8 - SAR TEST RESULTS

This page summarizes the results of the performed dosimetric evaluation. The plots with the corresponding SAR distributions, which reveal information about the location of the maximum SAR with respect to the device could be found in the following pages.

The worst case of the test result is 0.0088mW/g, which is within the limit of 1.6mW/g.

8.1 SAR Head Worst-Case Test Data

Ambient Temperature (ºC): 23.0
Relative Humidity (%): 49.3

Position	Frequency (MHz)	Output Power (dBm)	Test Type	Antenna position	Liquid	Phantom	Notes / Accessories	Measured (mW/g)	Limit (mW/g)	Plot #
Left Head Cheek	836	25	Head	Extended	Head	Head	None	0.0082	1.6	1
	836	25		Retracted				0.0084		2
Left Head Tilted	836	25		Extended				0.0077		3
	836	25		Retracted				0.0073		4
Right Head Cheek	836	25		Extended				0.0088		5
	836	25		Retracted				0.0083		6
Right Head Tilted	836	25		Extended				0.0076		7
	836	25		Retracted				0.0073		8
Back 2.2cm Separation	836	25	Body Worn	Extended	Body	Body	Headset	0.0038		9
Back 2.2cm Separation	836	25		Retracted				0.0041		10

8.2 Plots of Test Result

The plots of test result were attached as reference.

GR8 Communications, Model: SCH-770 (Left Head, Cheek, Antenna position extented, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

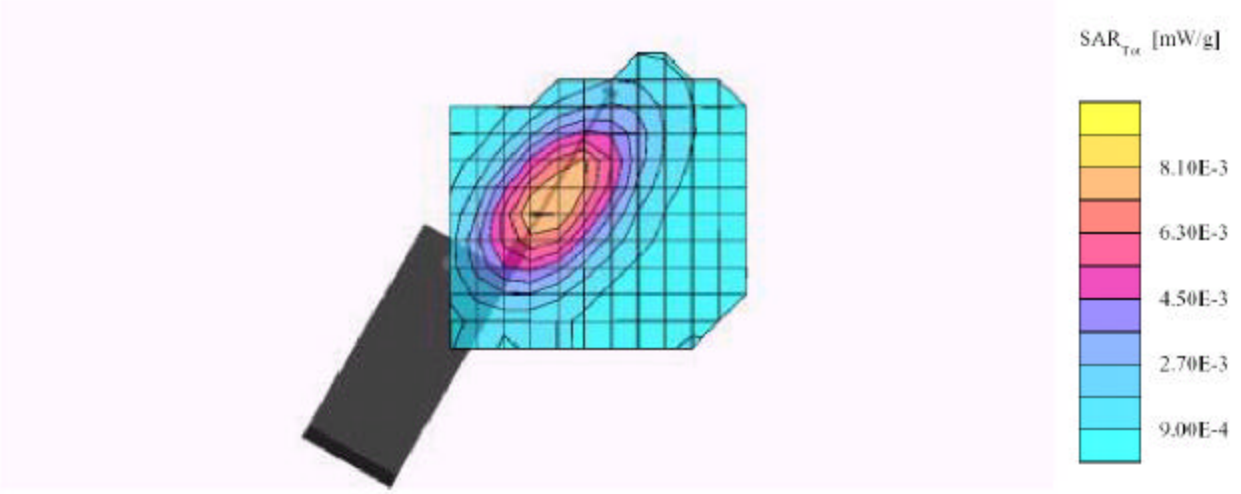
SAM Phantom; Left Hand Section; Position: (74°,60°); Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: $\sigma = 0.90$ mho/m $\varepsilon_r = 39.6$ $\rho = 1.31$ g/cm^3

Cube 5x5x7: SAR (1g): 0.0082 mW/g, SAR (10g): 0.0059 mW/g, (Worst-case extrapolation)

Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0

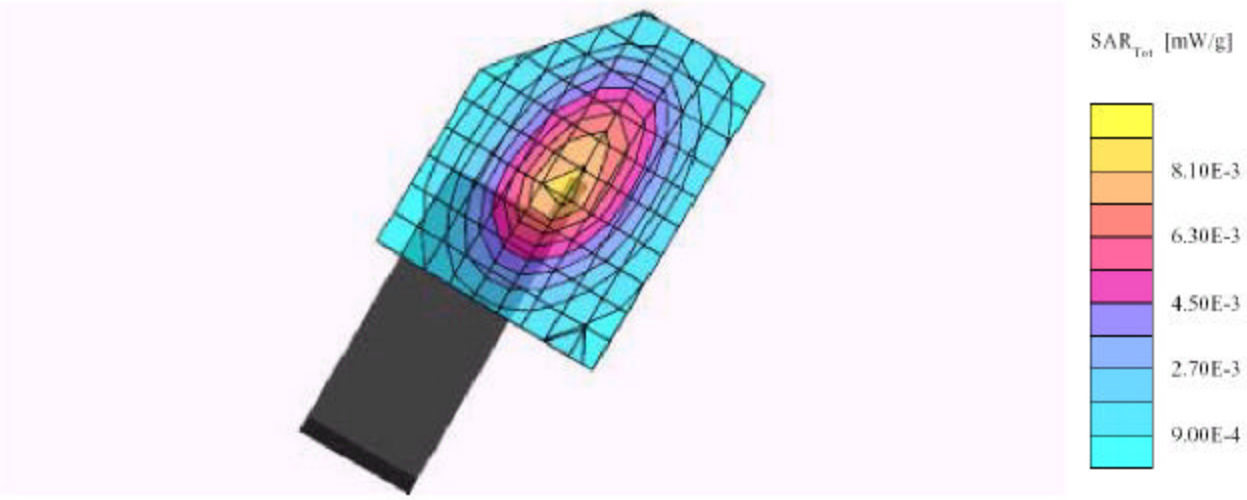
Powerdrift: -0.05 dB



Plot #1

GR8 Communications, Model: SCH-770 (Left Head, Cheek, Antenna position retracted, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

