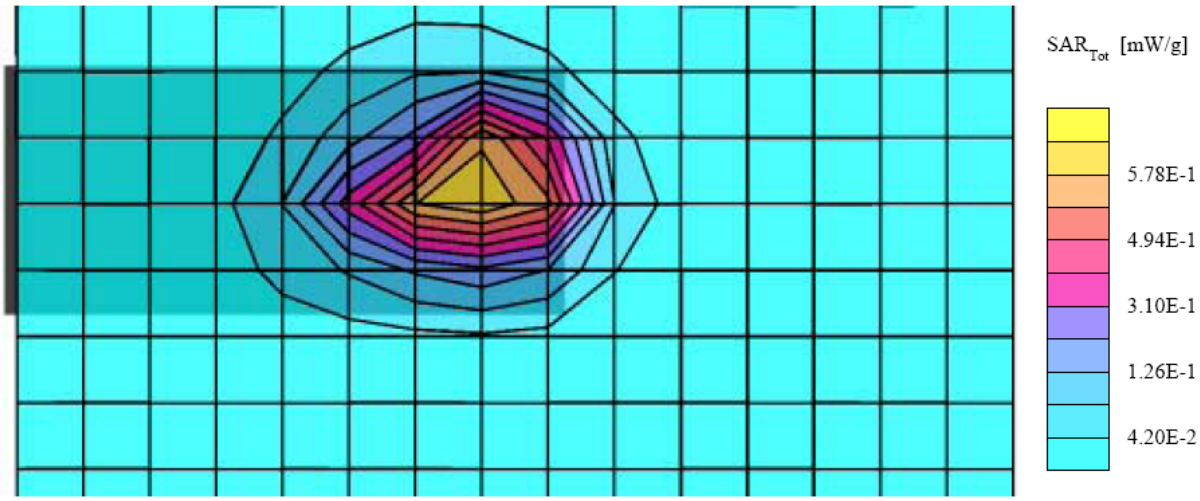
APPENDIX E - EUT SCANS

PegasusTelecom, Model: Z160 (1.5 cm separation to the flat phantom with headset, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 11/22/2004)

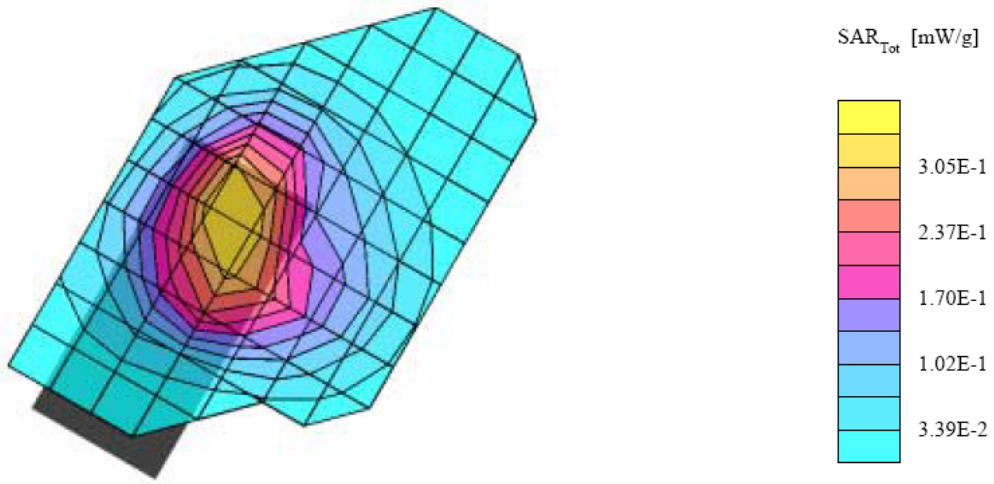
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 837 MHz
Probe: ES3DV2 - SN3019; ConvF(6.10,6.10,6.10); Crest factor: 8.0; (Body) 835 MHz: σ = 0.93 mho/m ε_r = 55.6 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.748 mW/g, SAR (10g): 0.412 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.04 dB



Plot #1

Pegasus Telecom, Model: Z160 (Left Head, Cheek, Middle Channel, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 11/22/2004)

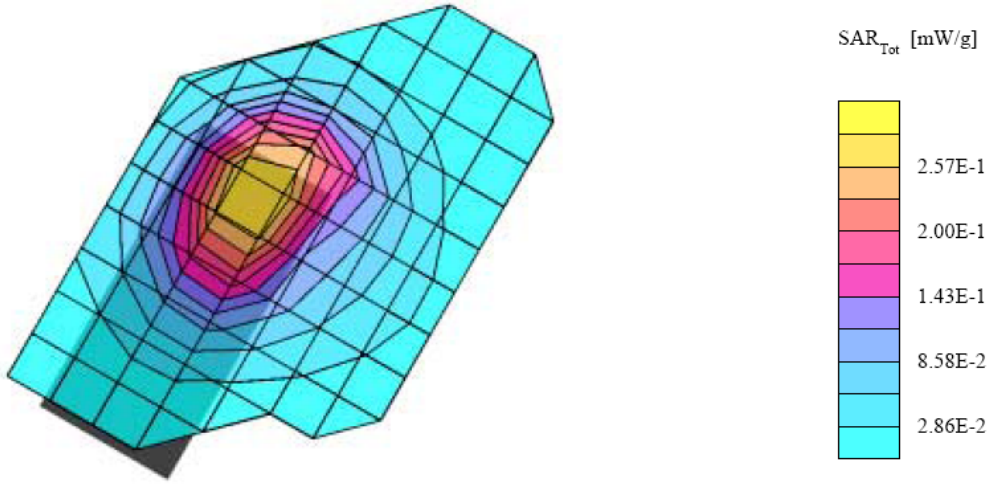
SAM Phantom; Left Hand Section; Position: (90°,60°); Frequency: 837 MHz
Probe: ET3DV6 - SN1604; ConvF(6.45,6.45,6.45); Crest factor: 8.0; Head Liquid 835 MHz: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.4$ $\rho = 1.00$ g/cm^3
Cube 5x5x7: SAR (1g): 0.446 mW/g, SAR (10g): 0.289 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.02 dB



Plot #2

Pegasus Telecom, Model: Z160 (Left Head, Tilted, Middle Channel, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 11/22/2004)

