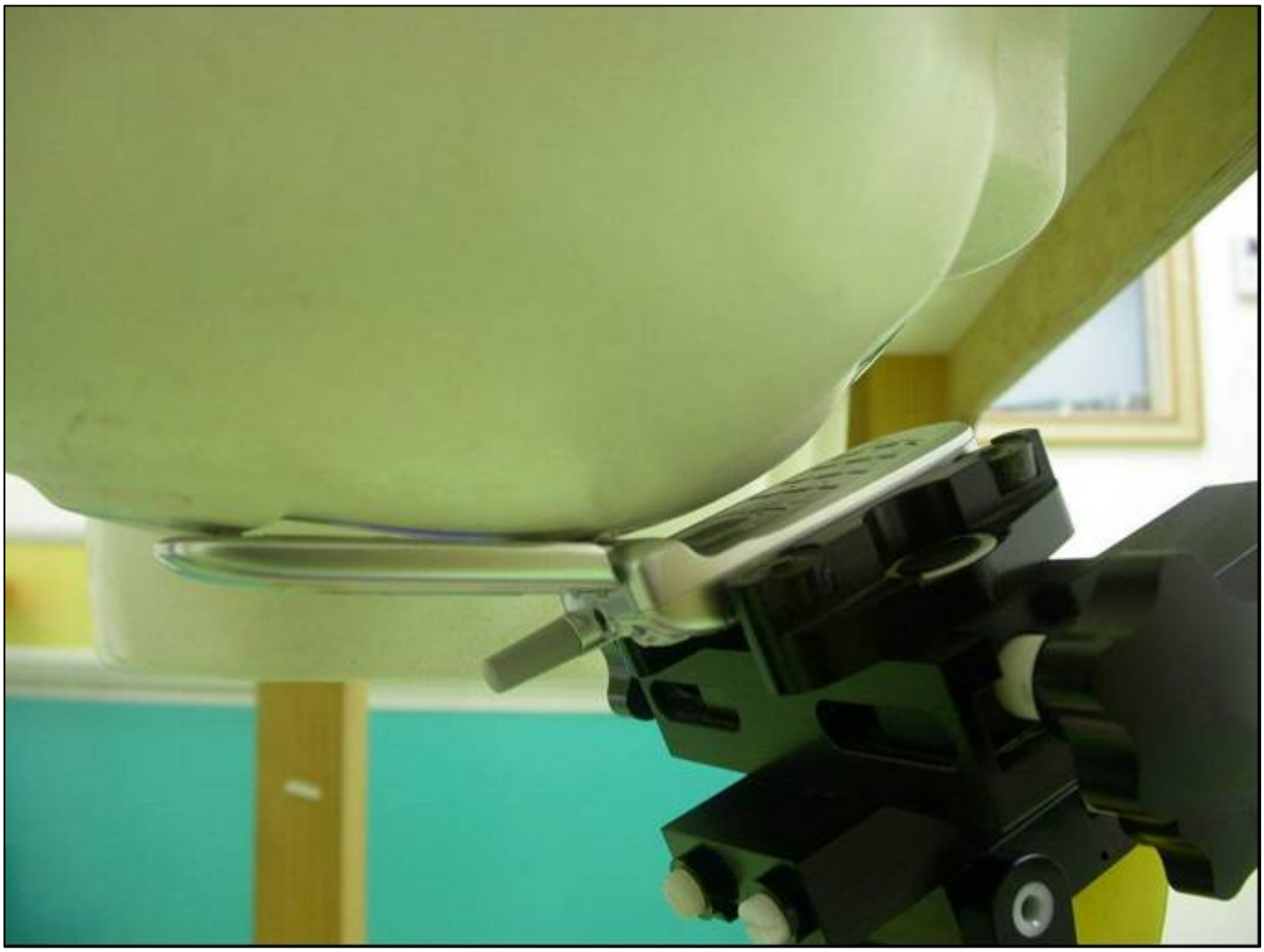
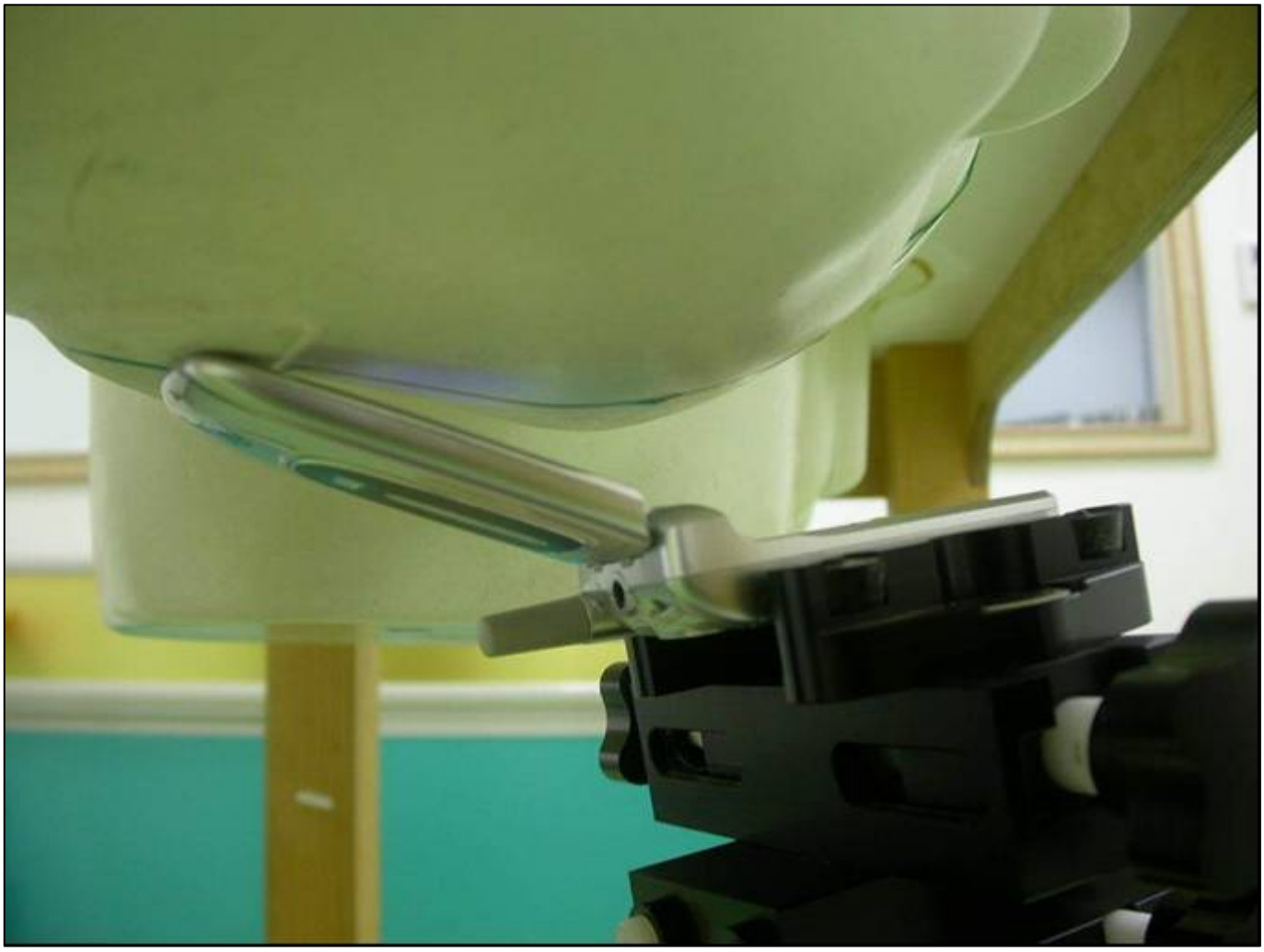
APPENDIX A: TEST CONFIGURATIONS AND TEST DATA
A1: TEST CONFIGURATION