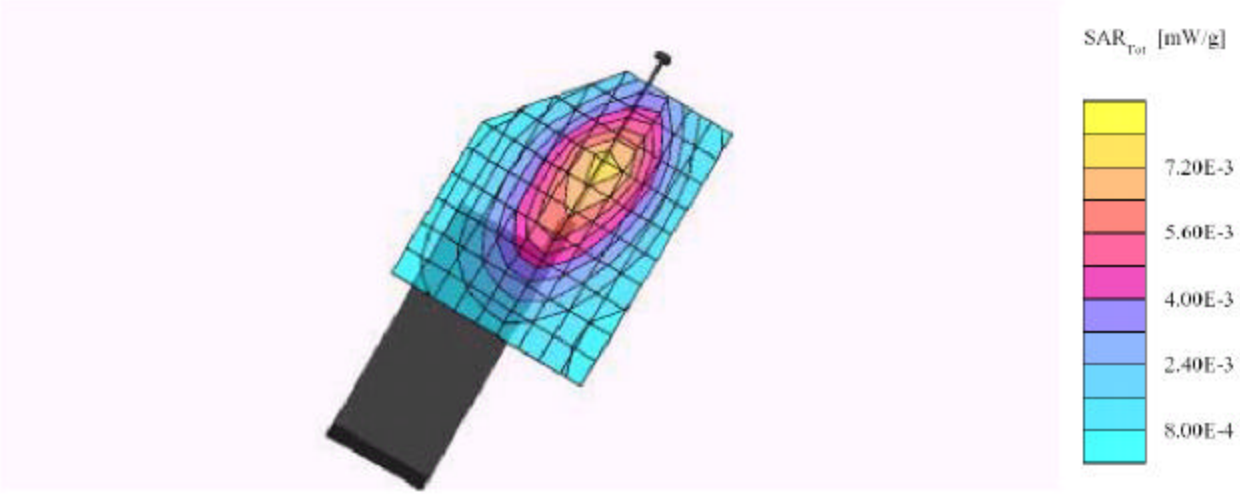
SAM Phantom; Left Hand Section; Position: (74°,60°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: σ = 0.90 mho/m ε_r = 39.6 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.0084 mW/g, SAR (10g): 0.0060 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 10.0, Dz = 10.0
Powerdrift: 0.02 dB



Plot #2

GR8 Communications, Model: SCH-770 (Left Head, Tilted, Antenna position extented, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

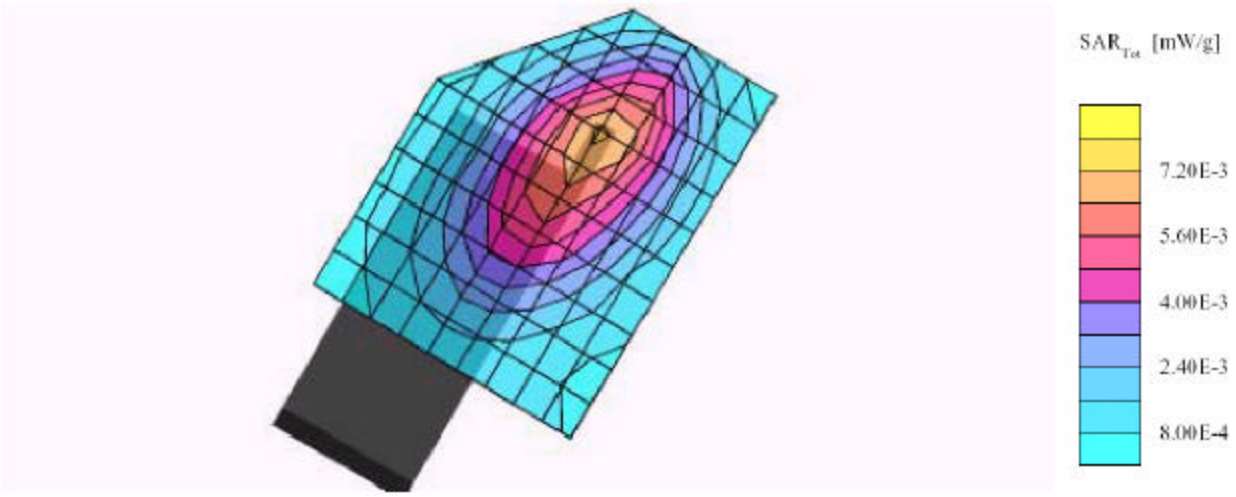
SAM Phantom: Left Hand Section; Position: (74°,60°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: σ = 0.90 mho/m ε_r = 39.6 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.0077 mW/g, SAR (10g): 0.0052 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 10.0, Dz = 10.0
Powerdrift: -0.02 dB



Plot #3

GR8 Communications, Model: SCH-770 (Left Head, Tilted, Antenna position retracted, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

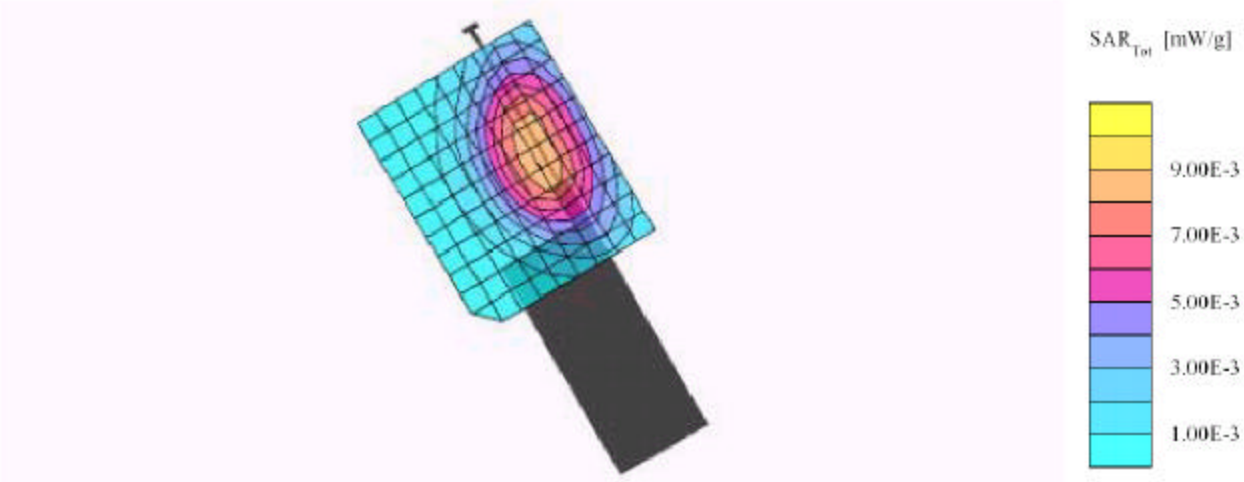
SAM Phantom; Left Hand Section; Position: (74°,60°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: σ = 0.90 mho/m ε_r = 39.6 ρ = 1.31 g/cm³
Cube 5x5x7: SAR (1g): 0.0073 mW/g, SAR (10g): 0.0049 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 10.0, Dz = 10.0
Powerdrift: -0.00 dB



Plot #4

GR8 Communications, Model: SCH-770 (Right Head, Cheek, Antenna position extented, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