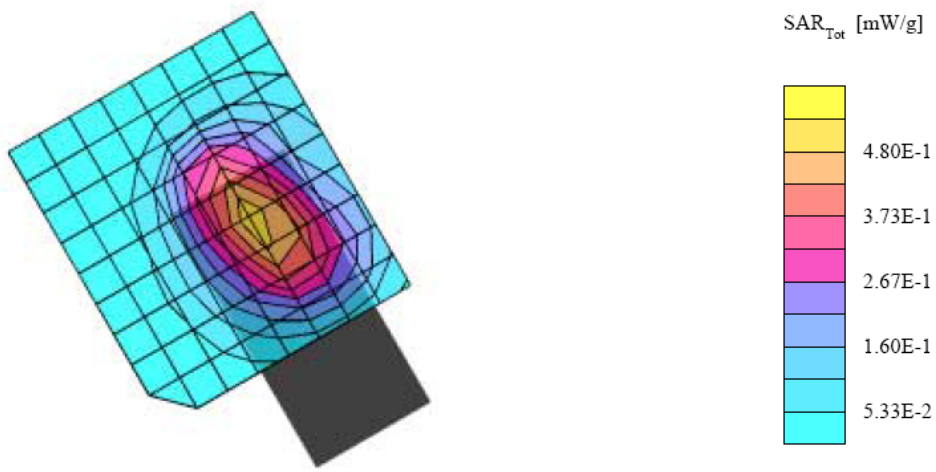
SAM Phantom; Left Hand Section; Position: (90°,60°); Frequency: 837 MHz
Probe: ET3DV6 - SN1604; ConvF(6.45,6.45,6.45); Crest factor: 8.0; Head Liquid 835 MHz: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.4$ $\rho = 1.00$ g/cm^3
Cube 5x5x7: SAR (1g): 0.339 mW/g, SAR (10g): 0.225 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.01 dB



Plot #3

Pegasus Telecom, Model: Z160 (Right Head, Cheek, Middle Channel, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 11/22/2004)

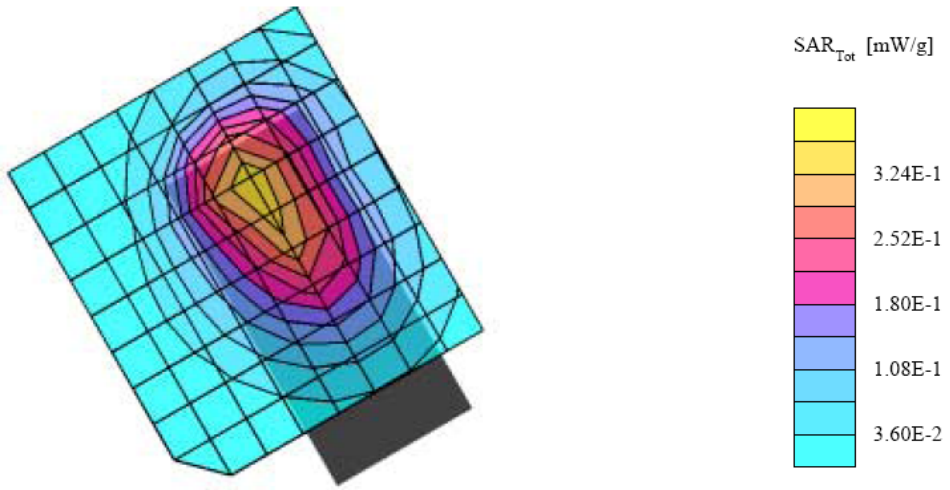
SAM Phantom; Righ Hand Section; Position: (90°,120°); Frequency: 837 MHz
Probe: ET3DV6 - SN1604; ConvF(6.45,6.45,6.45); Crest factor: 8.0; Head Liquid 835 MHz: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.4$ $\rho = 1.00$ g/cm^3
Cube 5x5x7: SAR (1g): 0.493 mW/g, SAR (10g): 0.320 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.01 dB



Plot #4

Pegasus Telecom, Model: Z160 (Right Head, Tilted, Middle Channel, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 11/22/2004)

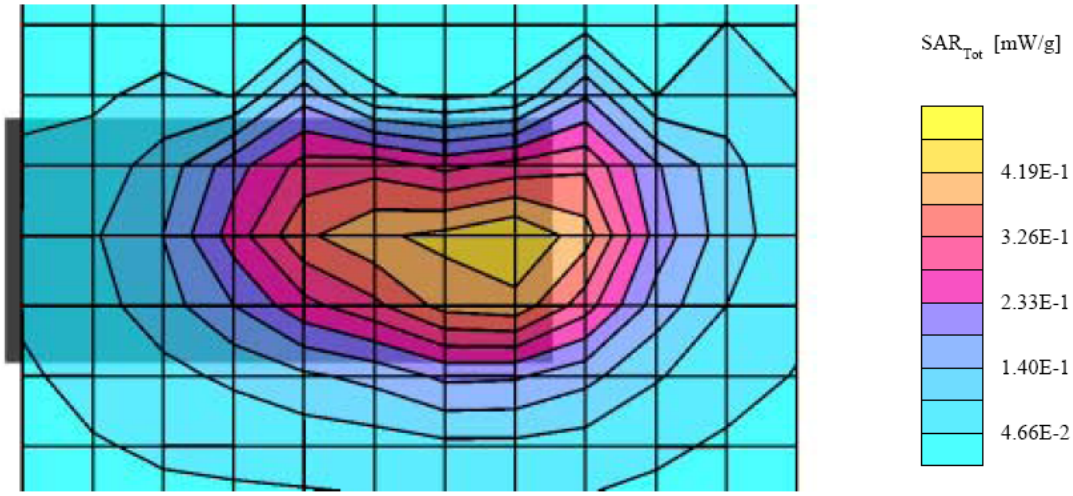
SAM Phantom; Righ Hand Section; Position: (90°,120°); Frequency: 837 MHz
Probe: ET3DV6 - SN1604; ConvF(6.45,6.45,6.45); Crest factor: 8.0; Head Liquid 835 MHz: $\sigma = 0.91$ mho/m $\varepsilon_r = 41.4$ $\rho = 1.00$ g/cm^3
Cube 5x5x7: SAR (1g): 0.339 mW/g, SAR (10g): 0.223 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.00 dB



Plot #5

PegasusTelecom, Model: Z160 (1.5 cm separation to flat phantom with headset, Middle Channel, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 12/8/2004)

