

System Validation 835 MHz Body liquid (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forward power = 20.4dBm, 8/2/04)

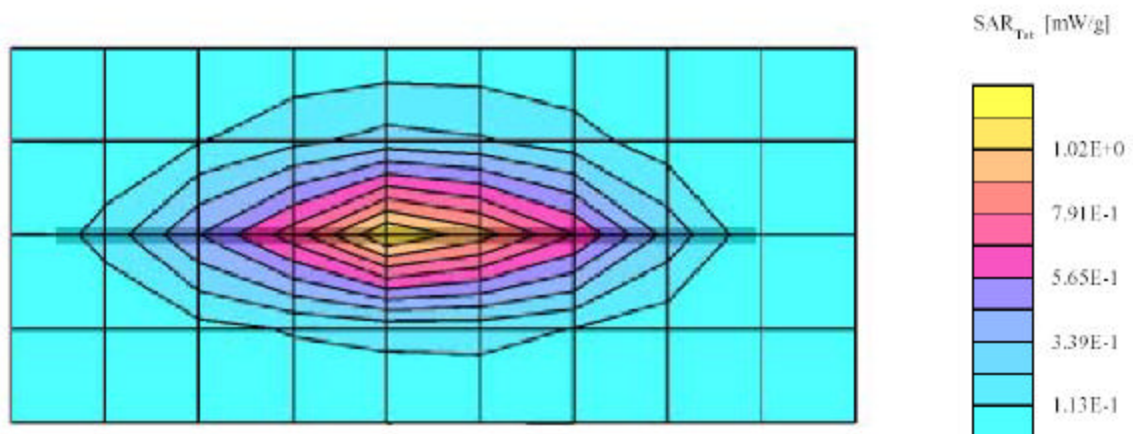
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 835 MHz

Probe: ES3DV2 - SN3019; ConvF(6.10,6.10,6.10); Crest factor: 1.0; 835 (Body) MHz: $\sigma = 0.99 \text{ mho/m}$, $\epsilon_r = 52.7$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7; SAR (1g): 0.976 mW/g, SAR (10g): 0.495 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 0.0

Powerdrift: -0.01 dB



System Validation 835 MHz Head liquid (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forward power = 20.4dBm, 8/2/04)

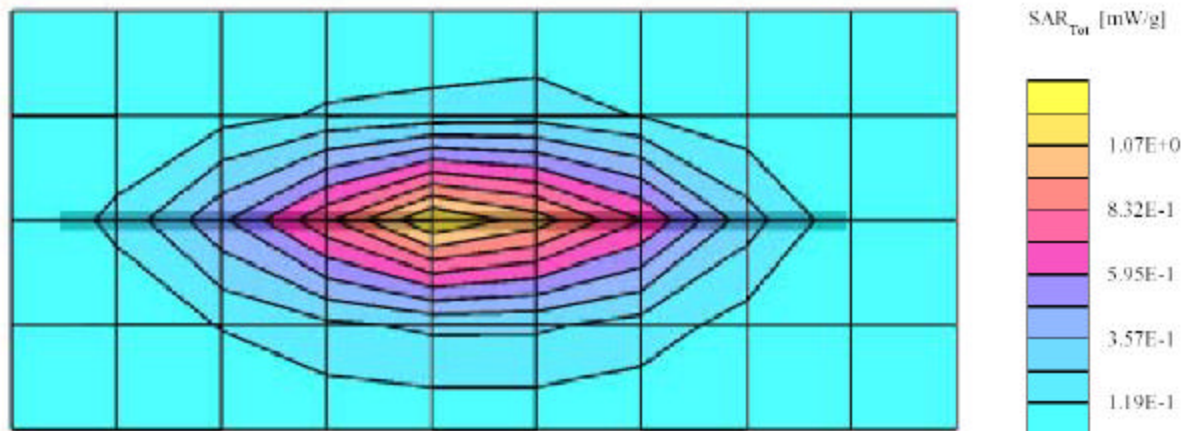
SAM Phantom; Flat Section; Position: (90°, 90°); Frequency: 835 MHz

Probe: ES3DV2 - SN3019; ConvF(6.50,6.50,6.50); Crest factor: 1.0; 835 (Head) MHz: $\sigma = 0.88 \text{ mho/m}$ $\epsilon_r = 40.6$ $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 1.05 mW/g, SAR (10g): 0.538 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 0.0

Powerdrift: -0.02 dB



1900 MHz Body Liquid System Validation (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forwar Power = 20.5 dBm, 8/4/2004)