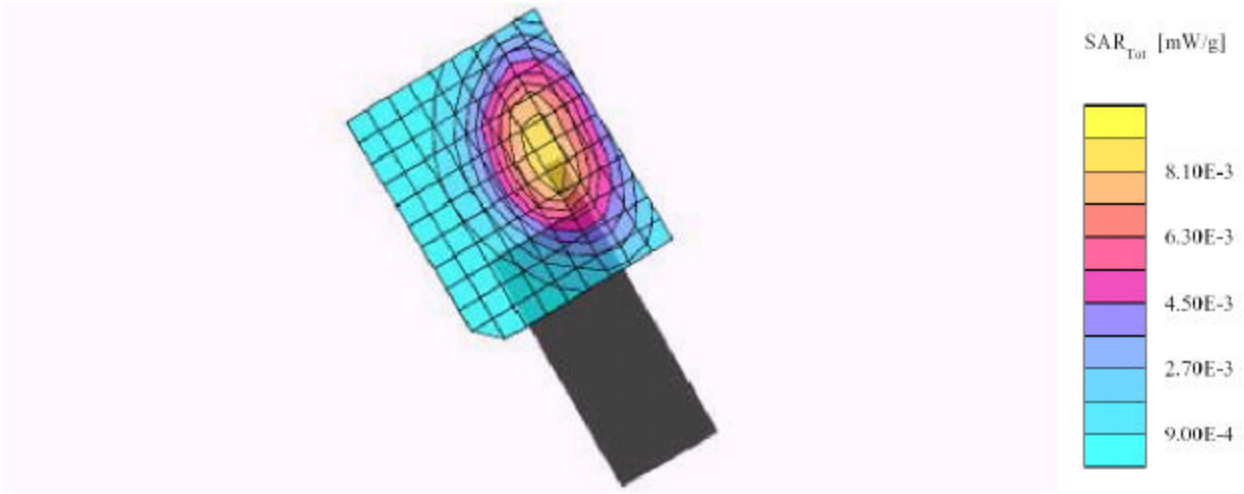
SAM Phantom; Righ Hand Section; Position: (90°,300°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: σ = 0.90 mho/m ε_r = 39.6 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.0088 mW/g, SAR (10g): 0.0064 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 8.0
Powerdrift: -0.02 dB



Plot #5

GR8 Communications, Model: SCH-770 (Right Head, Cheek, Antenna position retracted, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

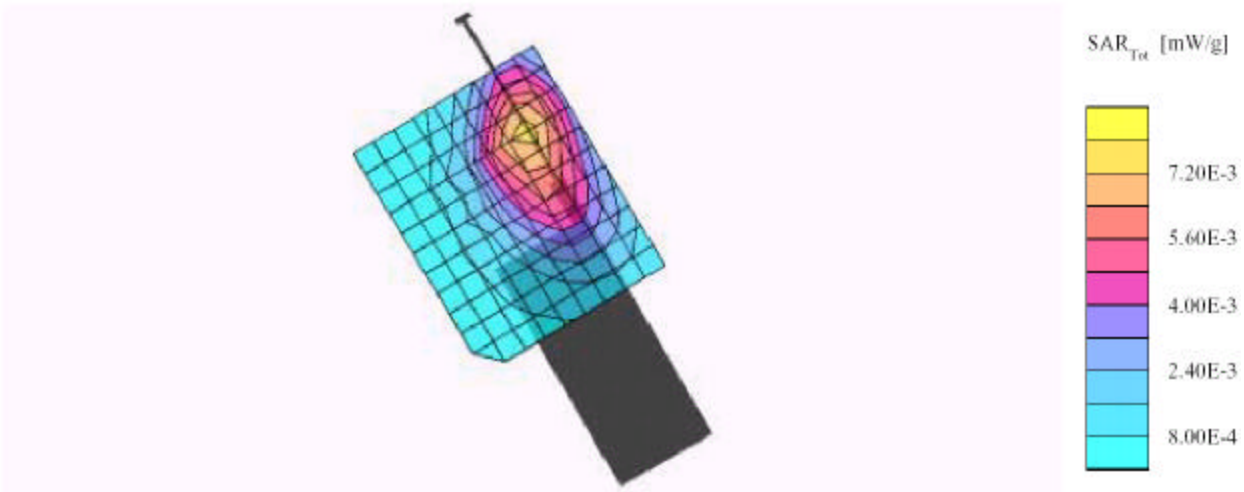
SAM Phantom; Righ Hand Section; Position: (90°,300°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: σ = 0.90 mho/m ε_r = 39.6 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.0083 mW/g, SAR (10g): 0.0060 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 8.0
Powerdrift: 0.01 dB



Plot #6

GR8 Communications, Model: SCH-770 (Right Head, Tilted, Antenna position extented, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

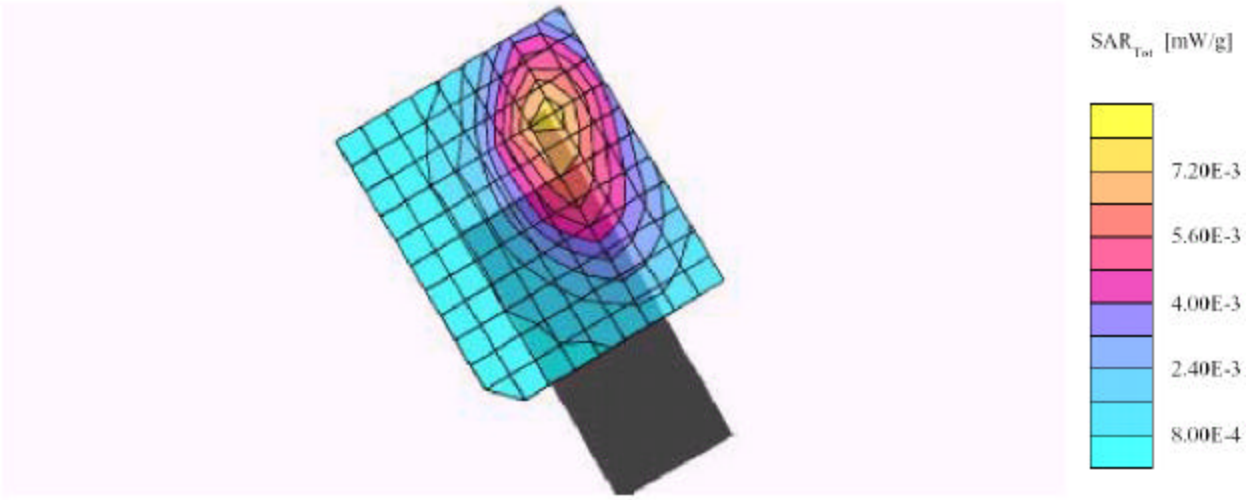
SAM Phantom; Righ Hand Section; Position: (90°,300°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: $\sigma = 0.90$ mho/m $\varepsilon_r = 39.6$ $\rho = 1.31$ g/cm^3
Cube 5x5x7: SAR (1g): 0.0076 mW/g, SAR (10g): 0.0052 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 8.0
Powerdrift: 0.00 dB



Plot #7

GR8 Communications, Model: SCH-770 (Right Head, Tilted, Antenna position retracted, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