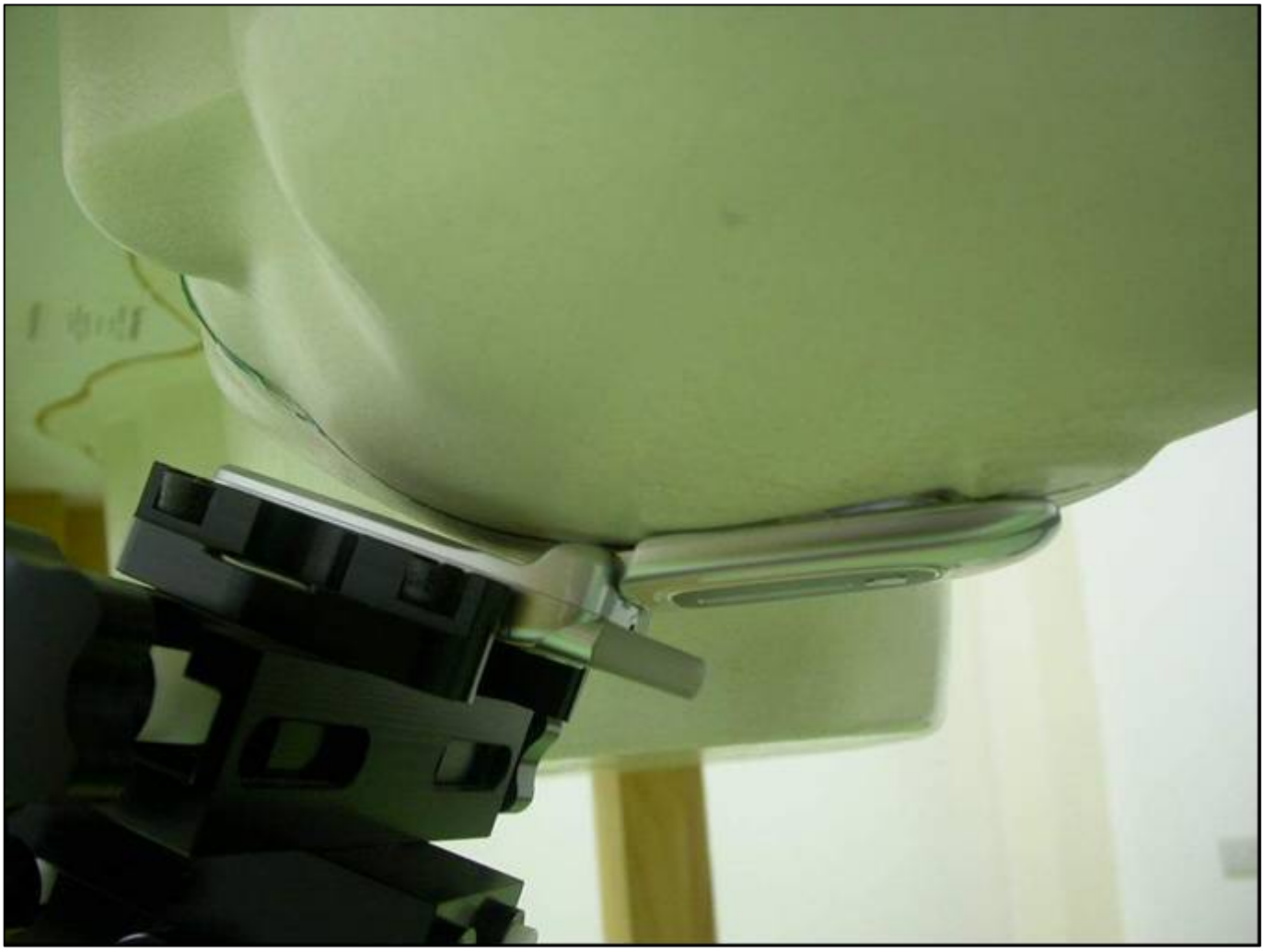
Right Head Cheek Position



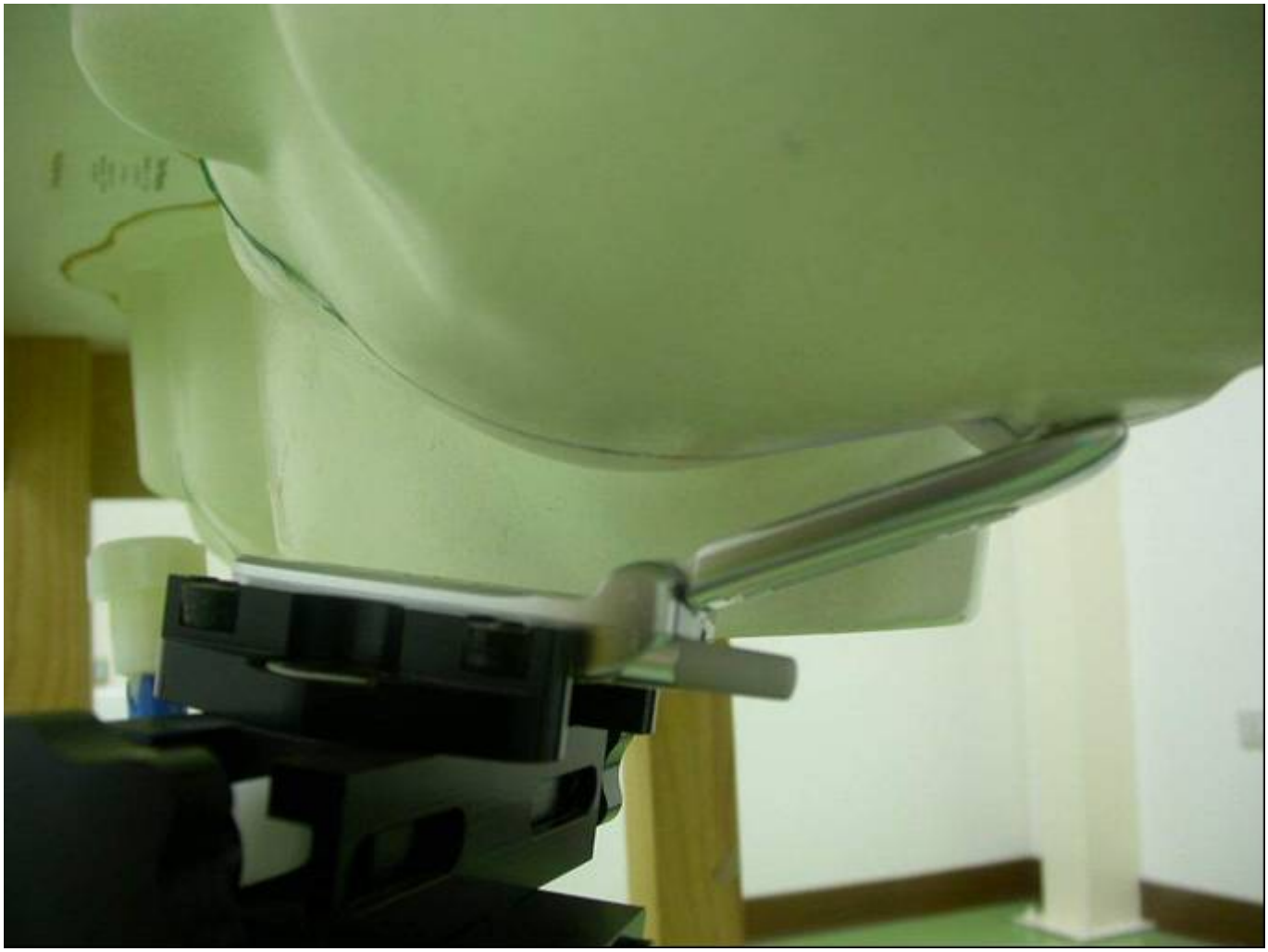
Right Head Tilt Position



Left Head Cheek Position



Left Head Tilt Position



Body Worn Position

The bottom of the EUT to the flat phantom distance 0 mm

Body Worn Position

The front of the EUT to the flat phantom distance 0 mm

EUT Photo

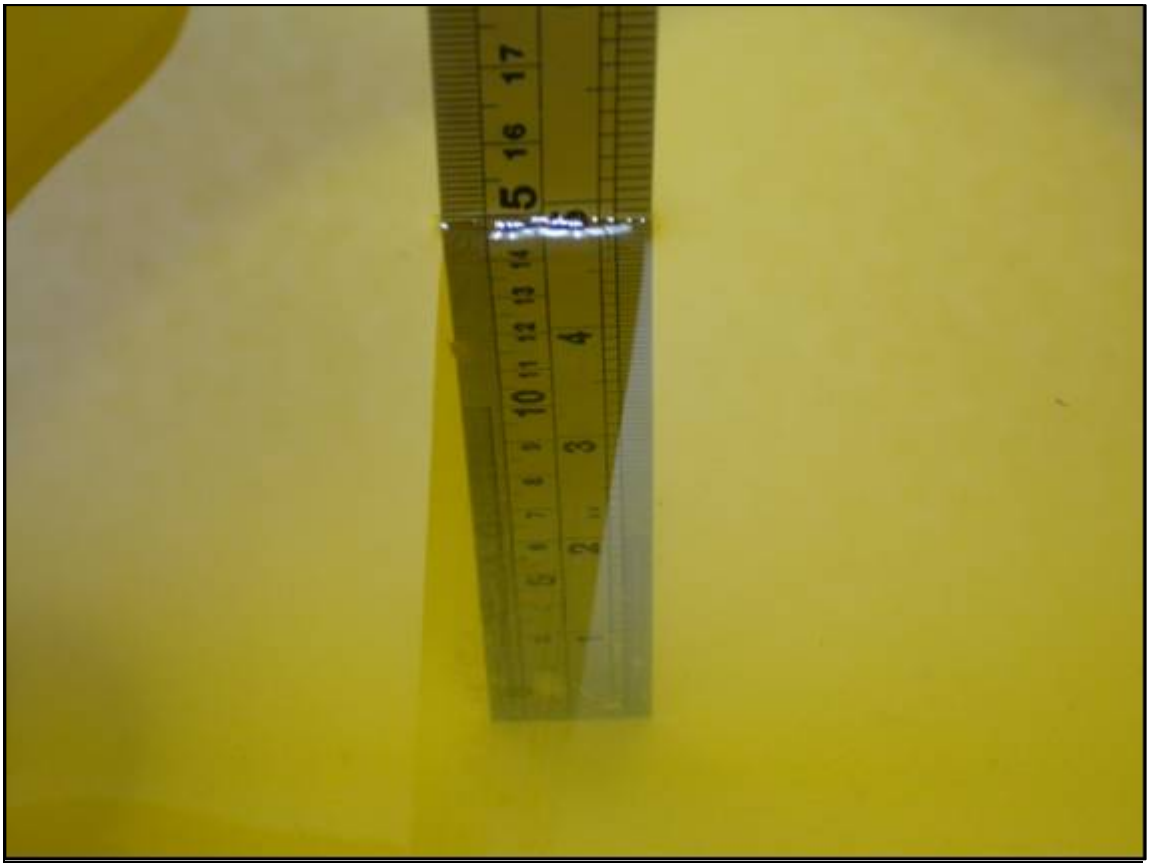
ZTE
Reference Point (BodyWorn - front)

CDMA BY
QUALCOMM
ZTE
Reference Point (BodyWorn - bottom)

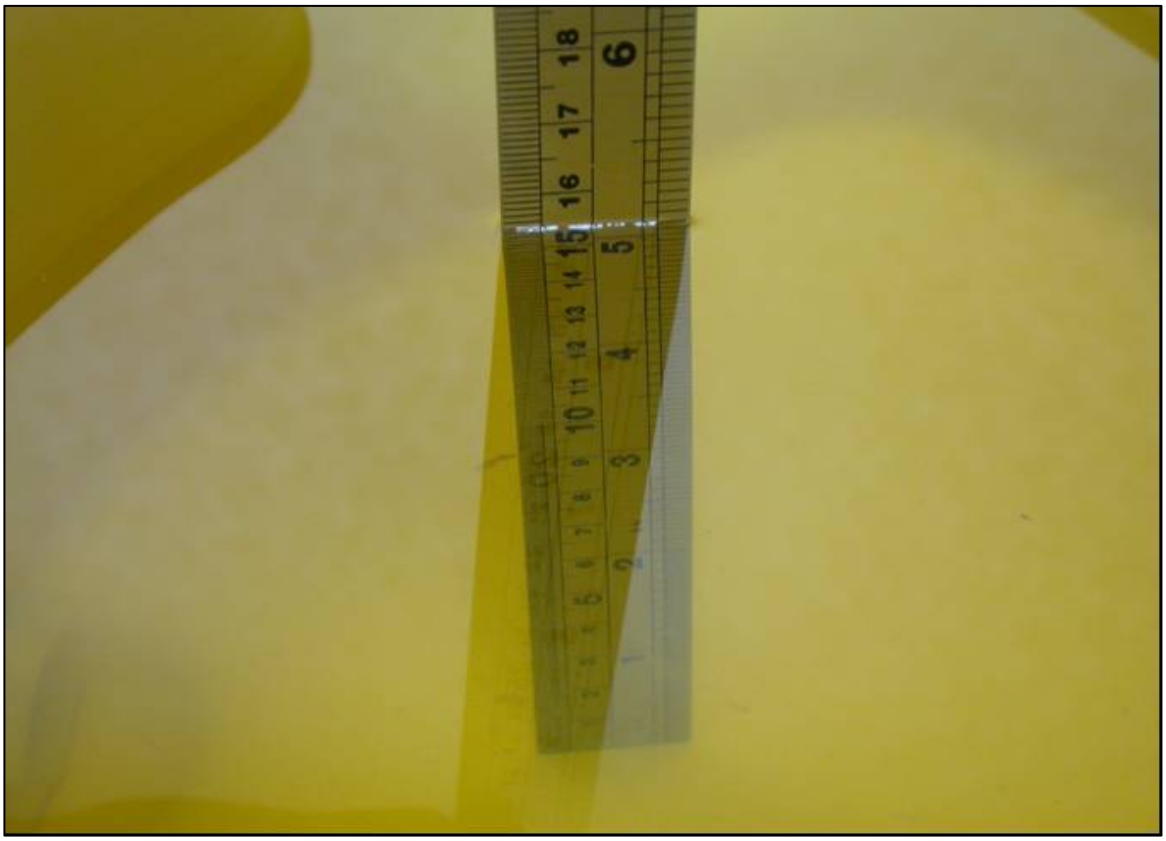
Reference Point (Head)

Liquid Level Photo

Tissue HSL900 MHz D=150mm



Tissue MSL900 MHz D=155mm



Date/Time: 2005/9/5 10:10:35

Test Laboratory: Advance Data Technology

C220_CDMA2000_Right Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 824.12 MHz

Communication System: CDMA ; Frequency: 824.12 MHz ; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used: f = 824.12 MHz; σ = 0.928 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3 ; Liquid level: 150mm

Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: OQPSK

Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low Channel 1013/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.202 mW/g

