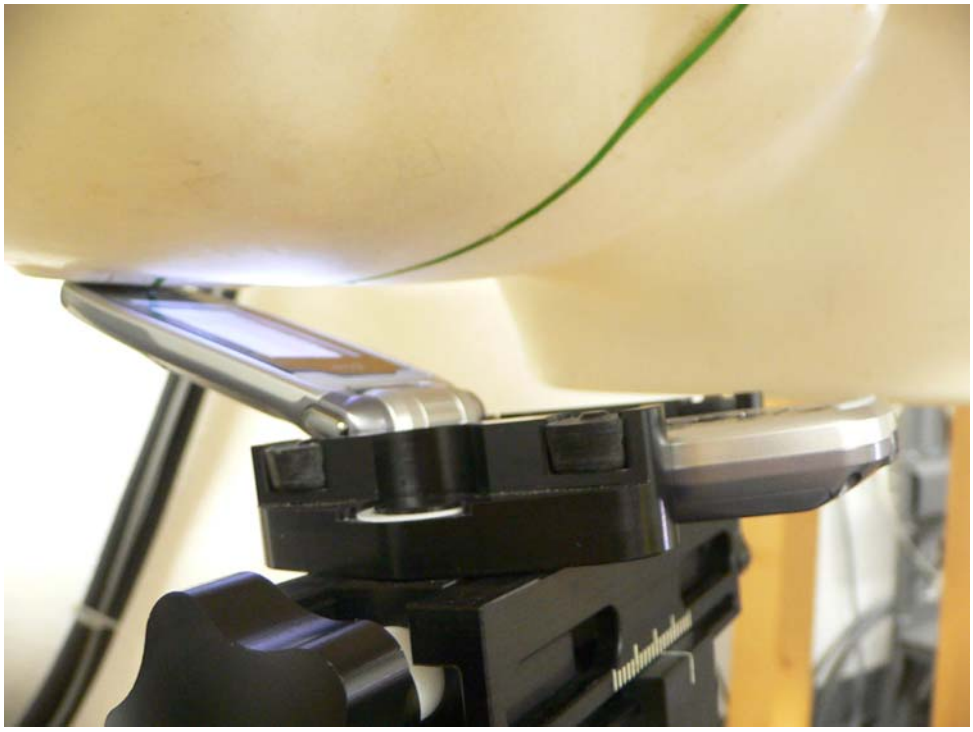
Left Head Tilt



Right Head Touch



Right Head Tilted

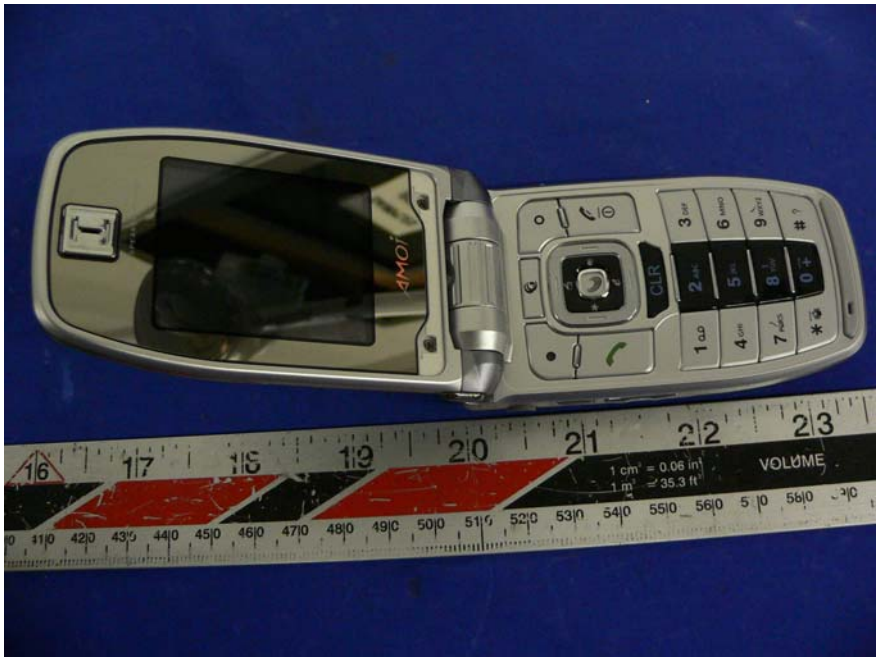


APPENDIX I – EUT & ACCESSORIES PHOTOS

EUT Front View

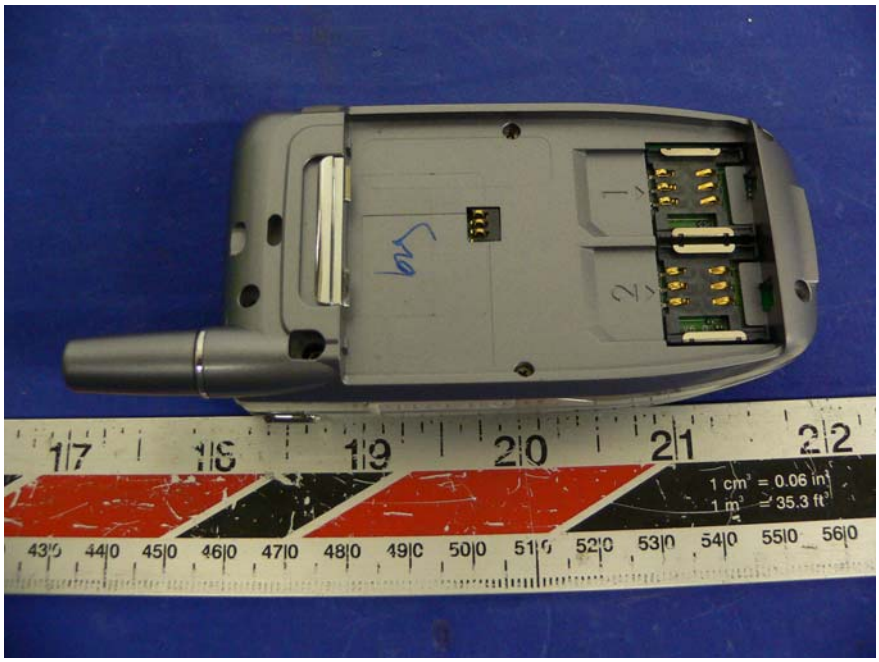
EUT Rear View

EUT Flip Open View

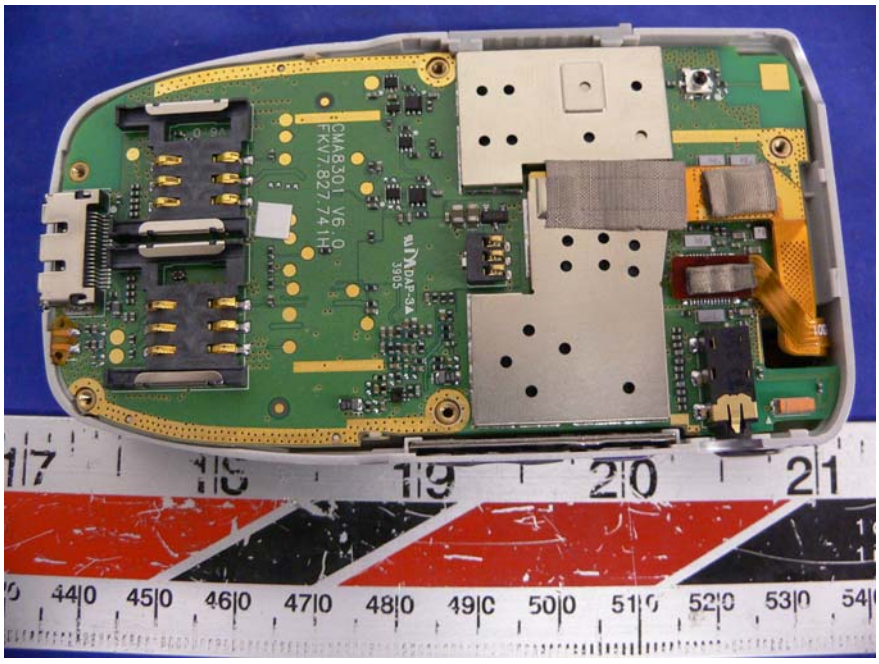


EUT Port View

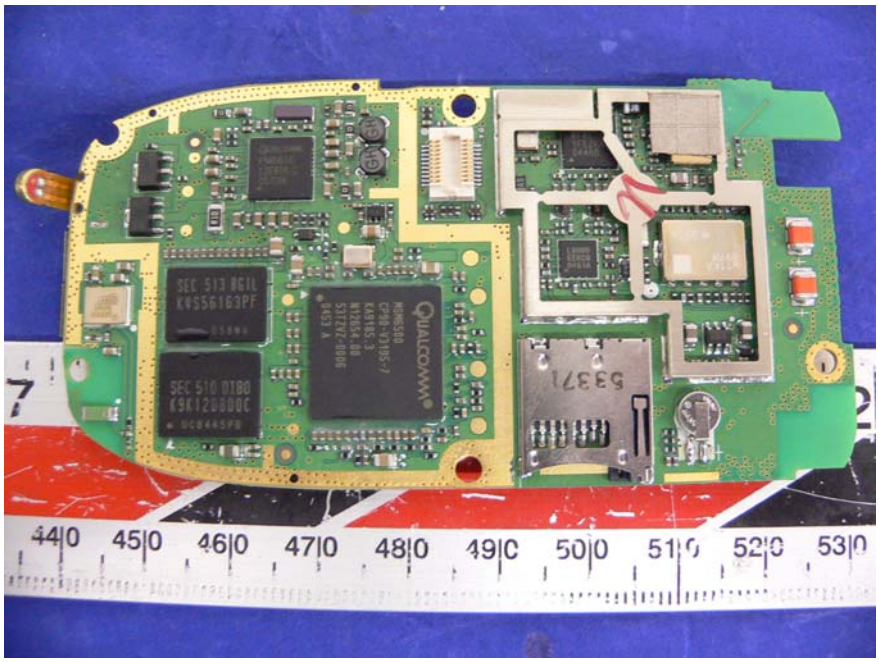
EUT Battery Cover Off View



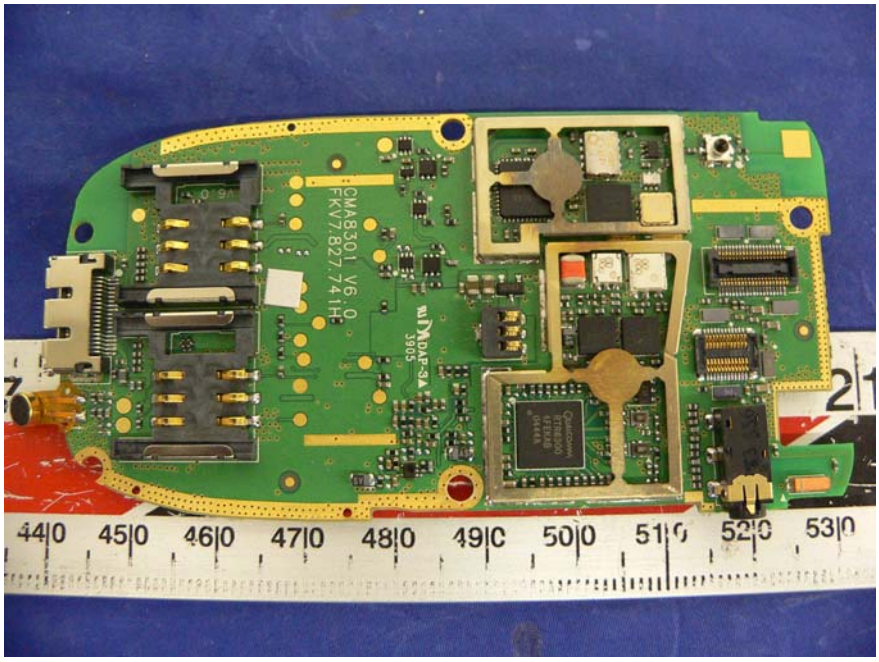
EUT Cover Off View



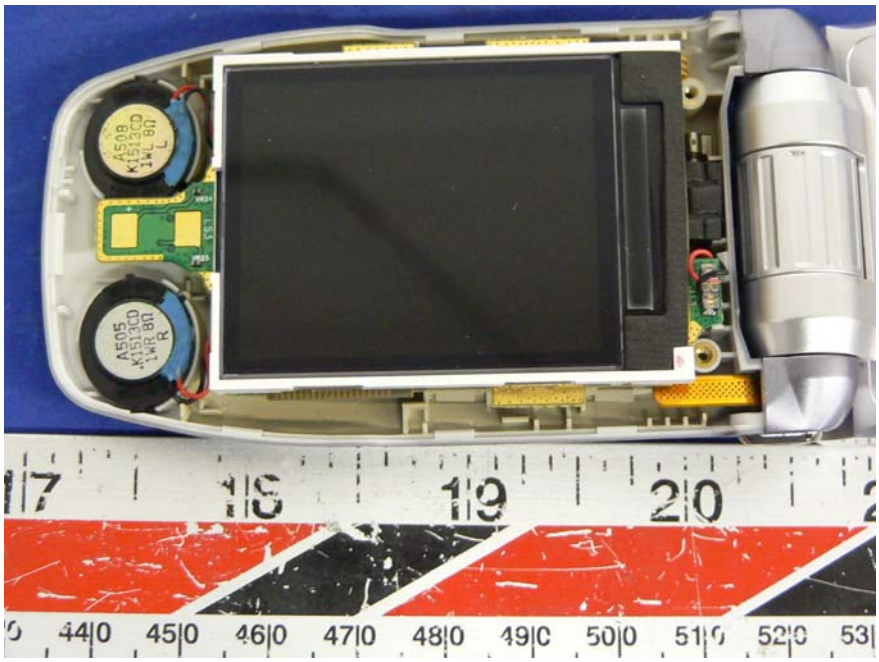
EUT Component View 1



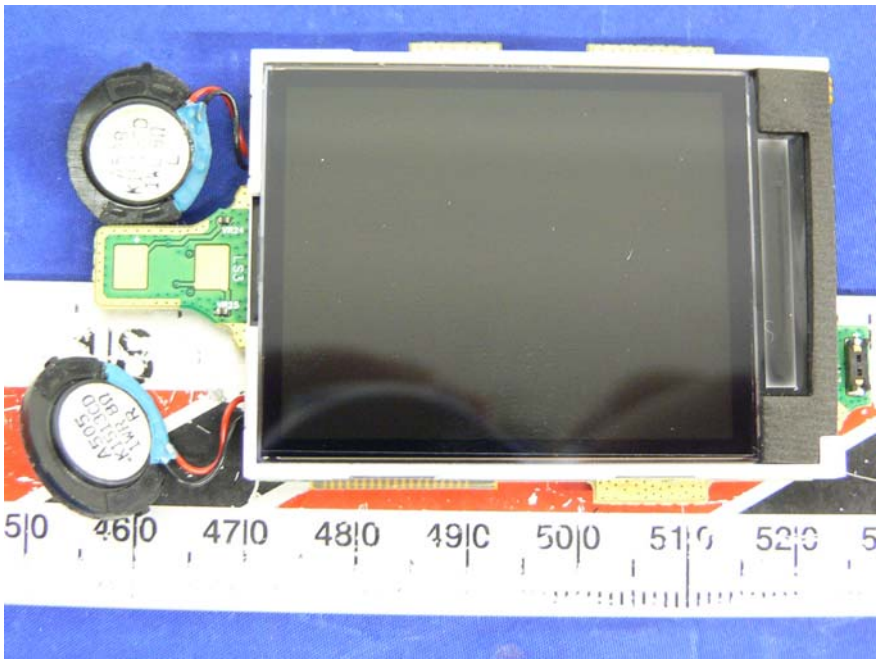