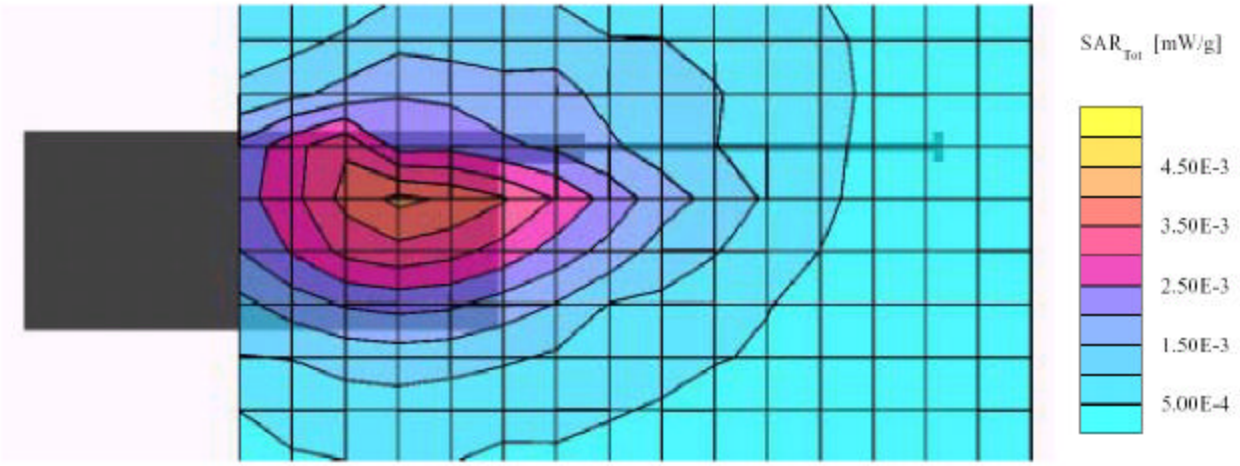
SAM Phantom; Righ Hand Section; Position: (90°,300°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: σ = 0.90 mho/m ε_r = 39.6 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.0073 mW/g, SAR (10g): 0.0050 mW/g, (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 8.0
Powerdrift: -0.03 dB



Plot #8

GR8 Communications, Model: SCH-770 (Body worn with back side seperation distance of 2.2 cm to the flat phantom with headset, Antenna position extented, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

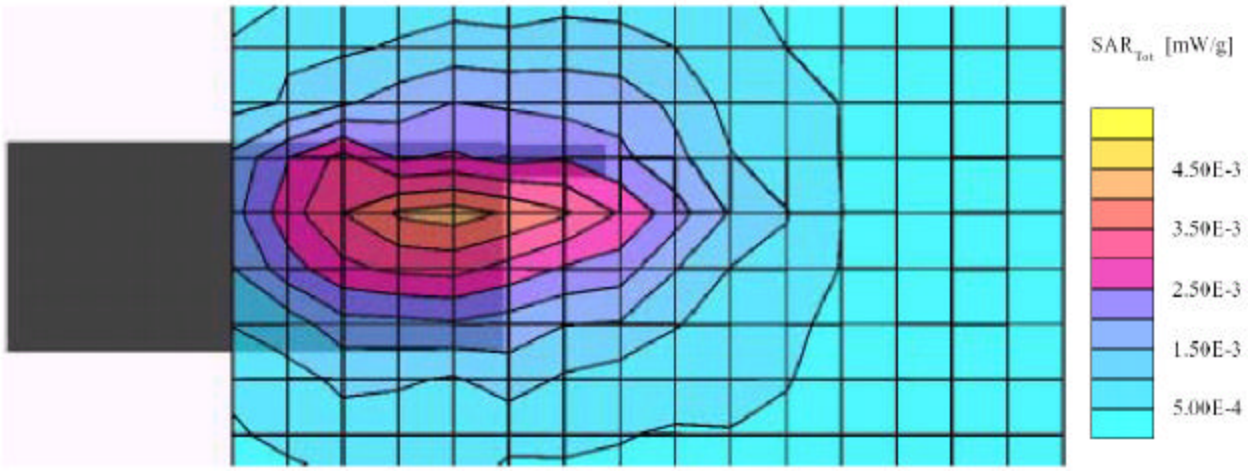
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: $\sigma = 0.96$ mho/m $\varepsilon_r = 55.2$ $\rho = 1.31$ g/cm³
Cube 5x5x7: SAR (1g): 0.0038 mW/g, SAR (10g): 0.0027 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.03 dB



Plot #9

GR8 Communications, Model: SCH-770 (Body worn with back side seperation distance of 2.2 cm to the flat phantom with headset, Antenna position retracted, Mid channel, Ambient Temp = 23 DegC, Liquid Temp = 21 Deg C, 08/11/2003)

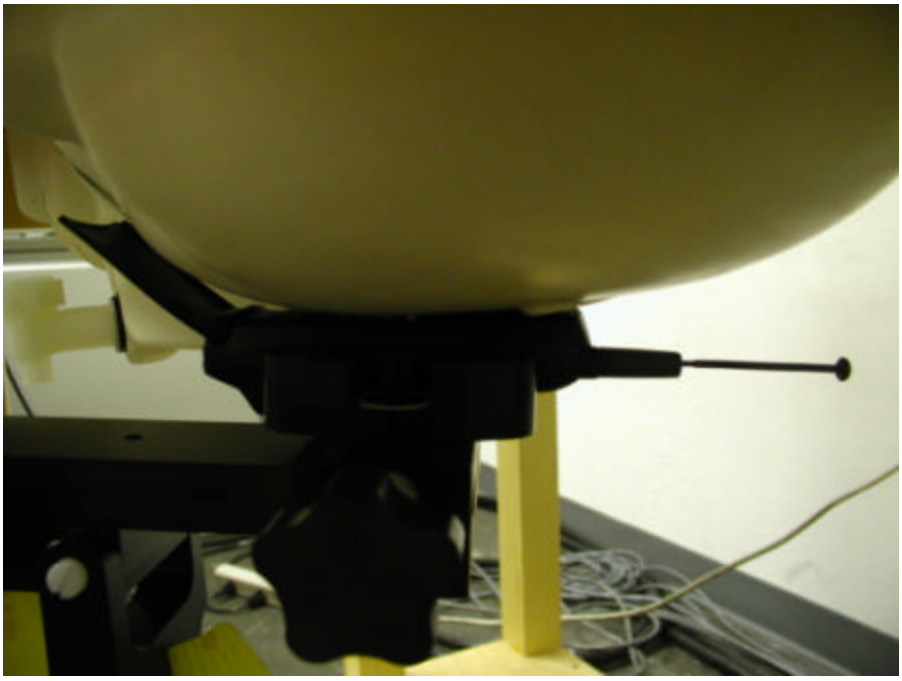
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz
Probe: ET3DV6 - SN1604; ConvF(6.40,6.40,6.40); Crest factor: 1.0; (Body) 835 MHz: σ = 0.96 mho/m ε_r = 55.2 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.0041 mW/g, SAR (10g): 0.0029 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.00 dB