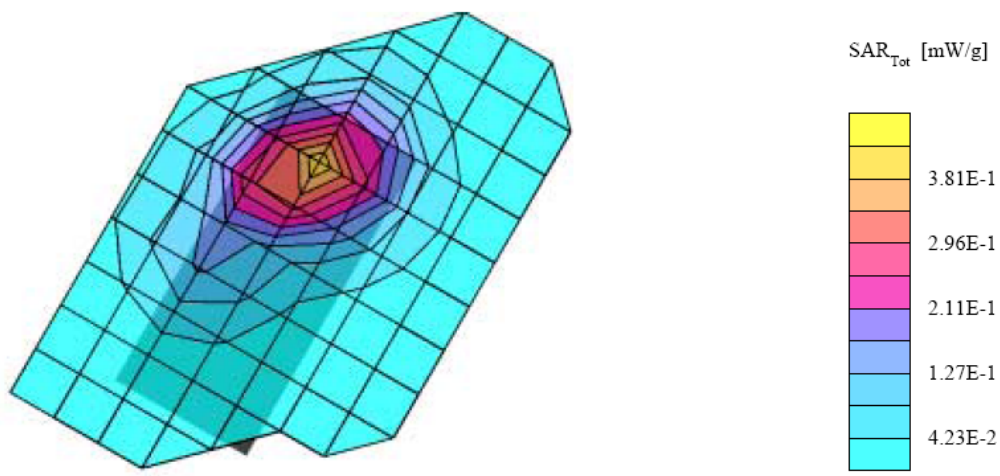
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1880 MHz
Probe: ET3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 8.0; Body Liquid 1900 MHz: σ = 1.50 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3
Cube 5x5x7: SAR (1g): 0.595 mW/g, SAR (10g): 0.332 mW/g, (Worst-case extrapolation)
Coarse: Dx = 13.0, Dy = 13.0, Dz = 10.0
Powerdrift: -0.01 dB



Plot #6

PegasusTelecom, Model: Z160 (Left Head, Cheek, Middle Channel, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 12/8/2004)

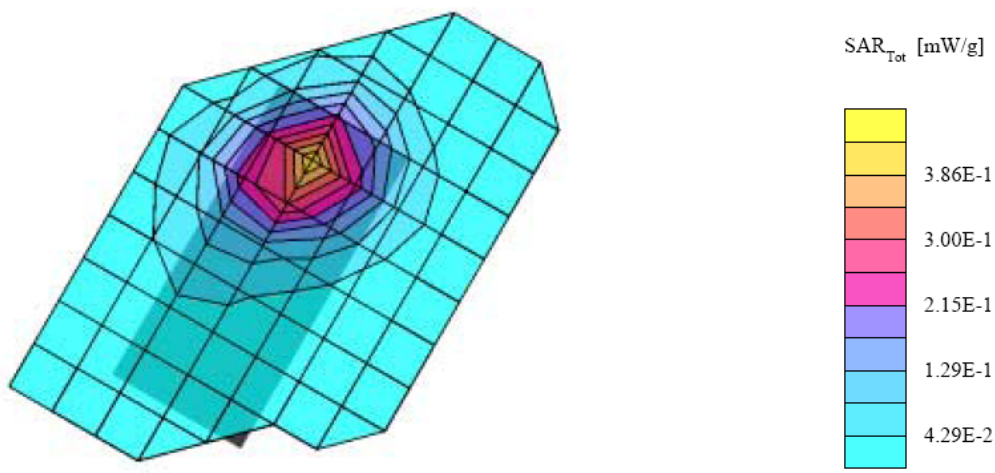
SAM Phantom; Left Hand Section; Position: (90°,60°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1604; ConvF(5.23,5.23,5.23); Crest factor: 8.0; (Head) 1900 MHz: σ = 1.41 mho/m ε_r = 39.2 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.440 mW/g, SAR (10g): 0.263 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: 0.02 dB



Plot #7

PegasusTelecom, Model: Z160 (Left Head, Tilted, Middle Channel, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 12/8/2004)

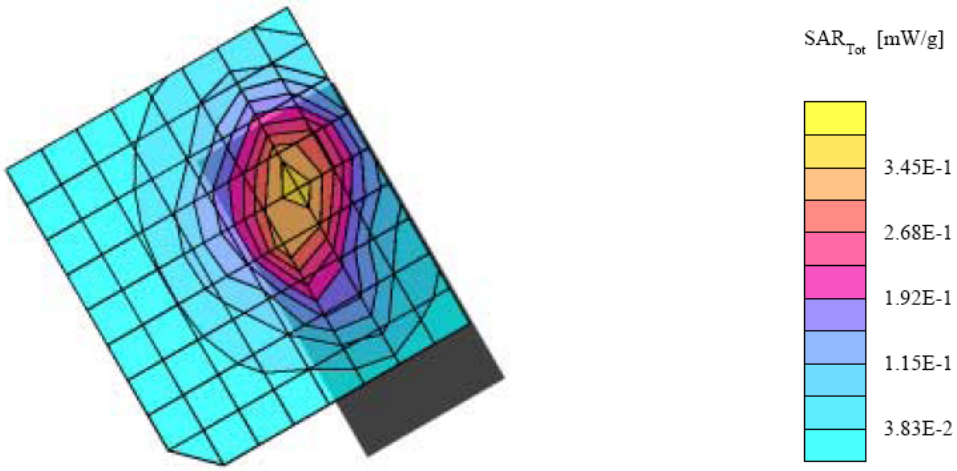
SAM Phantom; Left Hand Section; Position: (90°,60°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1604; ConvF(5.23,5.23,5.23); Crest factor: 8.0; (Head) 1900 MHz: σ = 1.41 mho/m ε_r = 39.2 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.453 mW/g, SAR (10g): 0.258 mW/g, (Worst-case extrapolation)
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0
Powerdrift: -0.00 dB



Plot #8

PegasusTelecom, Model: Z160 (Right Head, Cheek, Middle Channel, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 12/8/2004)