Touch position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.19 V/m

Peak SAR (extrapolated) = 0.29 W/kg

SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.107 mW/g

Maximum value of SAR (measured) = 0.310 mW/g

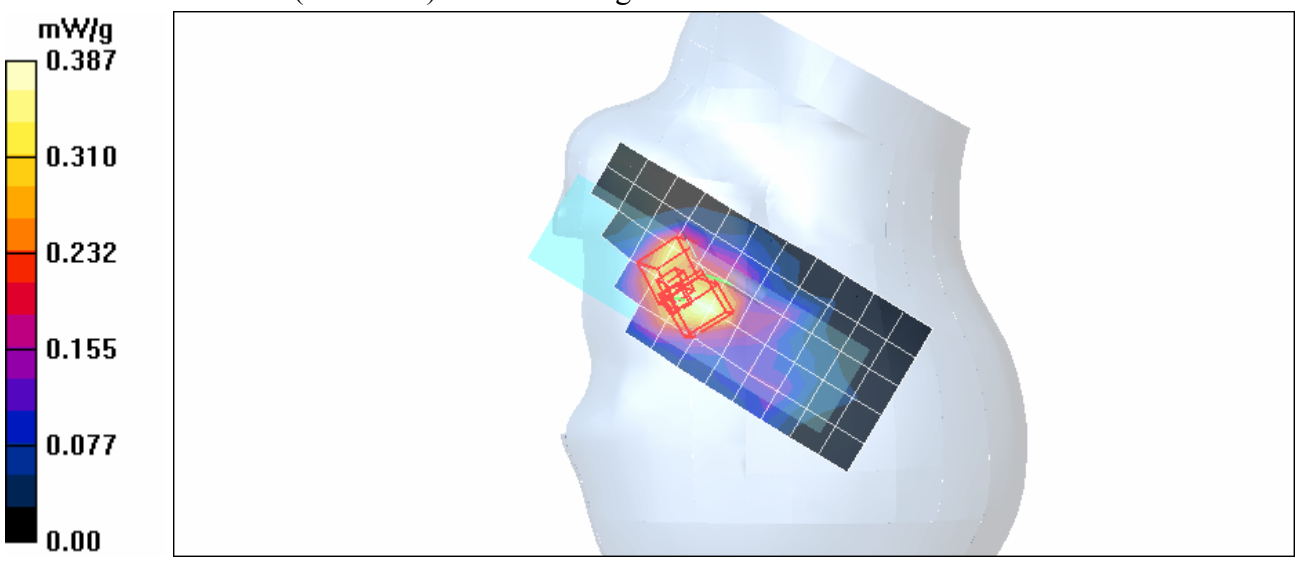
Touch position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.19 V/m

Peak SAR (extrapolated) = 0.317 W/kg

SAR(1 g) = 0.239 mW/g; SAR(10 g) = 0.143 mW/g

Maximum value of SAR (measured) = 0.387 mW/g



Date/Time: 2005/9/5 10:37:04

Test Laboratory: Advance Data Technology

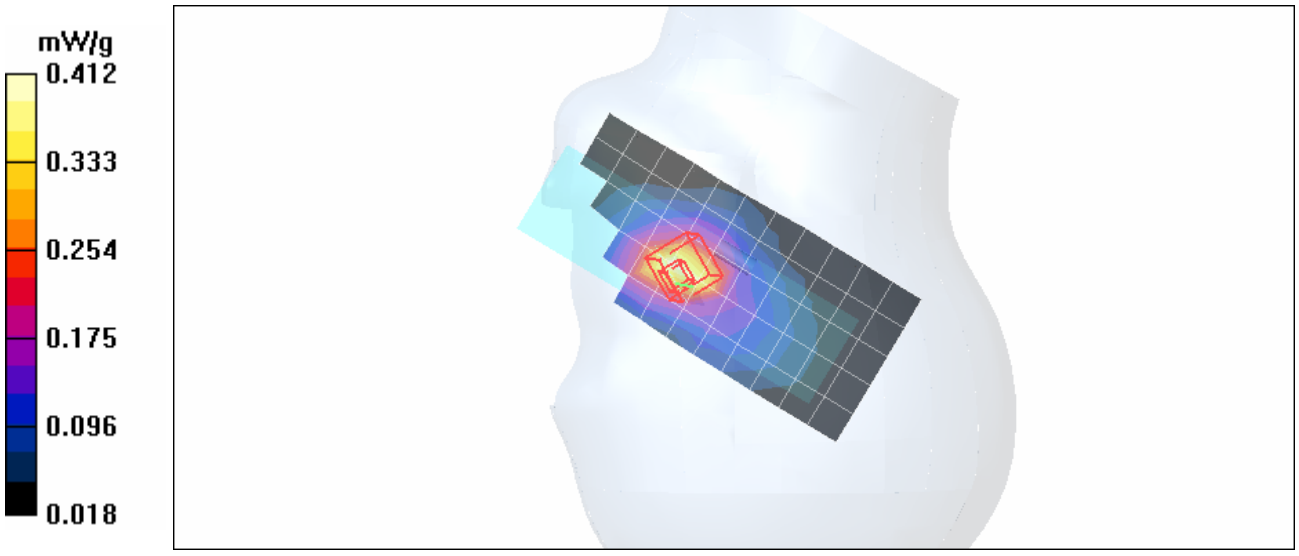
C220_CDMA2000_Right Head

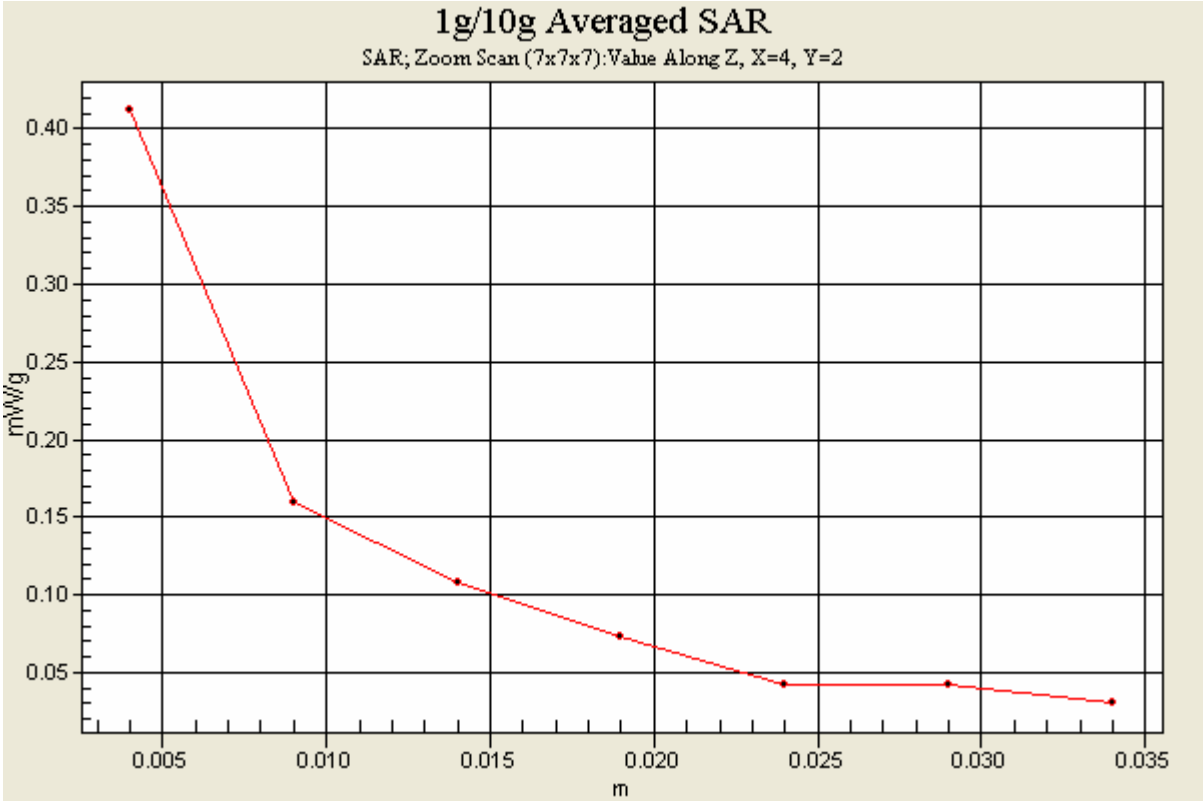
DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 836.58 MHz

Communication System: CDMA ; Frequency: 836.58 MHz ; Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 836.58 MHz; σ = 0.94 mho/m; ε_r = 43; ρ = 1000 kg/m^3 ;
Liquid level: 150mm
Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle Channel 384/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.219 mW/g

Touch position - Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.36 V/m
Peak SAR (extrapolated) = 0.232 W/kg
SAR(1 g) = 0.243 mW/g; SAR(10 g) = 0.146 mW/g
Maximum value of SAR (measured) = 0.412 mW/g




1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=4, Y=2
mW/g
0.40
0.35
0.30
0.25
0.20
0.15
0.10
0.05
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

Date/Time: 2005/9/5 11:20:30

Test Laboratory: Advance Data Technology

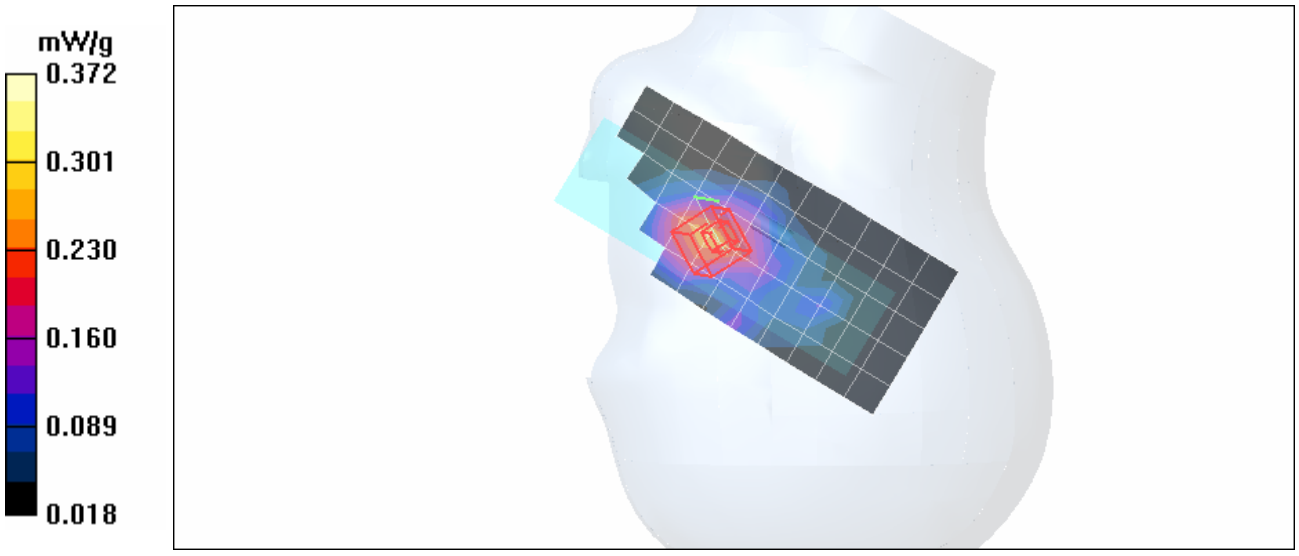
C220_CDMA2000_Right Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 848.76 MHz

Communication System: CDMA ; Frequency: 848.76 MHz ; Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 848.76 MHz; σ = 0.95 mho/m; ε_r = 42.8; ρ = 1000 kg/m^3 ; Liquid level: 150mm
Phantom section: Right Section ; DUT test position : Cheek ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High Channel 777/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.187 mW/g

Touch position - High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.39 V/m
Peak SAR (extrapolated) = 0.213 W/kg
SAR(1 g) = 0.224 mW/g; SAR(10 g) = 0.135 mW/g
Maximum value of SAR (measured) = 0.372 mW/g