EUT Component View 2



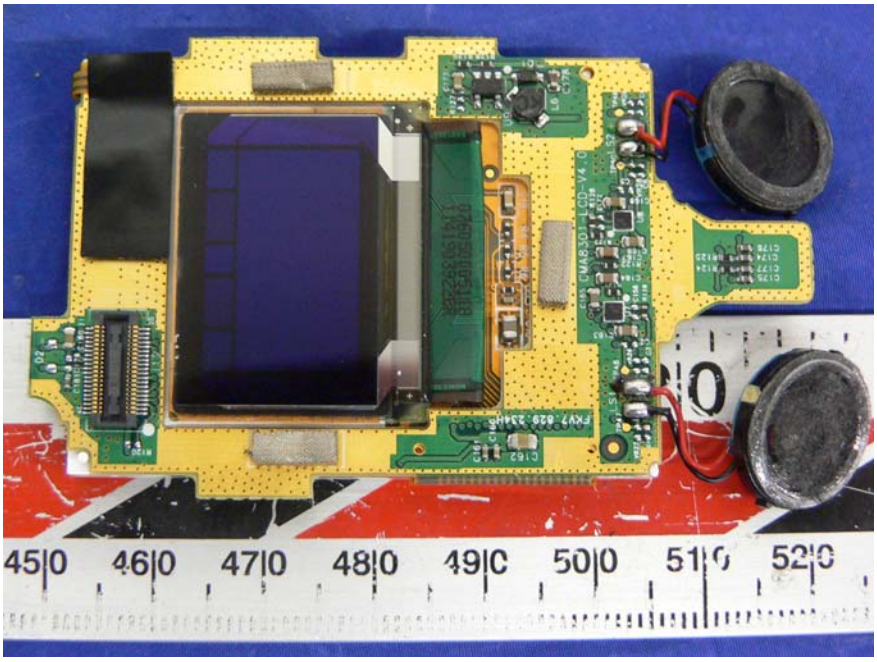
EUT Display Cover off View



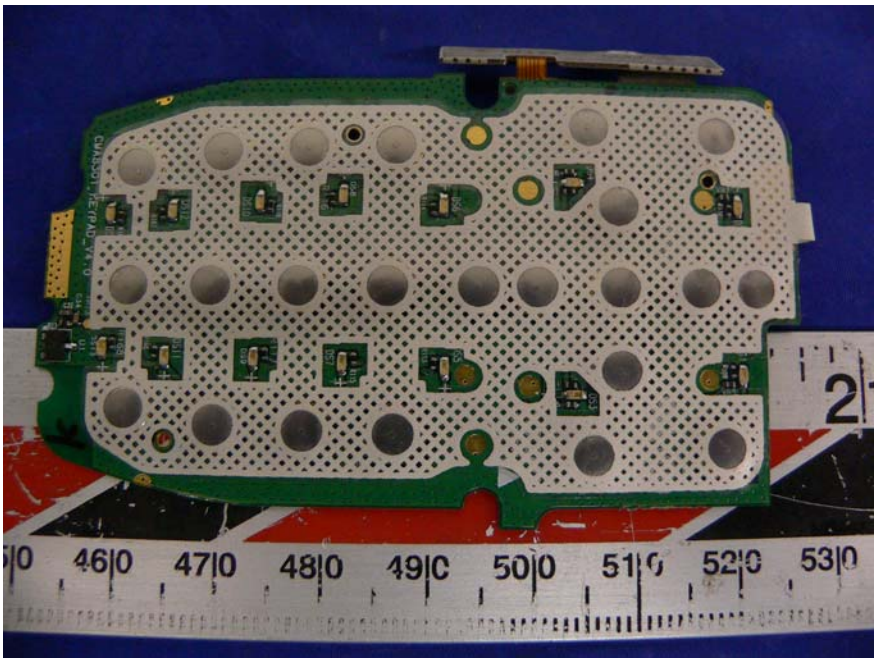
Display Component View 1



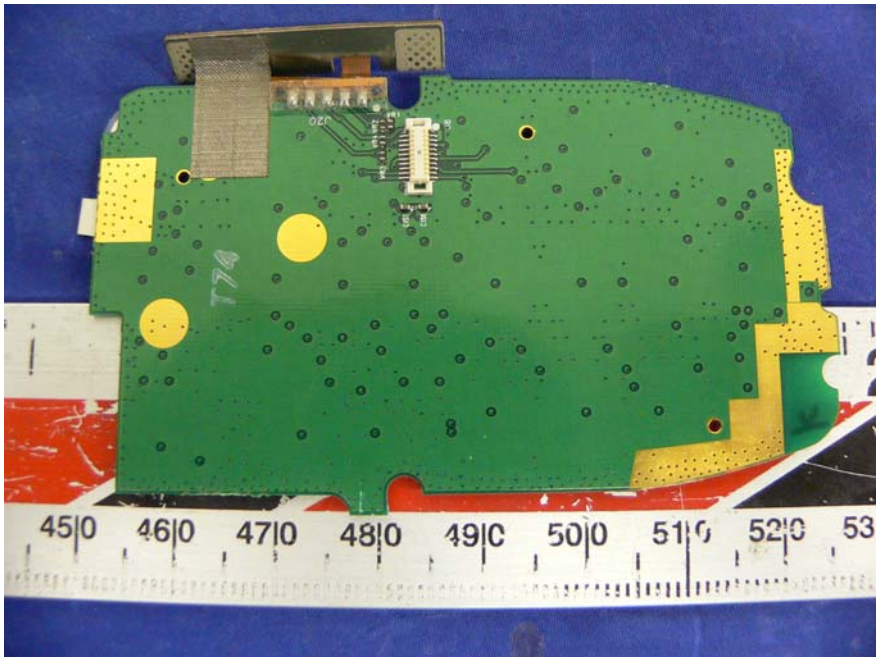
Display Component View 2



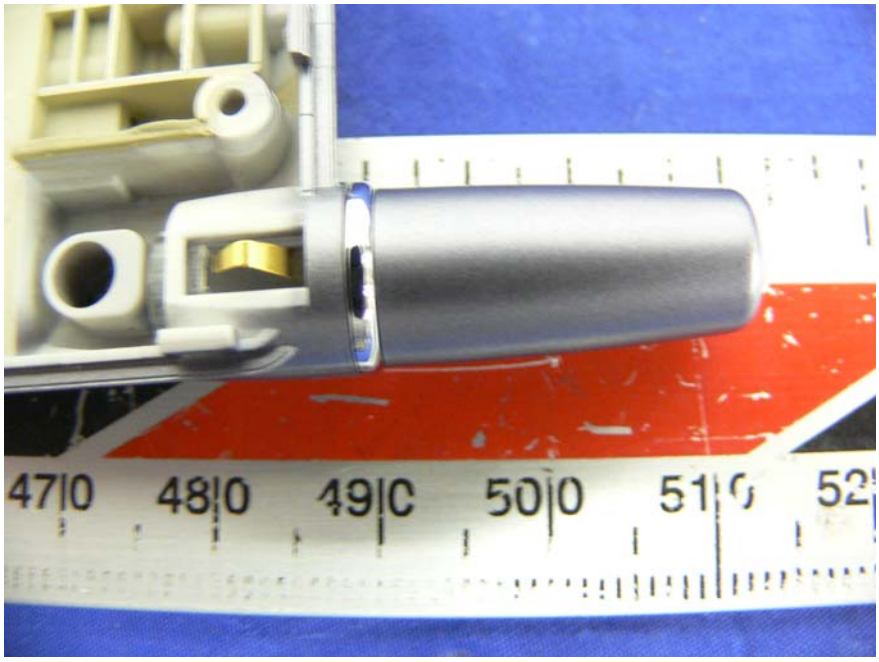
Keyboard Component View



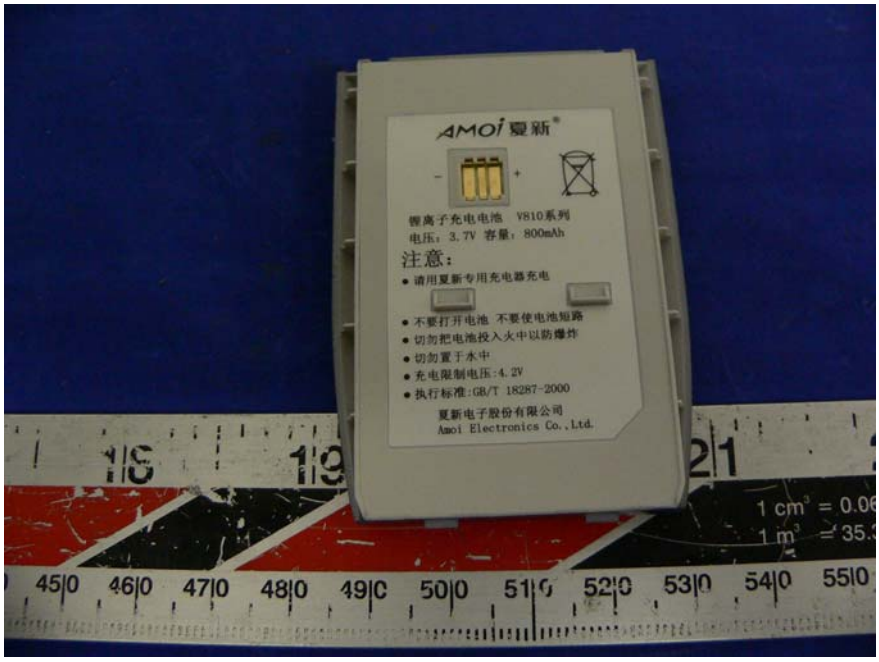
Keyboard Solder View



Antenna



Battery



Charger

APPENDIX J - INFORMATIVE REFERENCES

[1] Federal Communications Commission, \Report and order: Guidelines for evaluating the environmental effects of radiofrequency radiation", Tech. Rep. FCC 96-326, FCC, Washington, D.C. 20554, 1996.