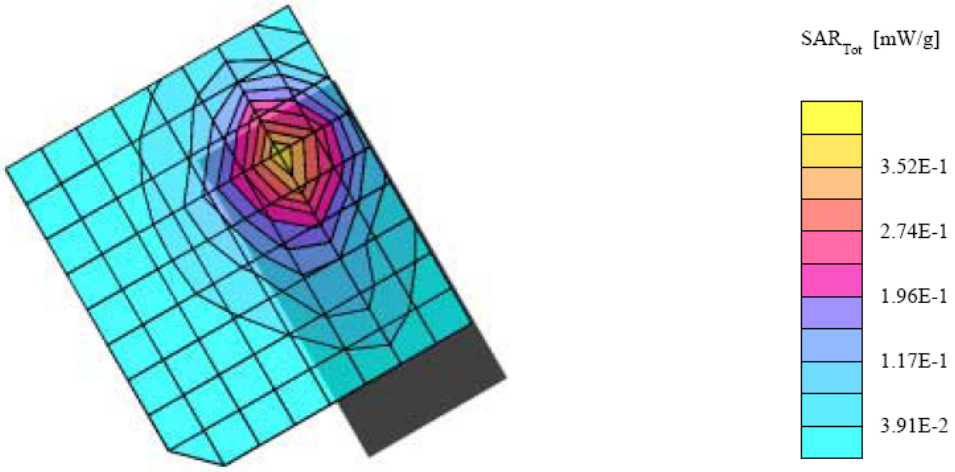
SAM Phantom; Righ Hand Section; Position: (90°,300°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1604; ConvF(5.23,5.23,5.23); Crest factor: 8.0; (Head) 1900 MHz: σ = 1.41 mho/m ε_r = 39.2 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.367 mW/g, SAR (10g): 0.222 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: -0.03 dB



Plot #9

PegasusTelecom, Model: Z160 (Right Head, Tilted, Middle Channel, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 12/8/2004)

SAM Phantom; Righ Hand Section; Position: (90°,300°); Frequency: 1880 MHz
Probe: ET3DV6 - SN1604; ConvF(5.23,5.23,5.23); Crest factor: 8.0; (Head) 1900 MHz: σ = 1.41 mho/m ε_r = 39.2 ρ = 1.31 g/cm^3
Cube 5x5x7: SAR (1g): 0.348 mW/g, SAR (10g): 0.200 mW/g, (Worst-case extrapolation)
Coarse: Dx = 12.0, Dy = 12.0, Dz = 10.0
Powerdrift: 0.02 dB



Plot #10

APPENDIX F – CONDUCTED OUTPUT POWER MEASUREMENT

Provision Applicable

According to FCC §22.913 (a), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts. According to FCC § 24.232(b), EIRP peak power for mobile/portable stations are limited to 2 watts.

Test Procedure

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

Test equipment

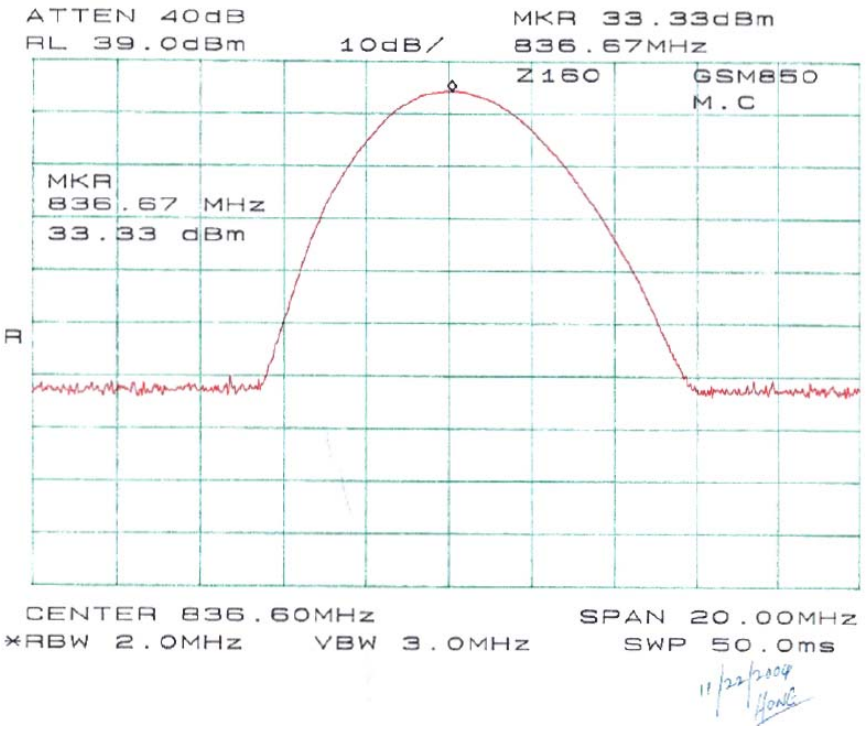
Hewlett Packard HP8564E Spectrum Analyzer, Calibration Due Date: 2005-08-01.
Hewlett Packard HP 7470A Plotter, Calibration not required.
A.H. Systems SAS200 Horn Antenna, Calibration Due Date: 2005-05-31
Com-Power AB-100 Dipole Antenna, Calibration Due Date: 2005-09-05

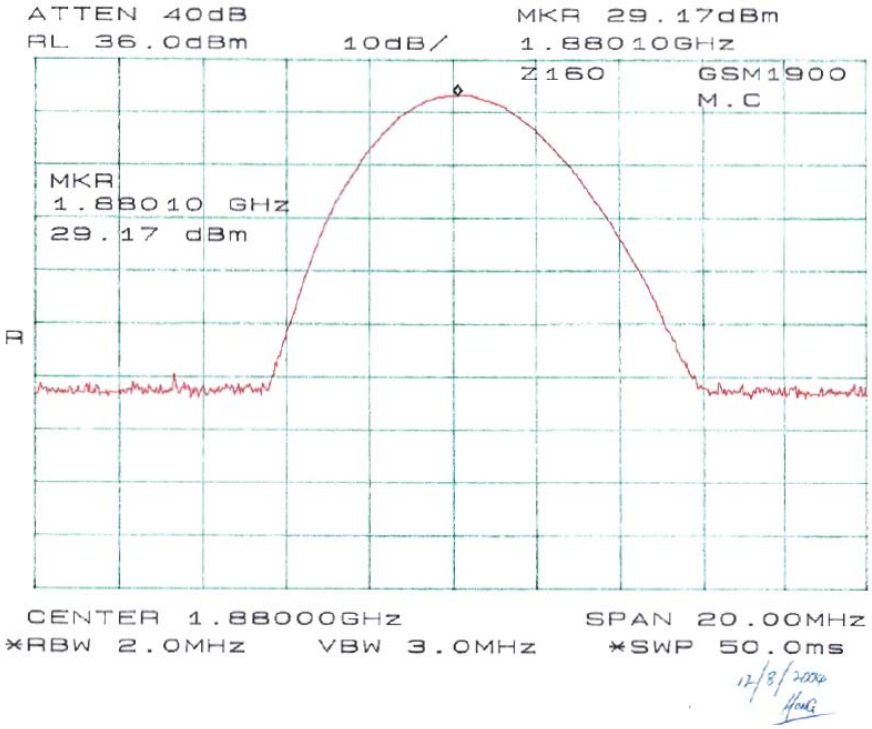
Test Results

GMS:

Frequency (MHz)	Output Power in dBm	Output Power in W	Limit (W)
836.67	33.33	2.153	7
1880.10	29.17	0.826	2

Please refer to the following plots.