Date/Time: 2005/9/5 11:55:18

Test Laboratory: Advance Data Technology

C220_CDMA2000_Right Head

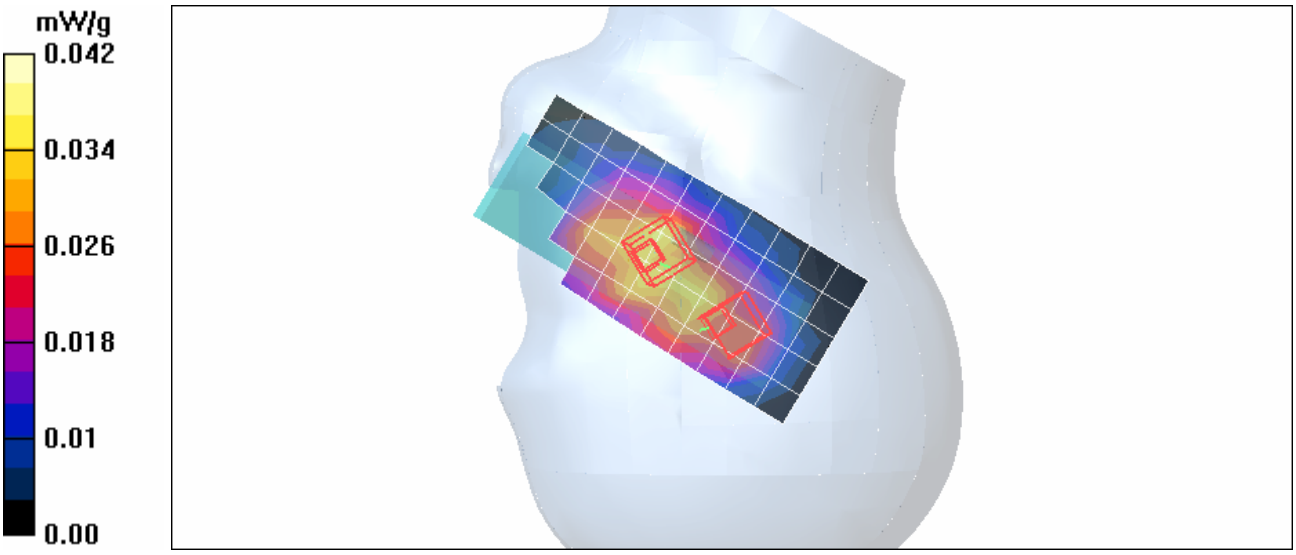
DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 824.12 MHz

Communication System: CDMA ; Frequency: 824.12 MHz ; Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 824.12 MHz; σ = 0.928 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3 ; Liquid level: 150mm
Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low Channel 1013/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.032 mW/g

Tilt position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.76 V/m
Peak SAR (extrapolated) = 0.036 W/kg
SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.032 mW/g
Maximum value of SAR (measured) = 0.042 mW/g

Tilt position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.76 V/m
Peak SAR (extrapolated) = 0.028 W/kg
SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.018 mW/g
Maximum value of SAR (measured) = 0.031 mW/g



Date/Time: 2005/9/5 12:29:25

Test Laboratory: Advance Data Technology

C220_CDMA2000_Right Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 836.58 MHz

Communication System: CDMA ; Frequency: 836.58 MHz ; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used: f = 836.58 MHz; σ = 0.94 mho/m; ε_r = 43; ρ = 1000 kg/m^3 ;

Liquid level: 150mm

Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: OQPSK

Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle Channel 384/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.040 mW/g

Tilt position - Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.63 V/m

Peak SAR (extrapolated) = 0.031 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.021 mW/g

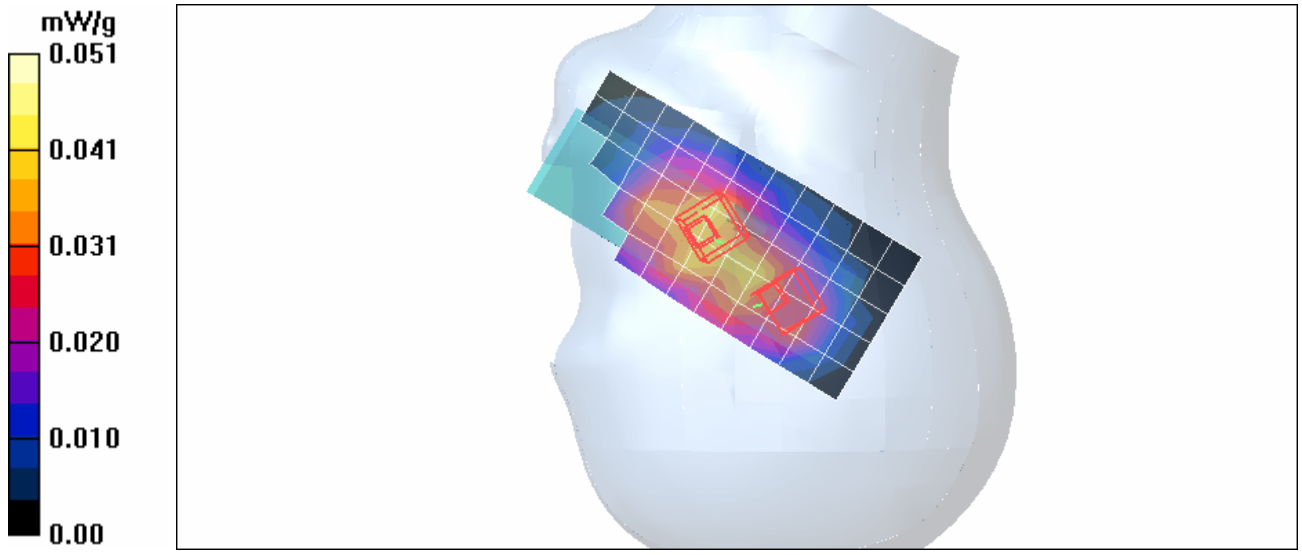
Tilt position - Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.63 V/m

Peak SAR (extrapolated) = 0.037 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.030 mW/g

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



Date/Time: 2005/9/5 13:04:06

Test Laboratory: Advance Data Technology

C220_CDMA2000_Right Head

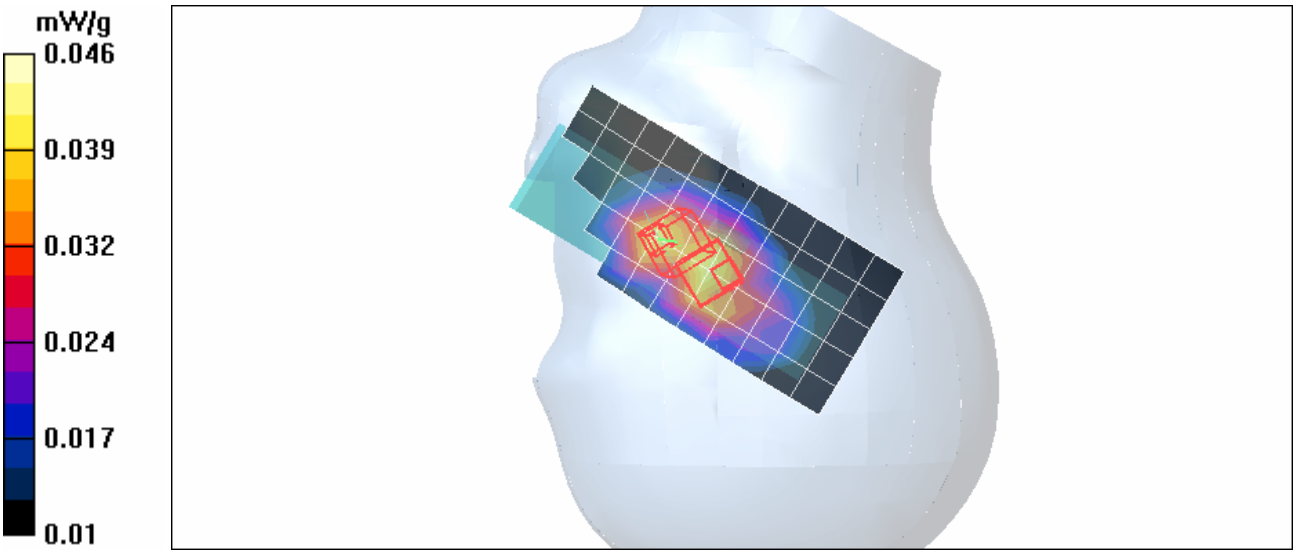
DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 848.76 MHz

Communication System: CDMA ; Frequency: 848.76 MHz ; Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 848.76 MHz; σ = 0.95 mho/m; ε_r = 42.8; ρ = 1000 kg/m^3 ; Liquid level: 150mm
Phantom section: Right Section ; DUT test position : Tilt ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High Channel 777/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.042 mW/g

Tilt position - High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.06 V/m
Peak SAR (extrapolated) = 0.037 W/kg
SAR(1 g) = 0.040 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.045 mW/g

Tilt position - High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.06 V/m
Peak SAR (extrapolated) = 0.035 W/kg
SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.046 mW/g



Date/Time: 2005/9/5 13:43:41

Test Laboratory: Advance Data Technology

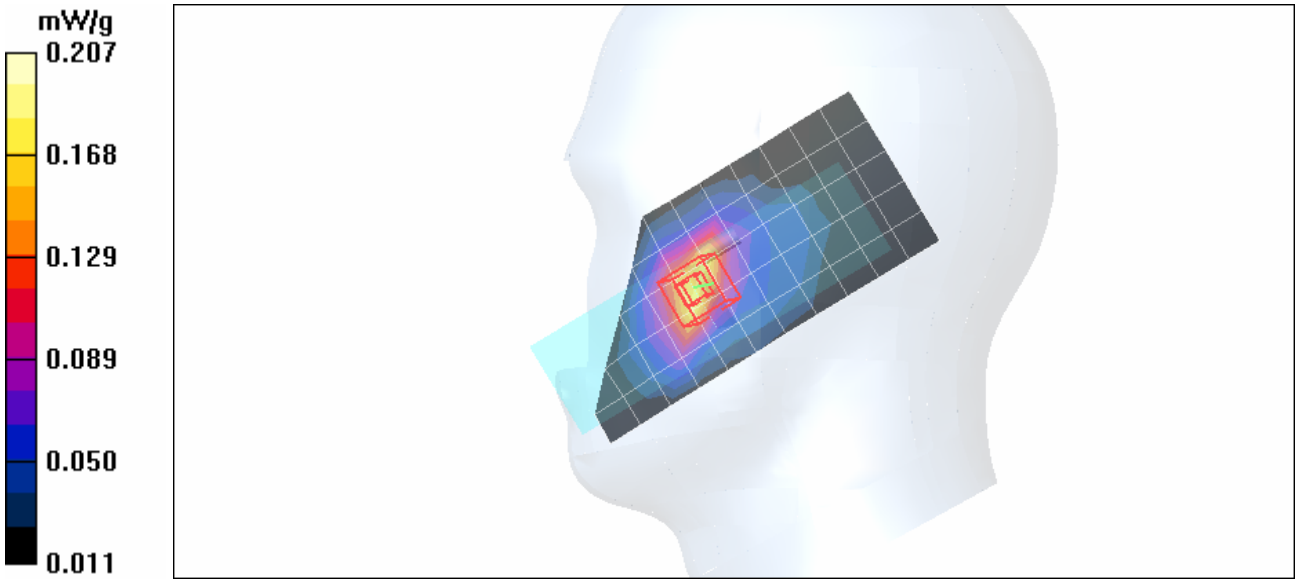
C220_CDMA2000_Left Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 824.12 MHz

Communication System: CDMA ; Frequency: 824.12 MHz ; Duty Cycle: 1:1
Phantom: SAM 12 Medium parameters used: f = 824.12 MHz; σ = 0.928 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3 ; Liquid level: 150mm
Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Low Channel 1013/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.174 mW/g