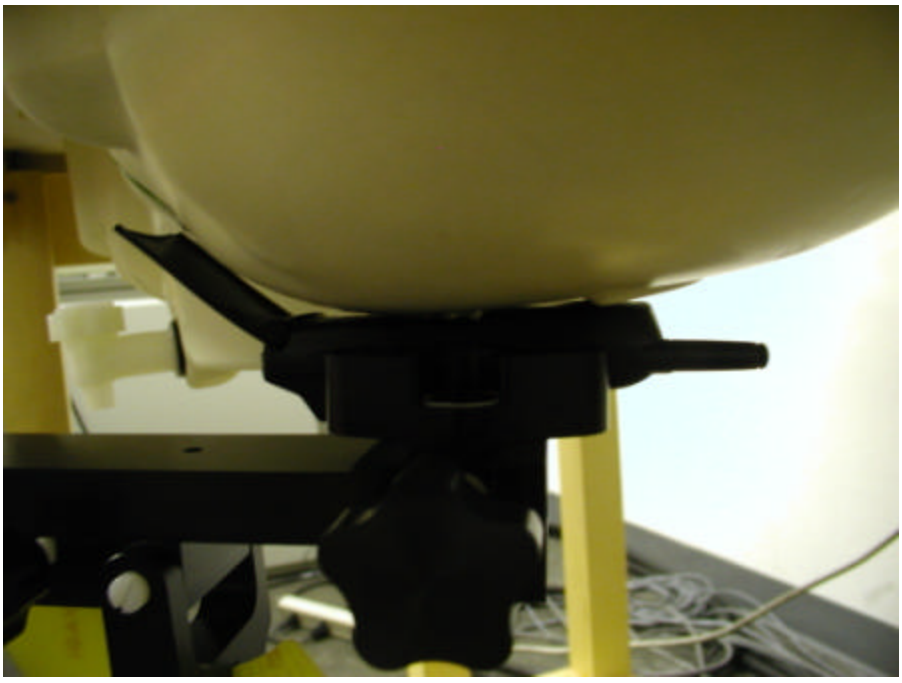
Plot #10

EXHIBIT A - SAR SETUP PHOTOGRAPHS

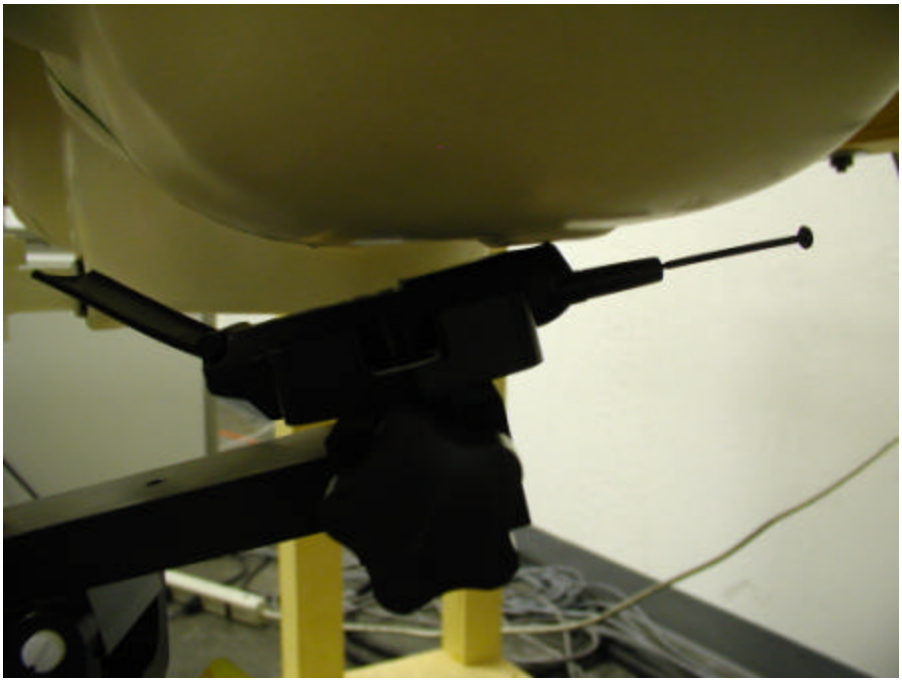
Left Head Cheek Touching Phantom, Antenna Extended



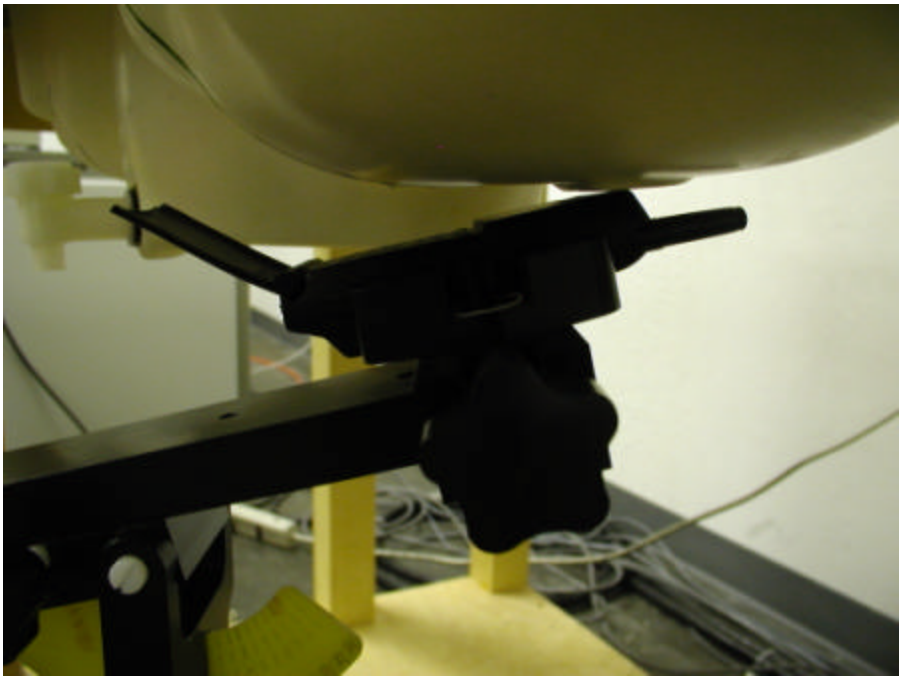
Left Head Cheek Touching Phantom, Antenna Retracted



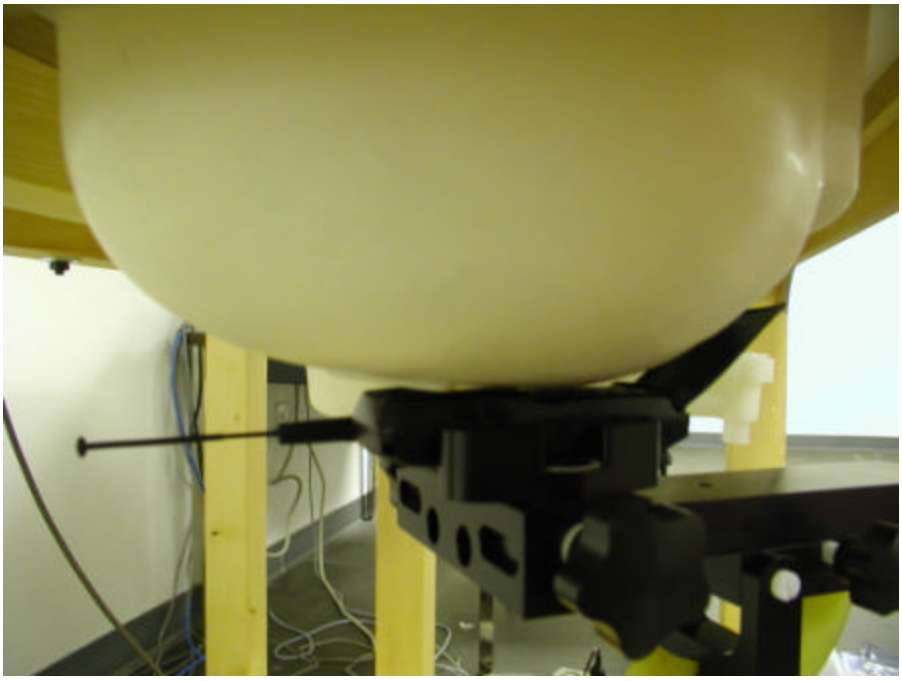
Left Head Tilted Touching Phantom, Antenna Extended