ATTEN 40dB
RL 39.0dBm
10dB/
MKR 33.33dBm
836.67MHz
Z160
GSM850
M.C
MKR
836.67 MHz
33.33 dBm
R
CENTER 836.60MHz
SPAN 20.00MHz
*RBW 2.0MHz
VBW 3.0MHz
SWP 50.0ms
11/22/2004


ATTEN 40dB
RL 36.0dBm
10dB/
MKR 29.17dBm
1.88010GHz
Z160
GSM1900
M.C
MKR
1.88010 GHz
29.17 dBm
R
CENTER 1.88000GHz
SPAN 20.00MHz
*RBW 2.0MHz
VBW 3.0MHz
*SWP 50.0ms
12/8/2004

APPENDIX G – Z-AXIS PLOT

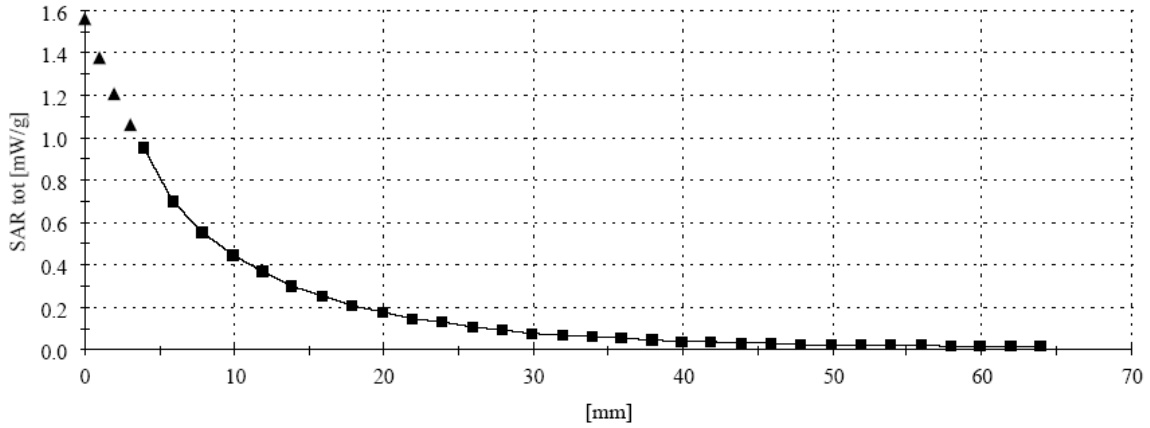
PegasusTelecom, Model: Z160 (1.5 cm separation to the flat phantom with headset, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 11/22/2004)

SAM Phantom; Section; Position: ; Frequency: 837 MHz

Probe: ES3DV2 - SN3019; ConvF(6.10,6.10,6.10); Crest factor: 8.0; (Body) 835 MHz: σ = 0.93 mho/m ε_r = 55.6 ρ = 1.31 g/cm^3

: , 0

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



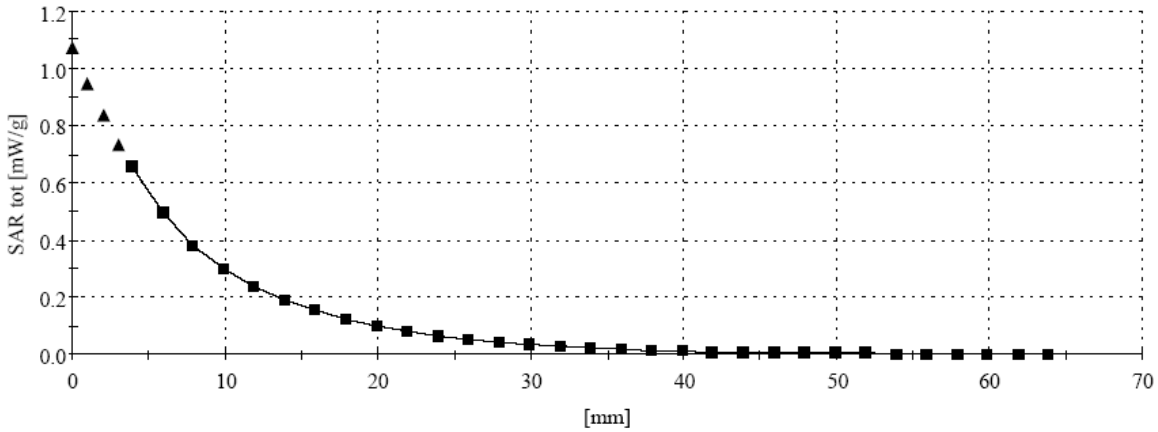
PegasusTelecom, Model: Z160 (1.5 cm separation to flat phantom with headset, Middle Channel, Ambient Temp = 23 Deg C, Liqiud Temp = 22 Deg C, 12/8/2004)

SAM Phantom; Section; Position: ; Frequency: 1880 MHz

Probe: ET3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 8.0; Body Liquid 1900 MHz: σ = 1.50 mho/m ε_r = 53.4 ρ = 1.00 g/cm^3