Touch position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 4.89 V/m
Peak SAR (extrapolated) = 0.312 W/kg
SAR(1 g) = 0.163 mW/g; SAR(10 g) = 0.105 mW/g
Maximum value of SAR (measured) = 0.207 mW/g



Date/Time: 2005/9/5 14:04:53

Test Laboratory: Advance Data Technology

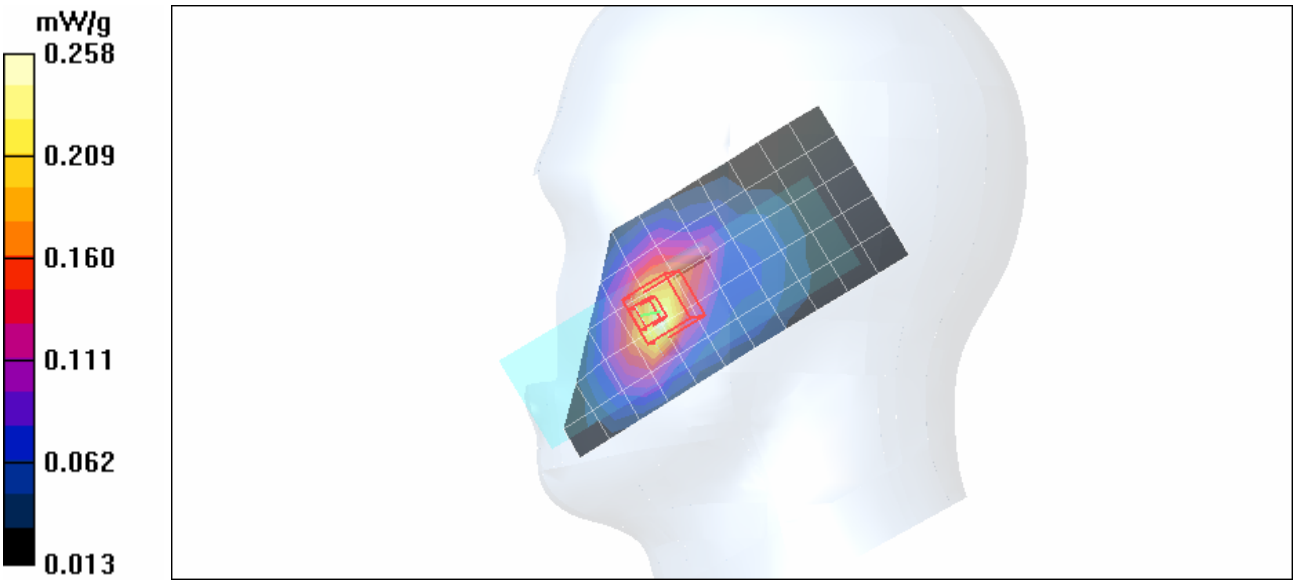
C220_CDMA2000_Left Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 836.58 MHz

Communication System: CDMA ; Frequency: 836.58 MHz ; Duty Cycle: 1:1
Phantom: SAM 12 Medium parameters used: f = 836.58 MHz; σ = 0.94 mho/m; ε_r = 43; ρ = 1000 kg/m^3 ;
Liquid level: 150mm
Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - Middle Channel 384/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.191 mW/g

Touch position - Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.85 V/m
Peak SAR (extrapolated) = 0.702 W/kg
SAR(1 g) = 0.213 mW/g; SAR(10 g) = 0.115 mW/g
Maximum value of SAR (measured) = 0.258 mW/g



Date/Time: 2005/9/5 14:25:16

Test Laboratory: Advance Data Technology

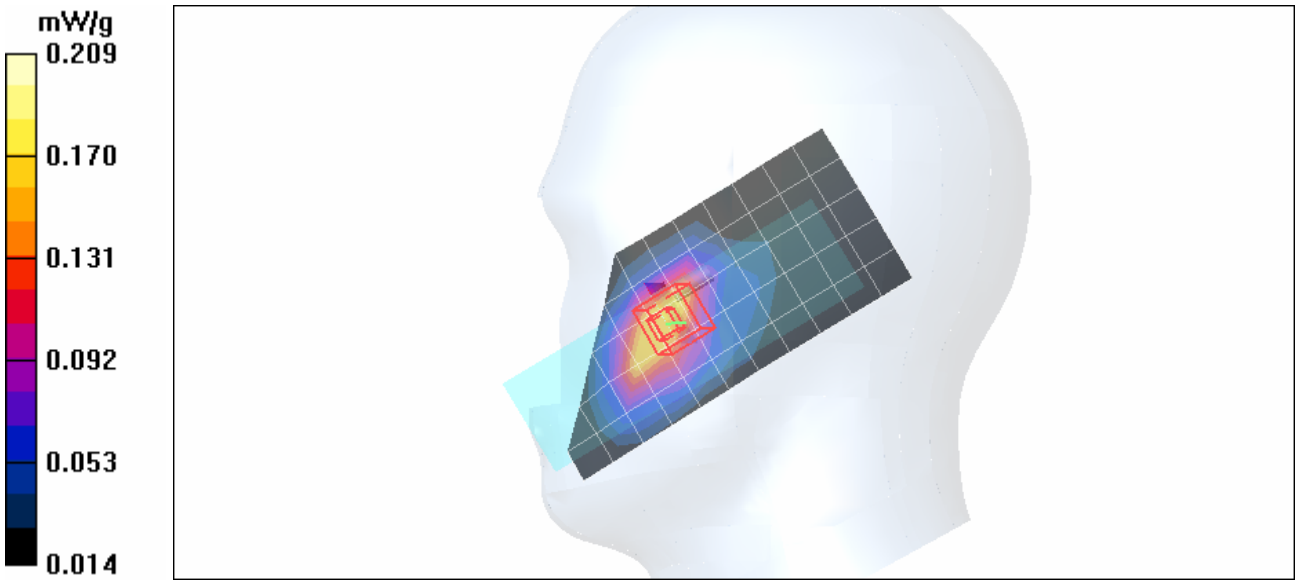
C220_CDMA2000_Left Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Frequency: 848.76 MHz

Communication System: CDMA ; Frequency: 848.76 MHz ; Duty Cycle: 1:1
Phantom: SAM 12 Medium parameters used: f = 848.76 MHz; σ = 0.95 mho/m; ε_r = 42.8; ρ = 1000 kg/m^3 ; Liquid level: 150mm
Phantom section: Left Section ; DUT test position : Cheek ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Touch position - High Channel 777/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.167 mW/g

Touch position - High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.34 V/m
Peak SAR (extrapolated) = 0.365 W/kg
SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.111 mW/g
Maximum value of SAR (measured) = 0.209 mW/g



Date/Time: 2005/9/5 14:43:02

Test Laboratory: Advance Data Technology

C220_CDMA2000_Left Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 824.12 MHz

Communication System: CDMA ; Frequency: 824.12 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used: f = 824.12 MHz; σ = 0.928 mho/m; ε_r = 43.1; ρ = 1000 kg/m^3 ; Liquid level: 150 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: OQPSK

Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Low Channel 1013/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

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

Tilt position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.15 V/m

Peak SAR (extrapolated) = 0.105 W/kg

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.034 mW/g

Maximum value of SAR (measured) = 0.053 mW/g

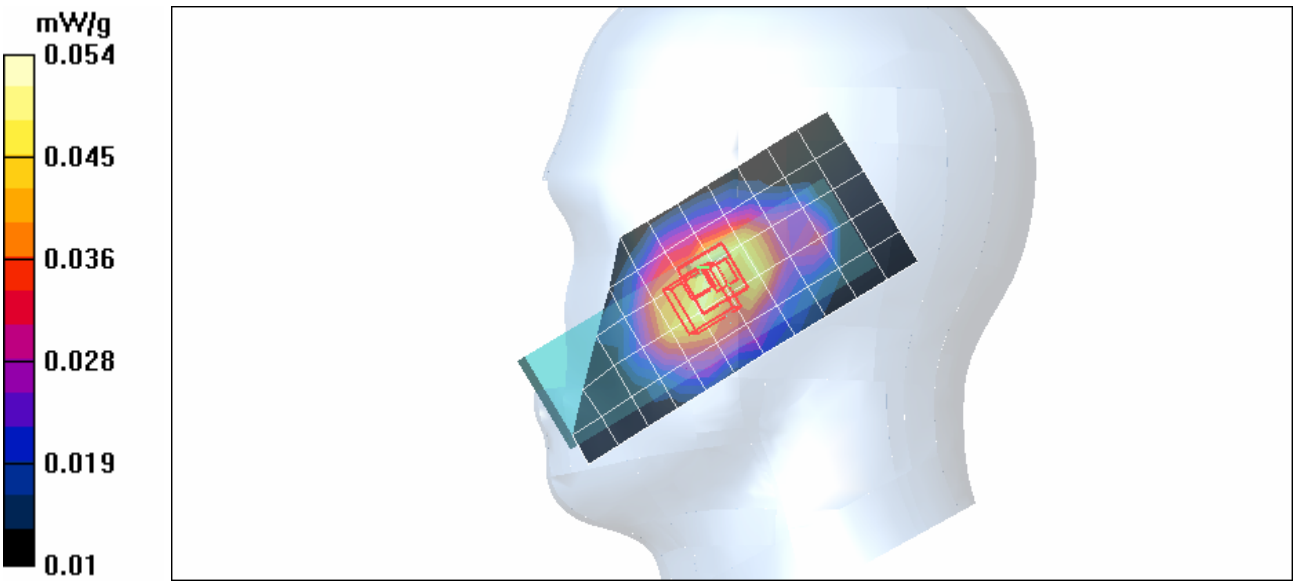
Tilt position - Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.15 V/m

Peak SAR (extrapolated) = 0.072 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.031 mW/g

Maximum value of SAR (measured) = 0.054 mW/g



Date/Time: 2005/9/5 15:15:57

Test Laboratory: Advance Data Technology

C220_CDMA2000_Left Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 836.58 MHz

Communication System: CDMA ; Frequency: 836.58 MHz; Duty Cycle: 1:1

Medium: HSL900 Medium parameters used: f = 836.58 MHz; σ = 0.94 mho/m; ε_r = 43; ρ = 1000 kg/m^3 ;

Liquid level: 150 mm

Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: OQPSK

Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1790 ; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - Middle Channel 384/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.038 mW/g

Tilt position - Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.37 V/m

Peak SAR (extrapolated) = 0.134 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.029 mW/g

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

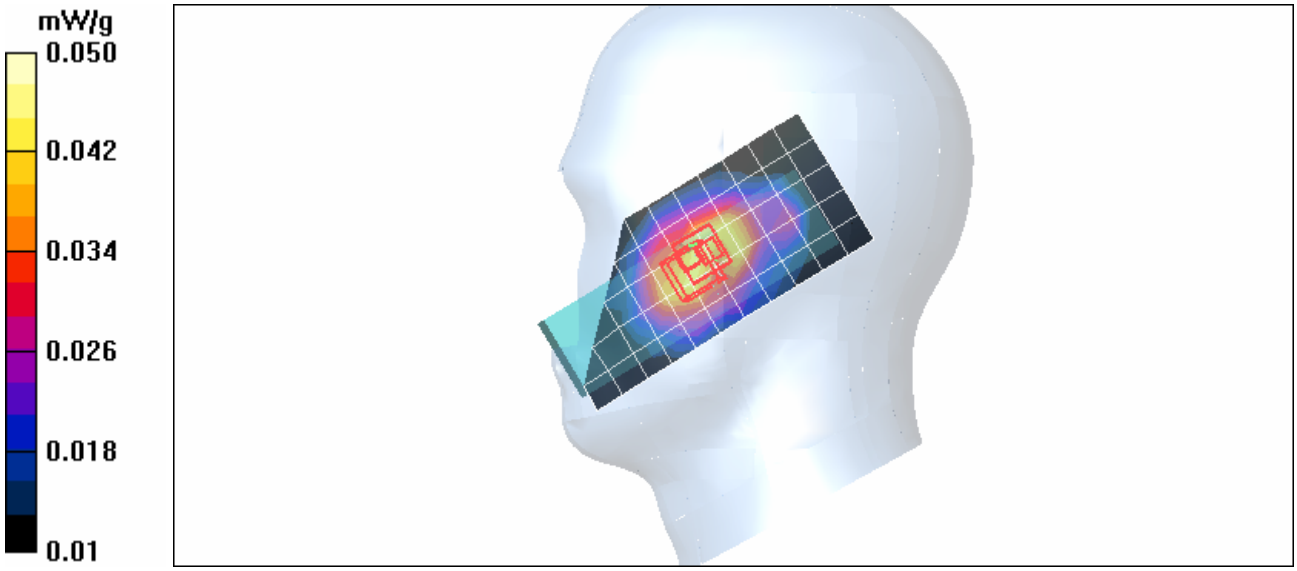
Tilt position - Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.37 V/m