[2] David L. Means Kwok Chan, Robert F. Cleveland, \Evaluating compliance with FCC guidelines for human exposure to radiofrequency electromagnetic fields", Tech. Rep., Federal Communication Commission, O_ce of Engineering & Technology, Washington, DC, 1997.

[3] Thomas Schmid, Oliver Egger, and Niels Kuster, \Automated E-_eld scanning system for dosimetric assessments", IEEE Transactions on Microwave Theory and Techniques, vol. 44, pp. 105{113, Jan. 1996.

[4] Niels Kuster, Ralph K.astle, and Thomas Schmid, \Dosimetric evaluation of mobile communications equipment with known precision", IEICE Transactions on Communications, vol. E80-B, no. 5, pp. 645{652, May 1997.

[5] CENELEC, \Considerations for evaluating of human exposure to electromagnetic fields (EMFs) from mobile telecommunication equipment (MTE) in the frequency range 30MHz - 6GHz", Tech. Rep., CENELEC, European Committee for Electrotechnical Standardization, Brussels, 1997.

[6] ANSI, ANSI/IEEE C95.1-1992: IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz, The Institute of Electrical and Electronics Engineers, Inc., New York, NY 10017, 1992.

[7] Katja Pokovic, Thomas Schmid, and Niels Kuster, \Robust setup for precise calibration of E-field probes in tissue simulating liquids at mobile communications frequencies", in ICECOM _ 97, Dubrovnik, October 15{17, 1997, pp. 120-24.

[8] Katja Pokovic, Thomas Schmid, and Niels Kuster, \E-field probe with improved isotropy in brain simulating liquids", in Proceedings of the ELMAR, Zadar, Croatia, 23{25 June, 1996, pp. 172-175.