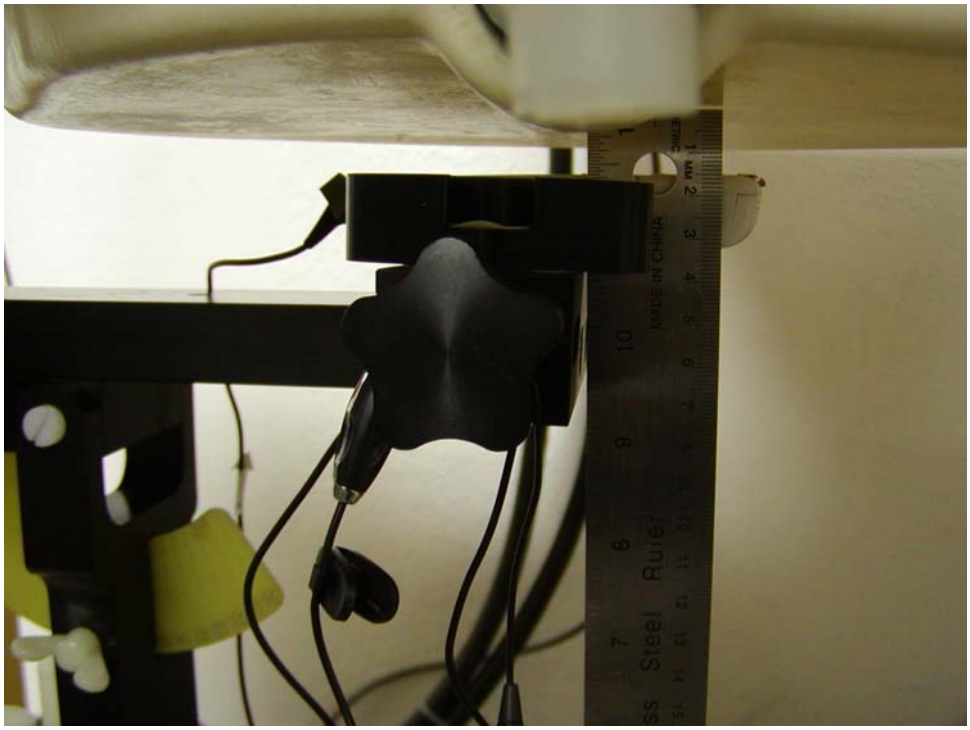
: , 0

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

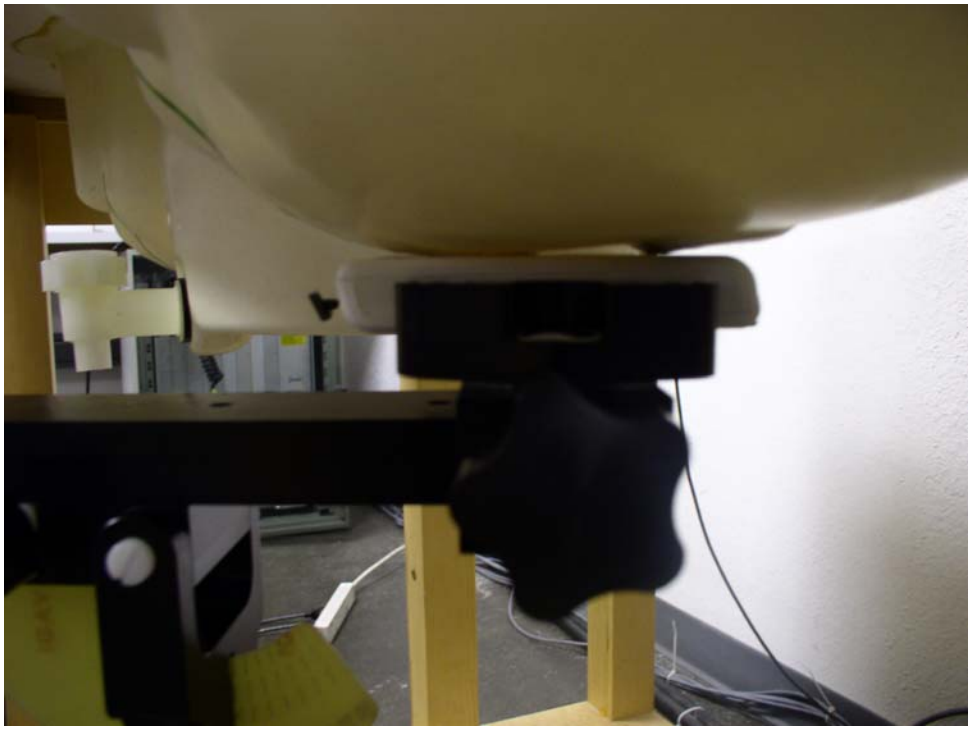


APPENDIX H – EUT TEST POSITION PHOTOS

1.5 Separation to Flat Phantom with Headset

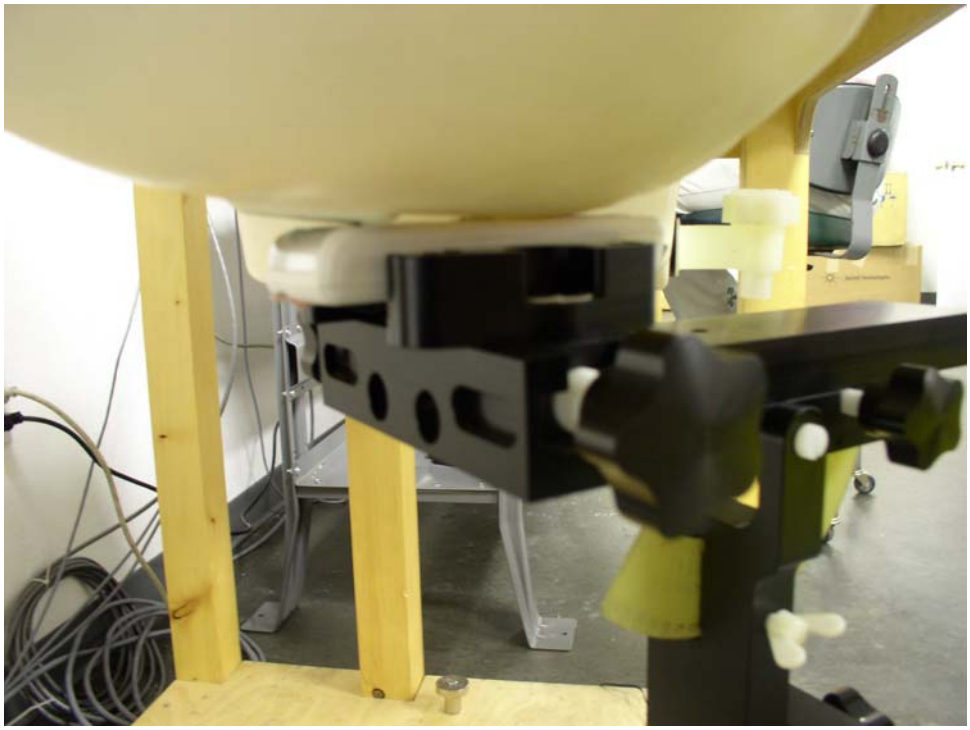


Left Head, Cheek