Peak SAR (extrapolated) = 0.152 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.46 mW/g



Date/Time: 2005/9/5 15:48:27

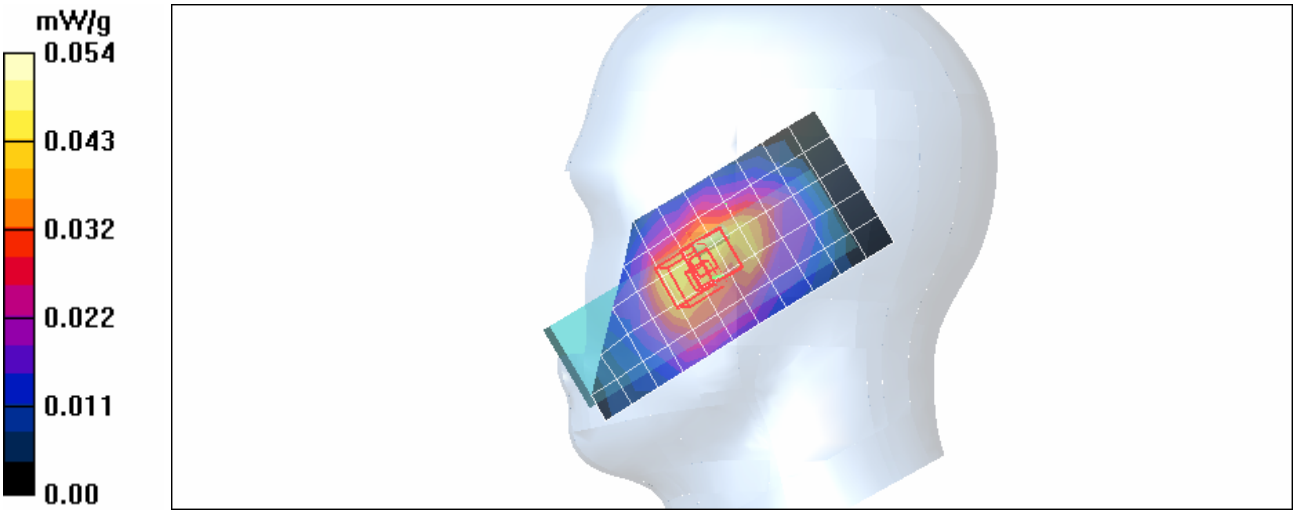
Test Laboratory: Advance Data Technology

C220_CDMA2000_Left Head

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 848.76 MHz

Communication System: CDMA ; Frequency: 848.76 MHz; Duty Cycle: 1:1
Medium: HSL900 Medium parameters used: f = 848.76 MHz; σ = 0.95 mho/m; ε_r = 42.8; ρ = 1000 kg/m^3 ; Liquid level: 150 mm
Phantom section: Left Section ; DUT test position : Tilt ; Modulation type: OQPSK
Antenna type : External Antenna ; Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Tilt position - High Channel 777/Area Scan (6x12x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.044 mW/g
Tilt position - High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.06 V/m
Peak SAR (extrapolated) = 0.175 W/kg
SAR(1 g) = 0.048 mW/g; SAR(10 g) = 0.030 mW/g
Maximum value of SAR (measured) = 0.054 mW/g
Tilt position - High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 5.06 V/m
Peak SAR (extrapolated) = 0.224 W/kg
SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.029 mW/g
Maximum value of SAR (measured) = 0.51 mW/g



Date/Time: 2005/9/5 17:46:36

Test Laboratory: Advance Data Technology

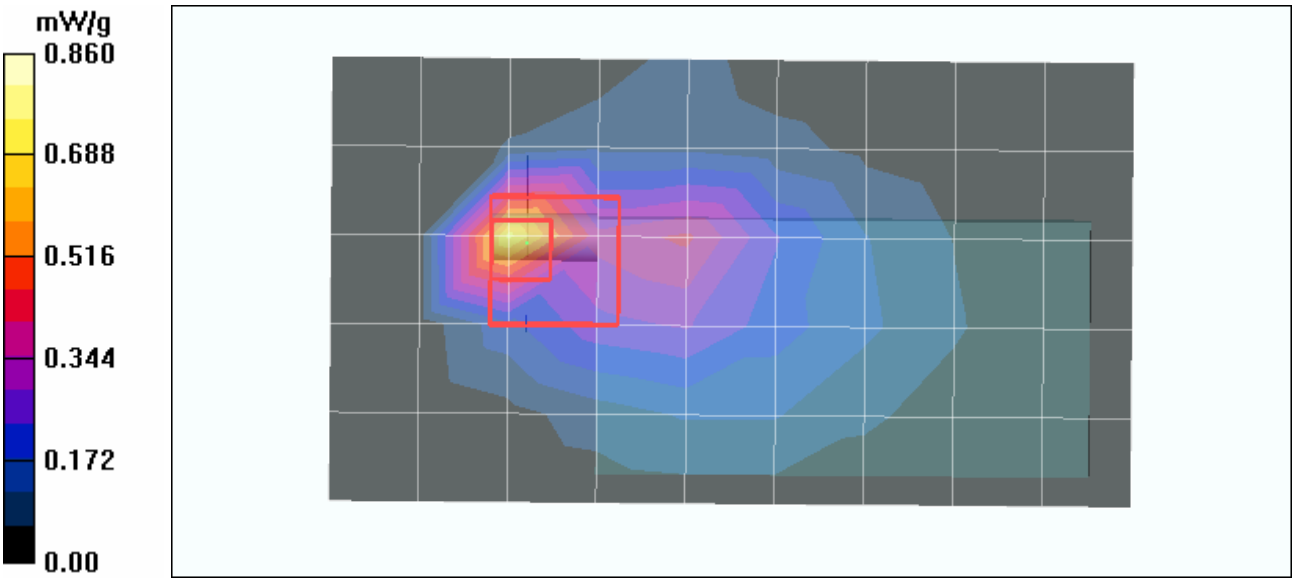
C220-BodyWorn-Bottom-CDMA2000

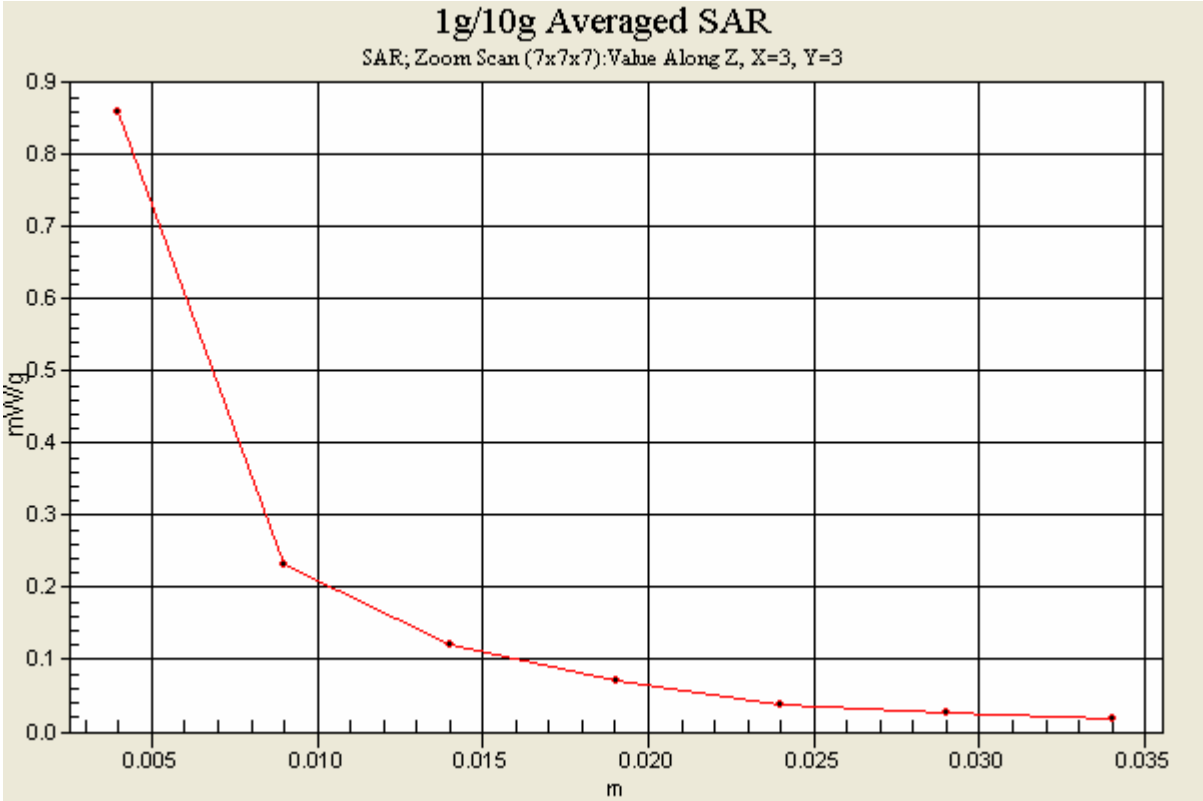
DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 824.12 MHz

Communication System: CDMA ; Frequency: 824.12 MHz ; Duty Cycle: 1:1
Medium: MSL900 Medium parameters used: f = 824.12 MHz; σ = 0.975 mho/m; ε_r = 55.5; ρ = 1000 kg/m^3 ; Liquid Level : 155mm
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OQPSK
Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)
Antenna Type : External Antenna ; Air Temp. : 23.1 degrees ; Liquid Temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: DAE not calibrated
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

Low Channel 1013/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.710 mW/g

Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.3 V/m
Peak SAR (extrapolated) = 4.26 W/kg
SAR(1 g) = 0.678 mW/g; SAR(10 g) = 0.241 mW/g
Maximum value of SAR (measured) = 0.860 mW/g




1g/10g Averaged SAR
SAR; Zoom Scan (7x7x7):Value Along Z, X=3, Y=3
mW/g
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
0.1
0.0
0.005
0.010
0.015
0.020
0.025
0.030
0.035
m