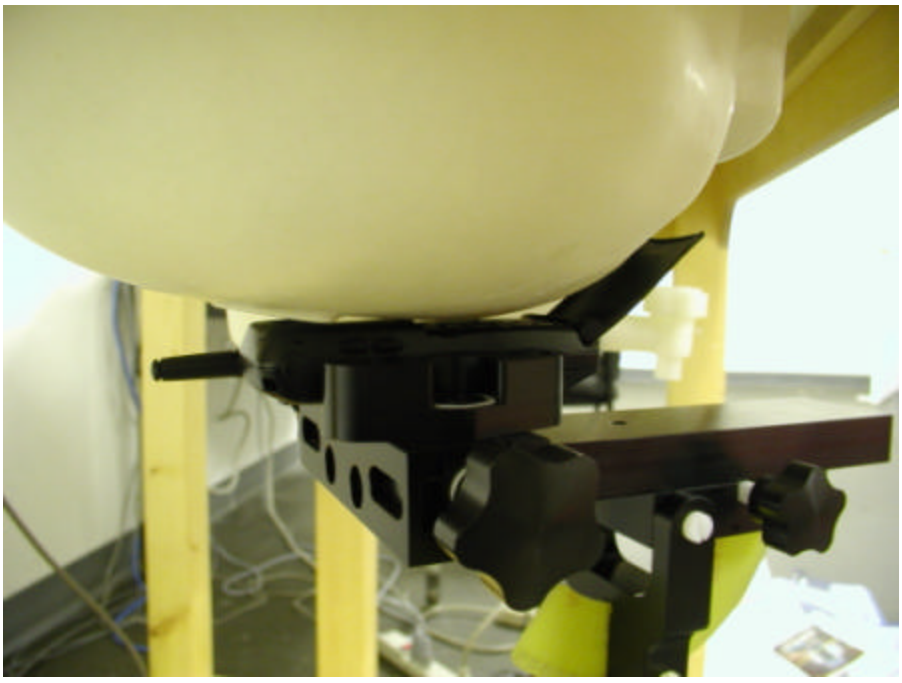
Left Head Tilted Touching Phantom, Antenna Retracted



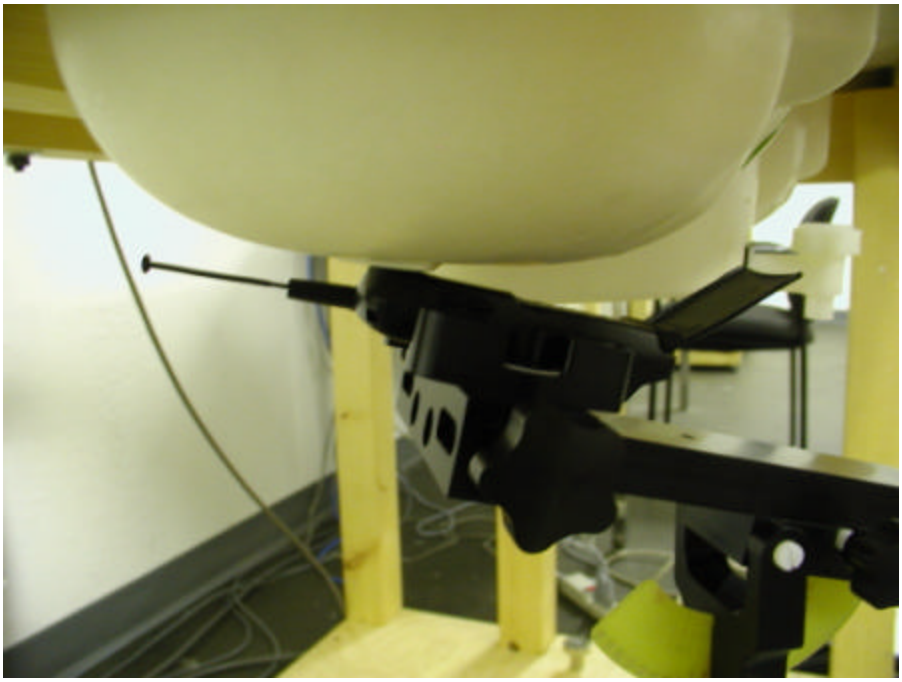
Right Head Cheek Touching Phantom, Antenna Extended



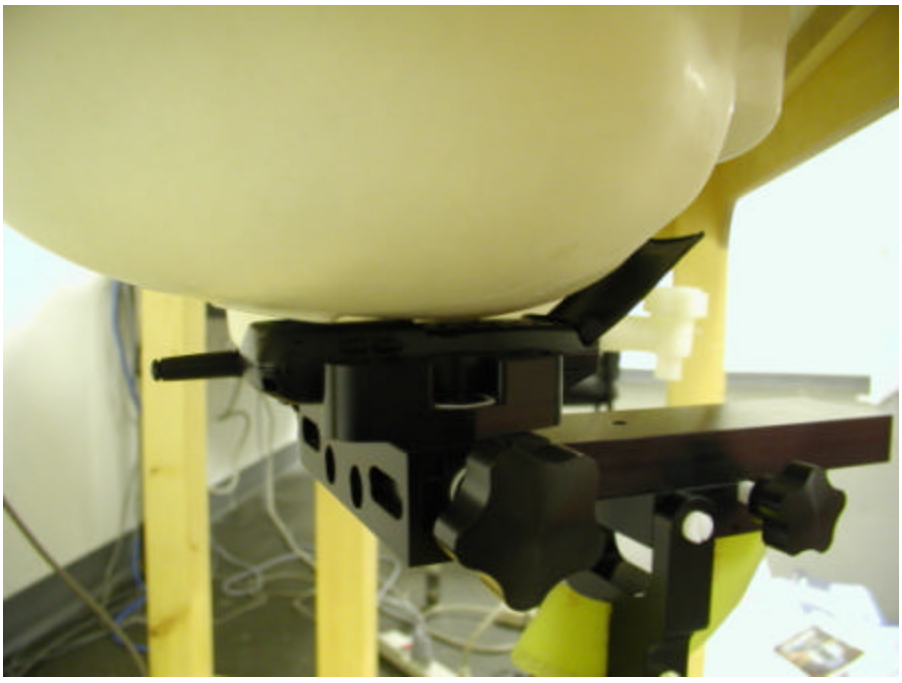
Right Head Cheek Touching Phantom, Antenna Retracted