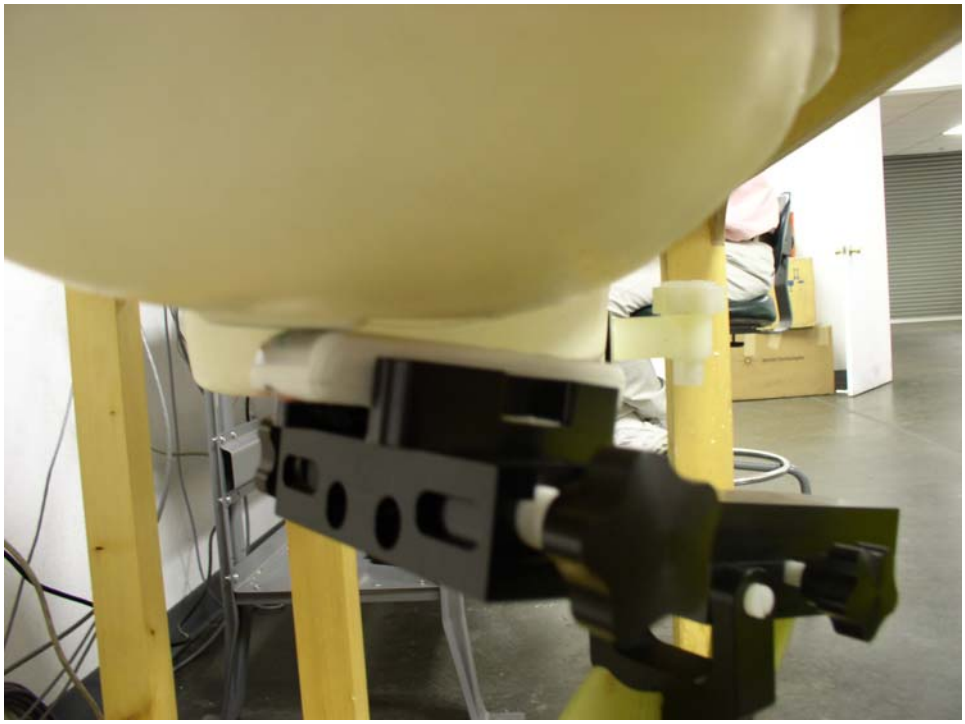


Left Head, Tilted

Right Head, Cheek



Right Head, Tilted

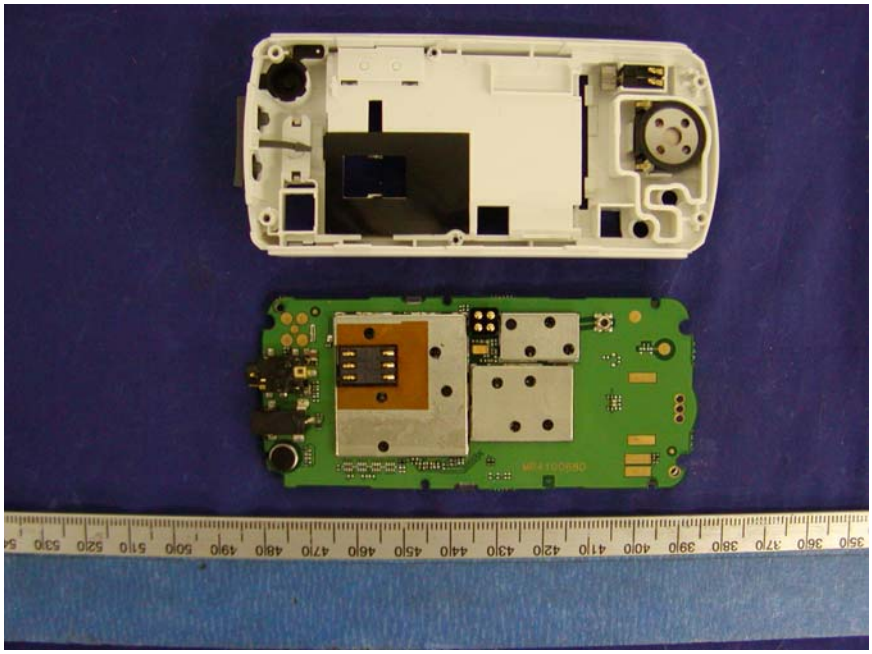


APPENDIX I – EUT & ACCESSORIES PHOTOS

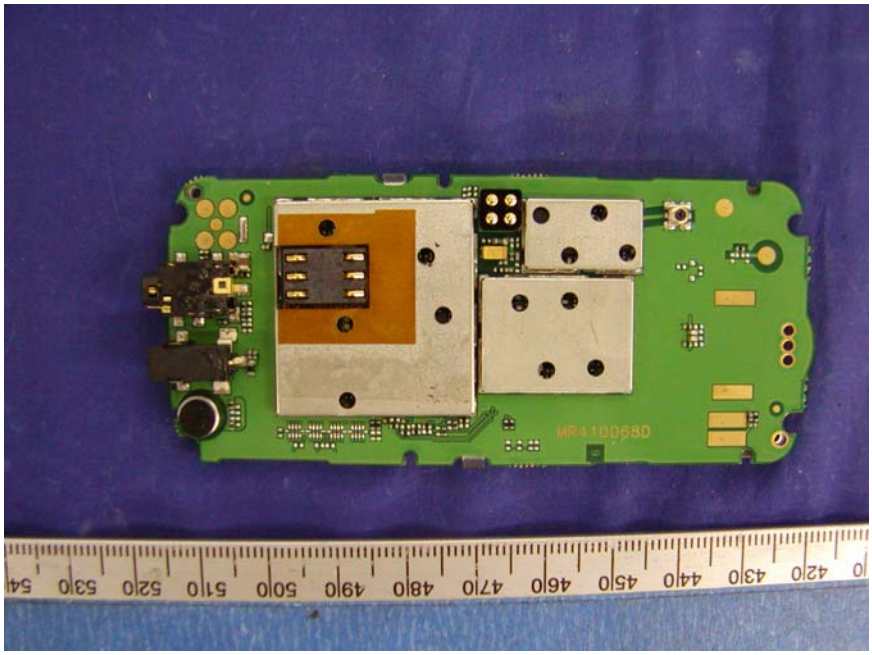
EUT Front View

EUT Rear View

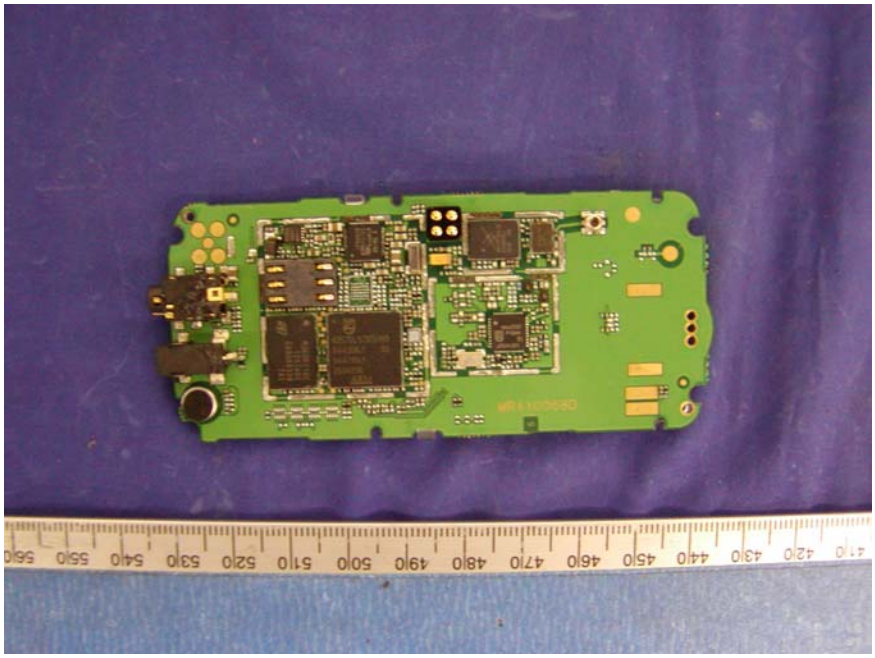