Date/Time: 2005/9/5 18:04:54

Test Laboratory: Advance Data Technology

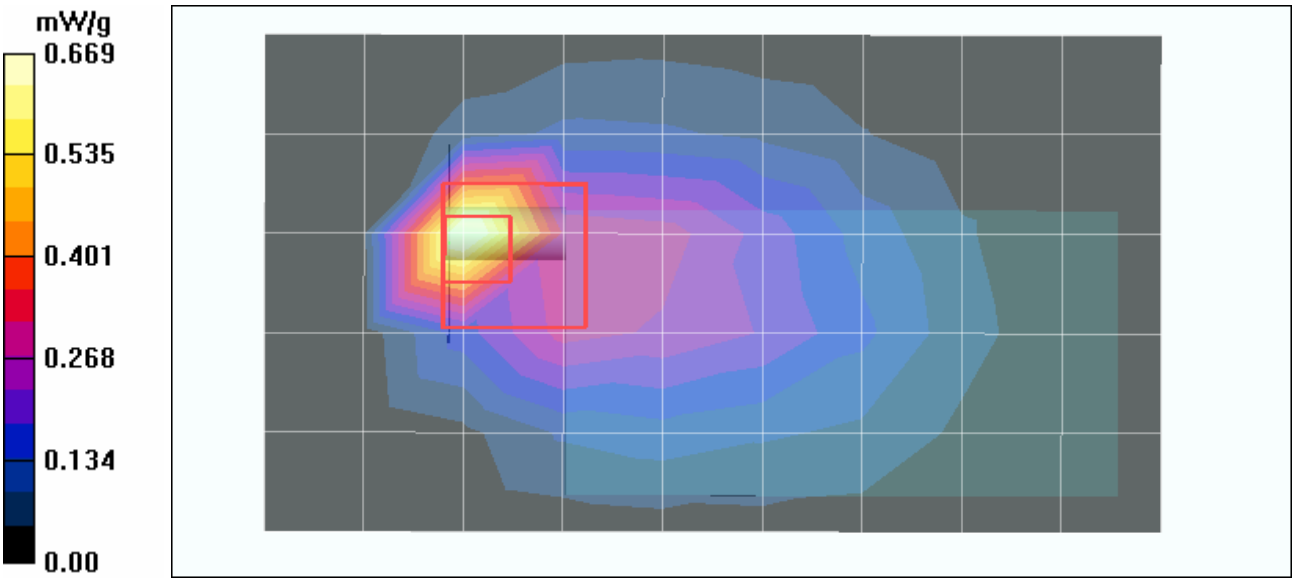
C220-BodyWorn-Bottom-CDMA2000

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 836.58 MHz

Communication System: CDMA ; Frequency: 836.58 MHz ; Duty Cycle: 1:1
Medium: MSL900 Medium parameters used: f = 836.58 MHz; σ = 0.987 mho/m; ε_r = 55.4; ρ = 1000 kg/m^3 ; Liquid Level : 155mm
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OQPSK
Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)
Antenna Type : External Antenna ; Air Temp. : 23.1 degrees ; Liquid Temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: DAE not calibrated
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

Middle Channel 384/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.732 mW/g

Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 19.7 V/m
Peak SAR (extrapolated) = 2.07 W/kg
SAR(1 g) = 0.568 mW/g; SAR(10 g) = 0.218 mW/g
Maximum value of SAR (measured) = 0.669 mW/g



Date/Time: 2005/9/5 18:22:12

Test Laboratory: Advance Data Technology

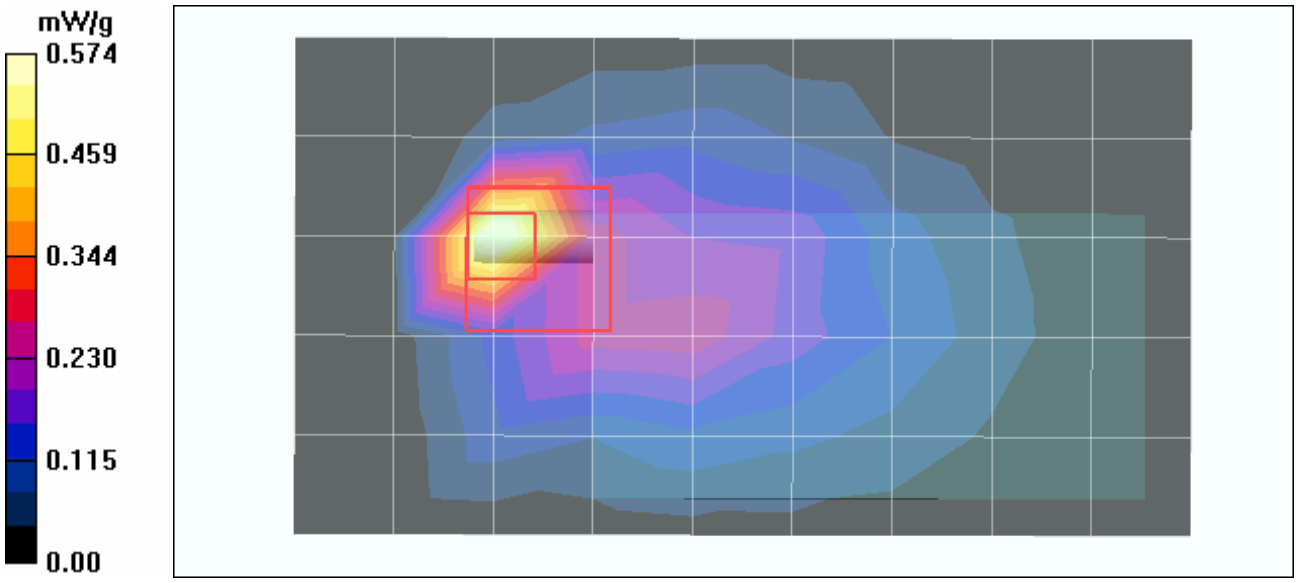
C220-BodyWorn-Bottom-CDMA2000

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 848.76 MHz

Communication System: CDMA ; Frequency: 848.76 MHz ; Duty Cycle: 1:1
Medium: MSL900 Medium parameters used: f = 848.76 MHz; σ = 1 mho/m; ε_r = 55.3; ρ = 1000 kg/m^3 ; Liquid Level : 155mm
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OQPSK
Separation Distance : 0 mm (The bottom side of the EUT to the Phantom)
Antenna Type : External Antenna ; Air Temp. : 23.1 degrees ; Liquid Temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: DAE not calibrated
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

High Channel 777/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.637 mW/g

High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 16.7 V/m
Peak SAR (extrapolated) = 3.10 W/kg
SAR(1 g) = 0.502 mW/g; SAR(10 g) = 0.183 mW/g
Maximum value of SAR (measured) = 0.574 mW/g



Date/Time: 2005/9/5 18:44:44

Test Laboratory: Advance Data Technology

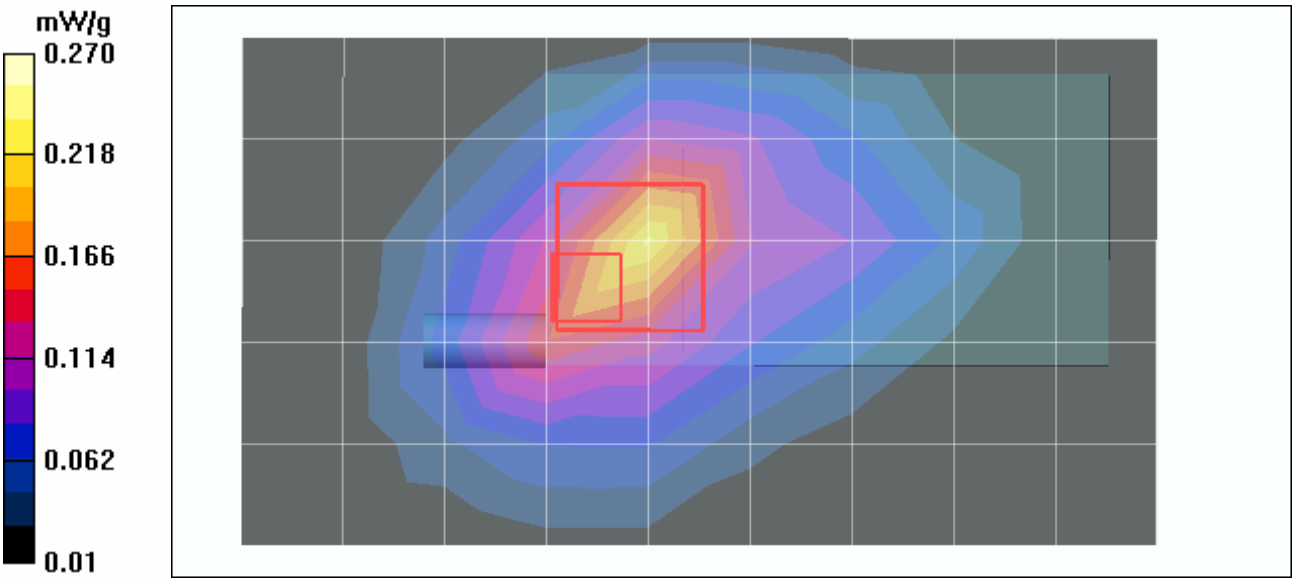
C220-BodyWorn-Front-CDMA2000

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 824.12 MHz

Communication System: CDMA ; Frequency: 824.12 MHz ; Duty Cycle: 1:1
Medium: MSL900 Medium parameters used: f = 824.12 MHz; σ = 0.975 mho/m; ε_r = 55.5; ρ = 1000 kg/m^3 ; Liquid Level : 155mm
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OQPSK
Separation Distance : 0 mm (The front side of the EUT to the Phantom)
Antenna Type : External Antenna ; Air Temp. : 23.1 degrees ; Liquid Temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: DAE not calibrated
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

Low Channel 1013/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.222 mW/g

Low Channel 1013/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.9 V/m
Peak SAR (extrapolated) = 0.544 W/kg
SAR(1 g) = 0.202 mW/g; SAR(10 g) = 0.115 mW/g
Maximum value of SAR (measured) = 0.270 mW/g



Date/Time: 2005/9/5 19:02:31

Test Laboratory: Advance Data Technology

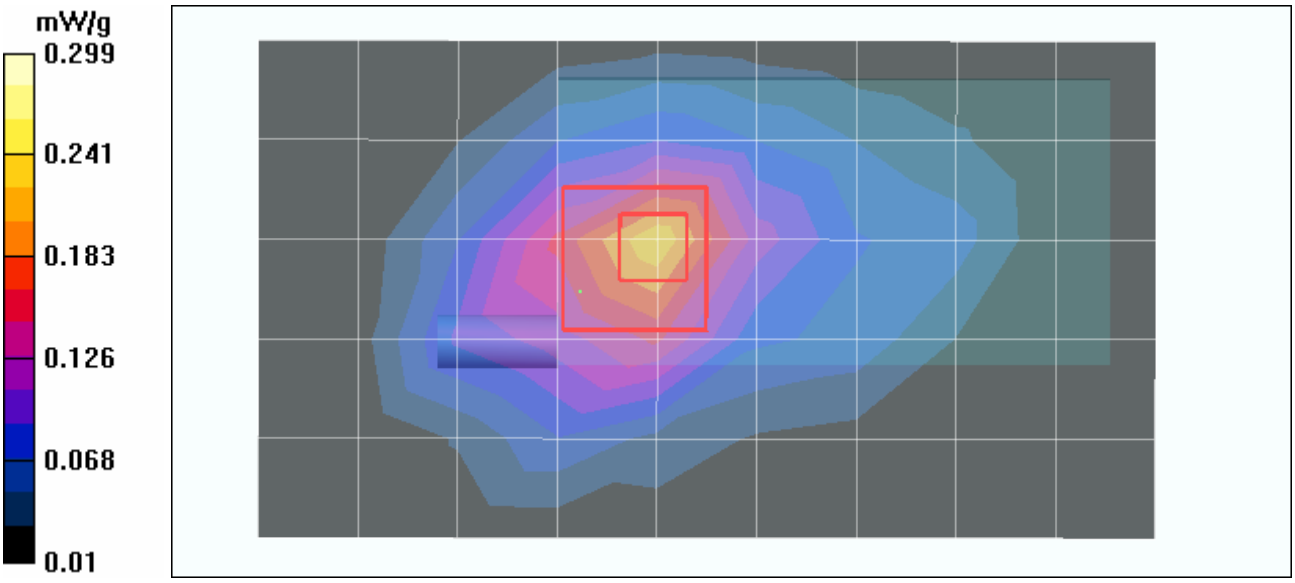
C220-BodyWorn-Front-CDMA2000

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 836.58 MHz

Communication System: CDMA ; Frequency: 836.58 MHz ; Duty Cycle: 1:1
Medium: MSL900 Medium parameters used: f = 836.58 MHz; σ = 0.987 mho/m; ε_r = 55.4; ρ = 1000 kg/m^3 ; Liquid Level : 155mm
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OQPSK
Separation Distance : 0 mm (The front side of the EUT to the Phantom)
Antenna Type : External Antenna ; Air Temp. : 23.1 degrees ; Liquid Temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: DAE not calibrated
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