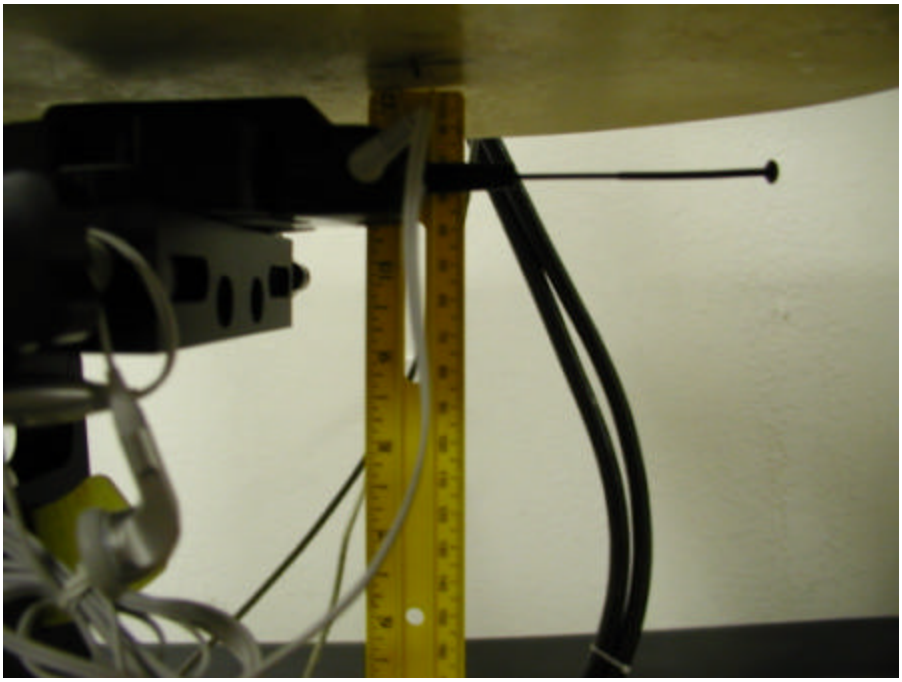
Right Head Tilted Touching Phantom, Antenna Extended