[9] Volker Hombach, Klaus Meier, Michael Burkhardt, Eberhard K. uhn, and Niels Kuster, \The depen-dence of EM energy absorption upon human head modeling at 900 MHz", IEEE Transactions on Microwave Theory and Techniques, vol. 44, no. 10, pp. 1865-1873, Oct. 1996.

[10] Klaus Meier, Ralf Kastle, Volker Hombach, Roger Tay, and Niels Kuster, \The dependence of EM energy absorption upon human head modeling at 1800 MHz", IEEE Transactions on Microwave Theory and Techniques, Oct. 1997, in press.

[11] W. Gander, Computermathematik, Birkhaeuser, Basel, 1992.

[12] W. H. Press, S. A. Teukolsky,W. T. Vetterling, and B. P. Flannery, Numerical Recepies in C, The Art of Scientific Computing, Second Edition, Cambridge University Press, 1992.Dosimetric Evaluation of Sample device, month 1998 9

[13] NIS81 NAMAS, \The treatment of uncertainity in EMC measurement", Tech. Rep., NAMAS Executive, National Physical Laboratory, Teddington, Middlesex, England, 1994.

[14] Barry N. Taylor and Christ E. Kuyatt, \Guidelines for evaluating and expressing the uncertainty of NIST measurement results", Tech. Rep., National Institute of Standards and Technology, 1994. Dosimetric Evaluation of Sample device, month 1998 10.