Middle Channel 384/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.223 mW/g

Middle Channel 384/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 12.6 V/m
Peak SAR (extrapolated) = 0.409 W/kg
SAR(1 g) = 0.192 mW/g; SAR(10 g) = 0.112 mW/g
Maximum value of SAR (measured) = 0.299 mW/g



Date/Time: 2005/9/5 19:20:09

Test Laboratory: Advance Data Technology

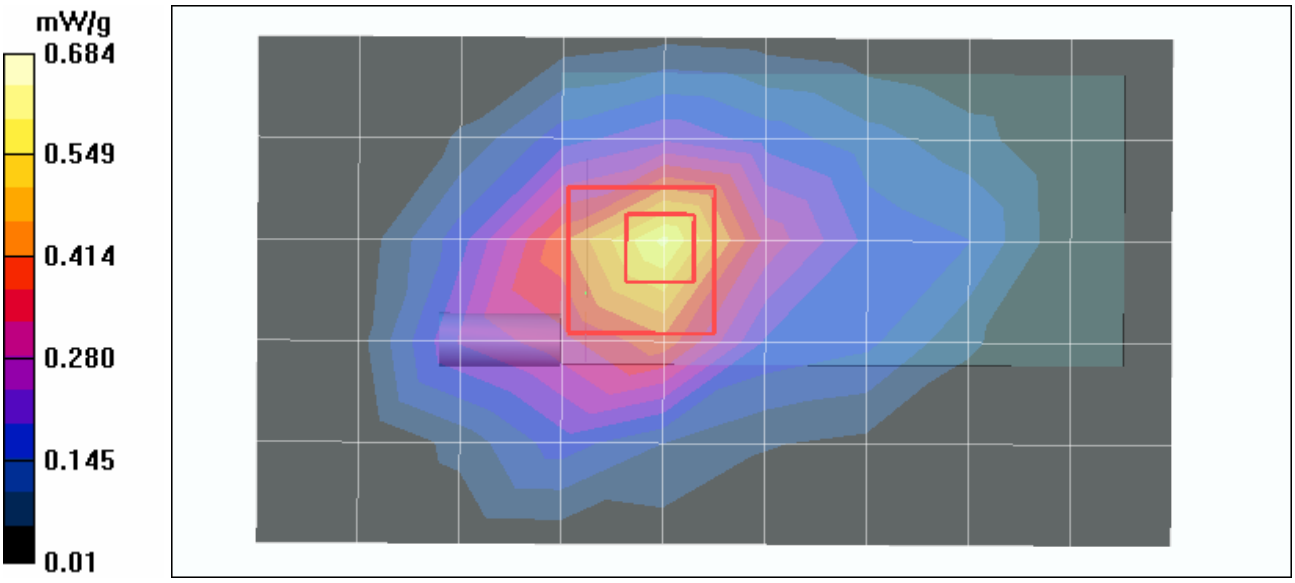
C220-BodyWorn-Front-CDMA2000

DUT: CDMA 2000 1X Mobile Phone ; Type: C220 ; Test Channel Frequency: 848.76 MHz

Communication System: CDMA ; Frequency: 848.76 MHz ; Duty Cycle: 1:1
Medium: MSL900 Medium parameters used: f = 848.76 MHz; σ = 1 mho/m; ε_r = 55.3; ρ = 1000 kg/m^3 ; Liquid Level : 155mm
Phantom section: Flat Section ; DUT test position : Body ; Modulation Type: OQPSK
Separation Distance : 0 mm (The front side of the EUT to the Phantom)
Antenna Type : External Antenna ; Air Temp. : 23.1 degrees ; Liquid Temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579 ; Calibrated: DAE not calibrated
- Phantom: SAM 12 ; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19 ; Postprocessing SW: SEMCAD, V1.8 Build 146

High Channel 777/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.214 mW/g

High Channel 777/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.3 V/m
Peak SAR (extrapolated) = 0.684 W/kg
SAR(1 g) = 0.231 mW/g; SAR(10 g) = 0.124 mW/g
Maximum value of SAR (measured) = 0.684 mW/g



Date/Time: 2005/9/5 09:23:14

Test Laboratory: Advance Data Technology

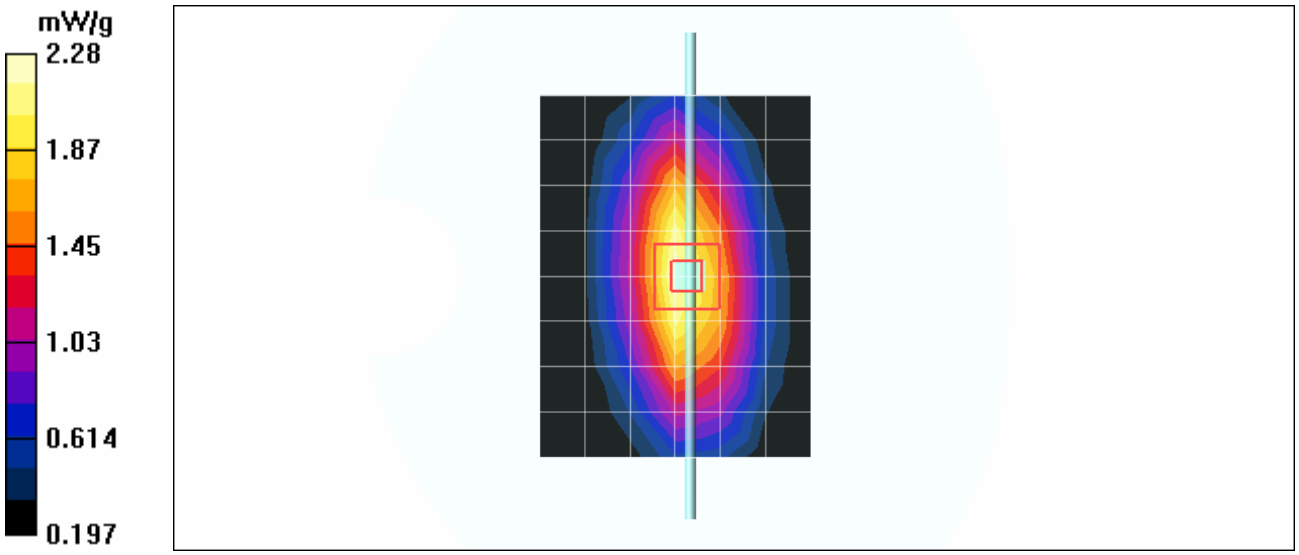
System Validation Check-HSL 835MHz

DUT: Dipole 835 MHz ; Type: D835V2 ; Serial: 4d021 ; Test Frequency: 835 MHz

Communication System: CW ; Frequency: 835 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: HSL900;Medium parameters used: f = 835 MHz; σ = 0.938 mho/m; ε_r = 43; ρ = 1000 kg/m^3 ;
Liquid level : 150 mm
Phantom section: Flat Section ; Separation distance : 15 mm (The feetpoint of the dipole to the Phantom)Air temp. : 22.8 degrees ; Liquid temp. : 22.1 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.94, 6.94, 6.94) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=250mW/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.23 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 51.0 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 3.13 W/kg
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.43 mW/g
Maximum value of SAR (measured) = 2.28 mW/g



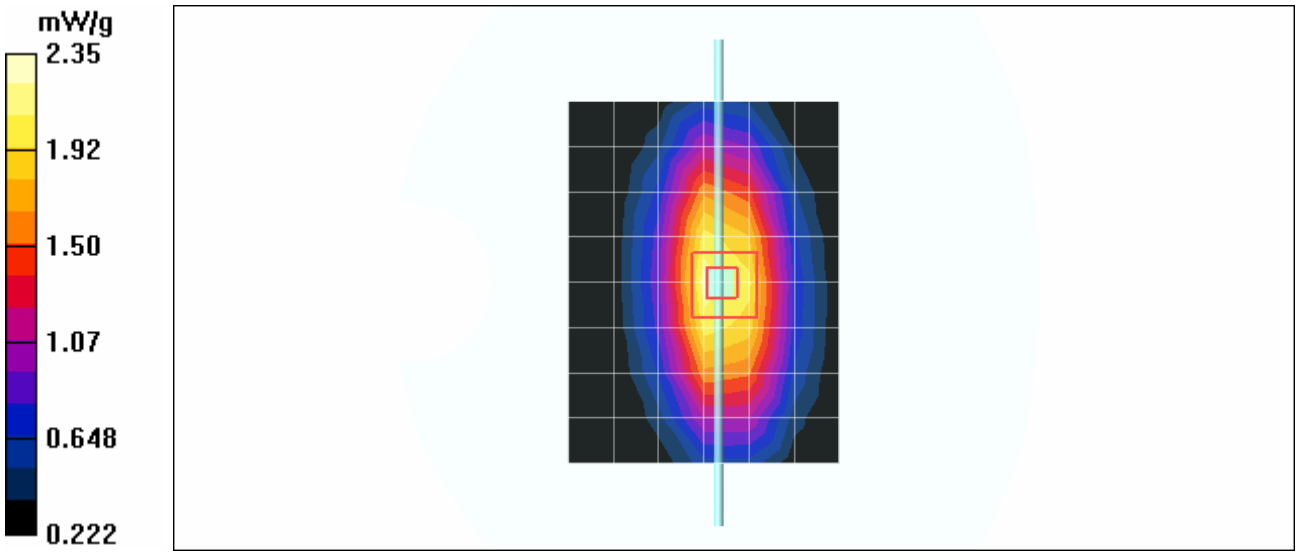
Date/Time: 2005/9/5 17:20:05

Test Laboratory: Advance Data Technology

System Validation Check-MSL 835MHz

DUT: Dipole 835 MHz ; Type: D835V2 ; Serial: 4d021 ; Test Frequency: 835 MHz

Communication System: CW ; Frequency: 835 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL900;Medium parameters used: f = 835 MHz; σ = 0.986 mho/m; ε_r = 55.4; ρ = 1000 kg/m^3 ;
Liquid level : 155 mm
Phantom section: Flat Section ; Separation distance : 15 mm (The feetpoint of the dipole to the Phantom)Air temp. : 23.1 degrees ; Liquid temp. : 22.3 degrees
DASY4 Configuration:
- Probe: ET3DV6 - SN1790 ; ConvF(6.65, 6.65, 6.65) ; Calibrated: 2004/12/20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn579; Calibrated: 2005/3/23
- Phantom: SAM 12; Type: SAM V4.0; Serial: TP 1202
- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

d=15mm, Pin=250mW/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.23 mW/g

d=15mm, Pin=250mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 50.6 V/m; Power Drift = -0.191 dB
Peak SAR (extrapolated) = 3.28 W/kg
SAR(1 g) = 2.24 mW/g; SAR(10 g) = 1.48 mW/g
Maximum value of SAR (measured) = 2.35 mW/g