Right Head Tilted Touching Phantom, Antenna Retracted



Back 2.2cm Separation to Flat Phantom with Headset, Antenna Extended



Back 2.2cm Separation to Flat Phantom with Headset, Antenna Retracted

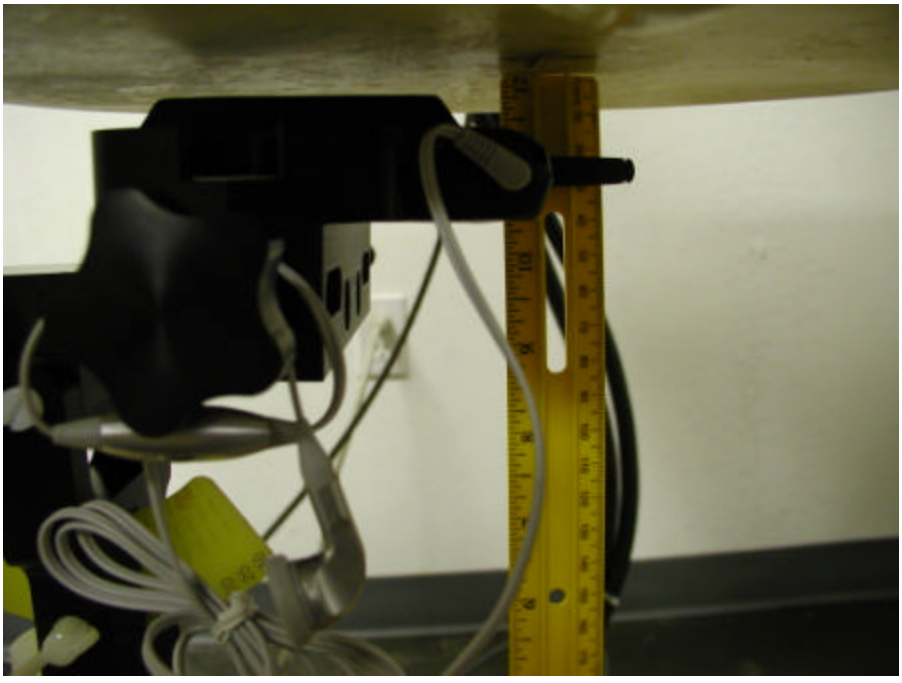


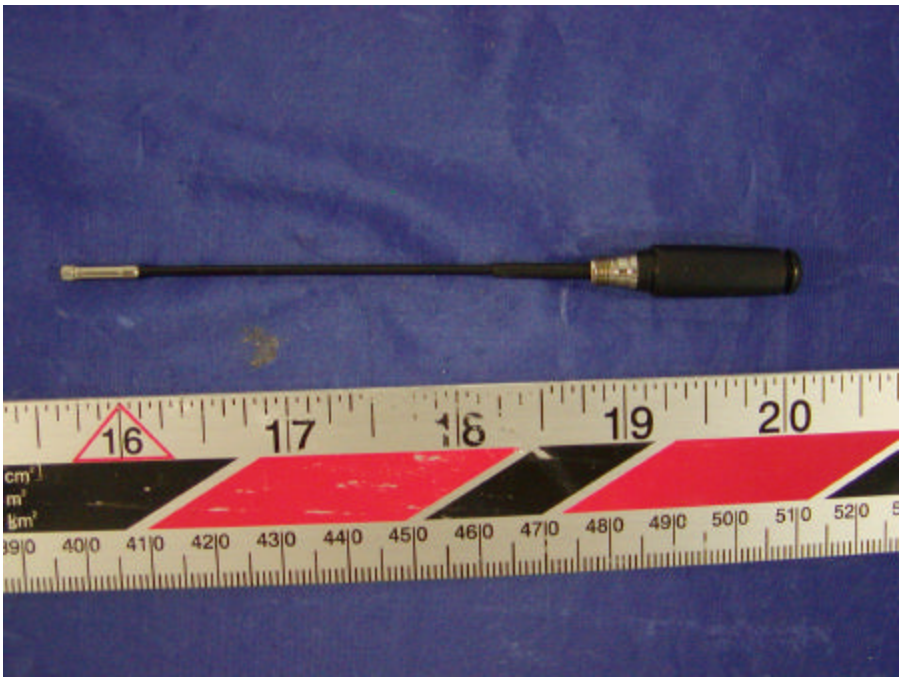
EXHIBIT B – EUT PHOTOGRAPHS

EUT - Chassis Front View

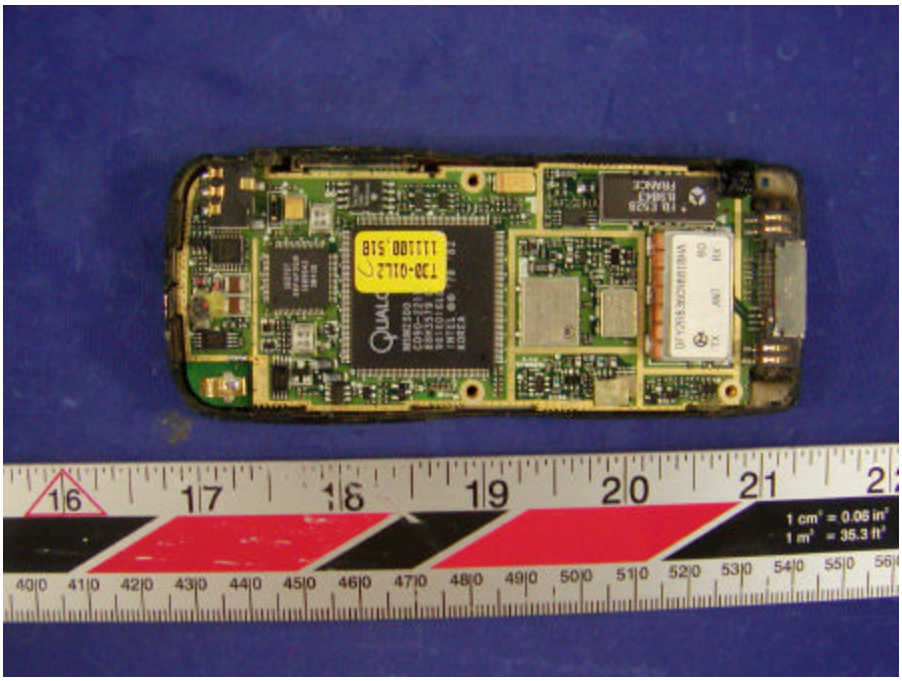
EUT – Chassis Rear View

Battery Charger

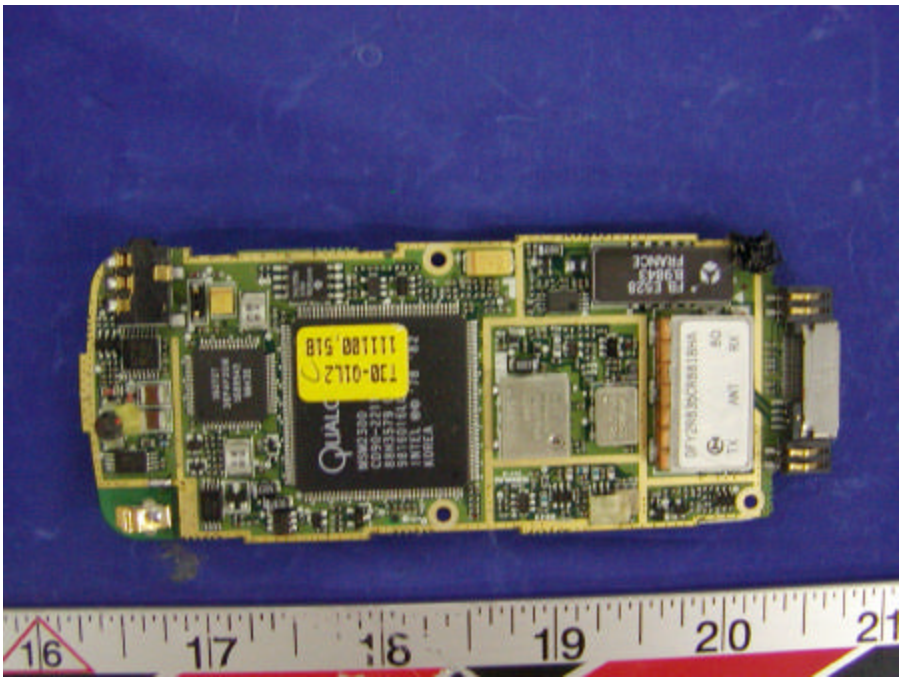
EUT – Antenna View



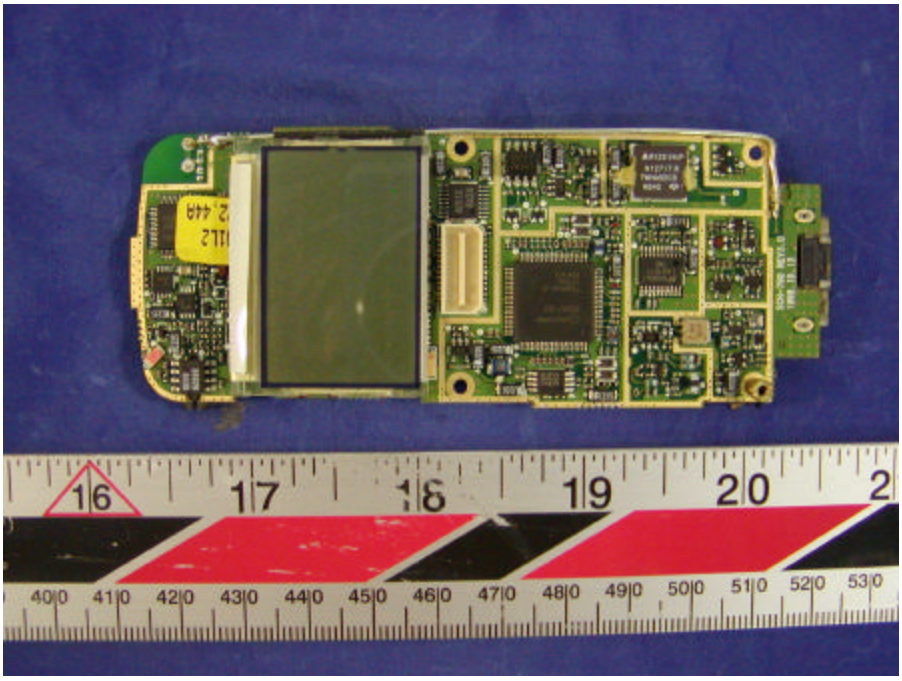
EUT – Board and Housing View



EUT – Board Top View



EUT – Board Solder View



EUT – Battery View

EXHIBIT C – Z-Axis

GR8 Communications, Model: SCH-770 (Right Head, Cheek, Antenna position extented, Mid channel, Ambient Temp = 23 Deg C, Liquid Temp = 21 Deg C, 08/11/2003)

SAM Phantom; Section; Position: ; Frequency: 836 MHz

Probe: ET3DV6 - SN1604; ConvF(6.50,6.50,6.50); Crest factor: 1.0; (Head) 835 MHz: $\sigma = 0.90$ mho/m $\varepsilon_r = 41.6$ $\rho = 1.31$ g/cm^3

: ; 0

Z-Axis: Dx = 0.0, Dy = 0.0, Dz = 2.0