Board and Housing View



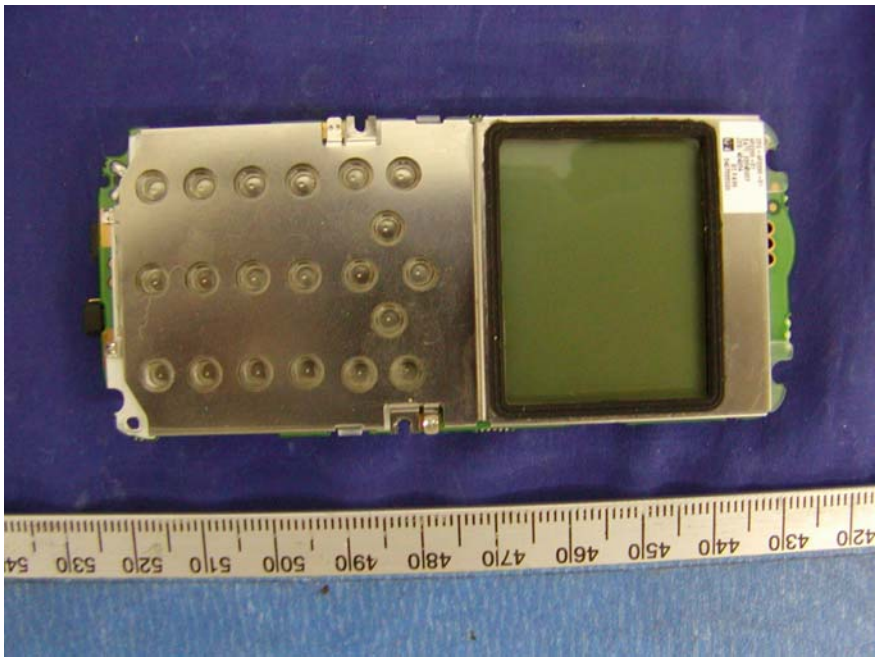
Board Top View



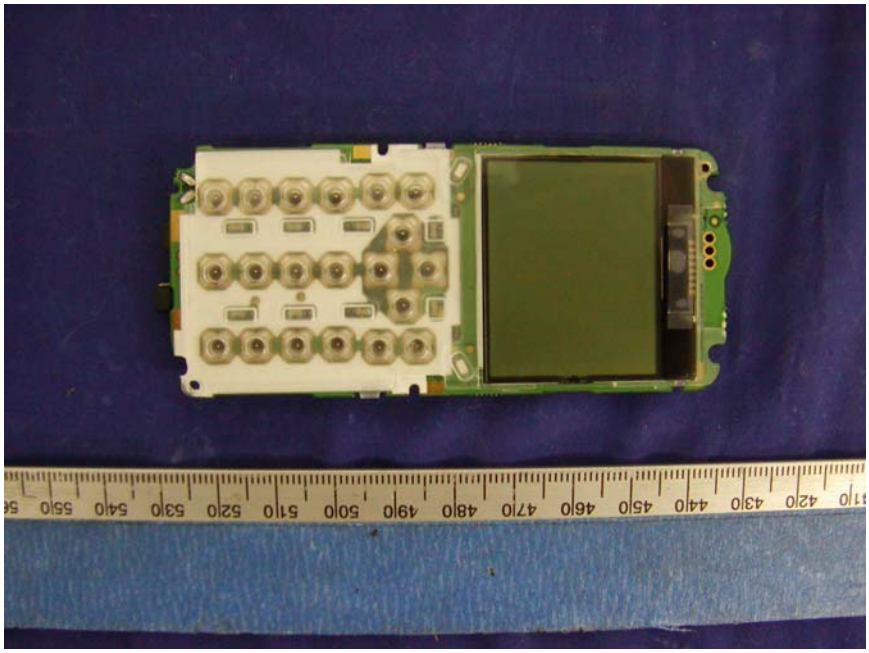
Board Top without Shielding View



Board Bottom View



Board Bottom without Shielding View



APPENDIX J - INFORMATIVE REFERENCES

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