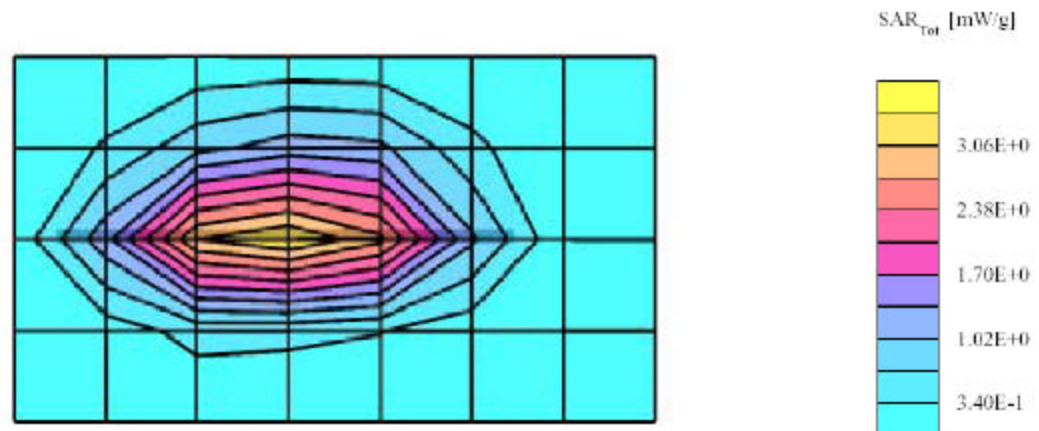
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 1.0; Body 1900 MHz: $\sigma = 1.51 \text{ mho/m}$, $\epsilon_r = 52.0$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 2.96 mW/g, SAR (10g): 1.21 mW/g, (Worst-case extrapolation)

Coarse: Dx = 13.0, Dy = 13.0, Dz = 0.0

Powerdrift: 0.03 dB



1900 MHz Head Liquid System Validation (Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, Forwar Power = 20.6 dBm, 8/4/2004)

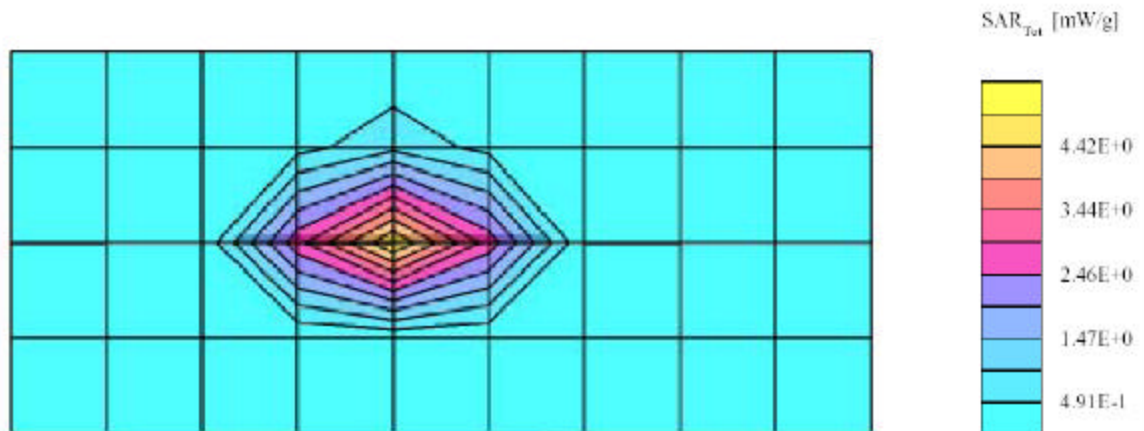
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.70,4.70,4.70); Crest factor: 1.0; Head 1900 MHz: $\sigma = 1.44 \text{ mho/m}$, $\epsilon_r = 39.7$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 4.66 mW/g, SAR (10g): 2.36 mW/g, (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 0.0

Powerdrift: -0.04 dB



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.

8.1 SAR Body and Head Worst-Case Test Data

2004-03-24

Ambient Temperature (°C): 19.0

Relative Humidity (%): 60

2004-03-30

Ambient Temperature (°C): 23.0

Relative Humidity (%): 49

Position	Frequency (MHz)	Output Power (dBm)	Liquid	Phantom	Measured (mW/g)	Limit (mW/g)	Plot #
Top side of the DUT face toward and in touch with flat phantom, Antenna 1	836	23.5	Body	Flat	0.373	1.6	1
Top side of the DUT face toward and in touch with flat phantom, Antenna 2	836	23.5	Body	Flat	0.219	1.6	2
Back side of the DUT face toward and in touch with flat phantom, Antenna 1	836	23.5	Body	Flat	0.567	1.6	3
Back side of the DUT face toward and in touch with flat phantom, Antenna 2	836	23.5	Body	Flat	0.093	1.6	4
Top side of the DUT face toward and 1.5cm separation with flat phantom, Antenna 1	1880	23.3	Body	Flat	0.205	1.6	5
Top side of the DUT face toward and 1.5cm separation with flat phantom, Antenna 2	1880	23.3	Body	Flat	0.110	1.6	6
Back side of the DUT face toward and 1.5cm separation with flat phantom, Antenna 1	1880	23.3	Body	Flat	0.196	1.6	7
Back side of the DUT face toward and 1.5cm separation with flat phantom, Antenna 2	1880	23.3	Body	Flat	0.0279	1.6	8

8.2 Plots of Test Result

The plots of test result were attached as reference.

Verifone, Omni5600(CDMA800, Top Side of the DUT faced toward and in touch with flat phantom, Antenna 1, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/2/04)

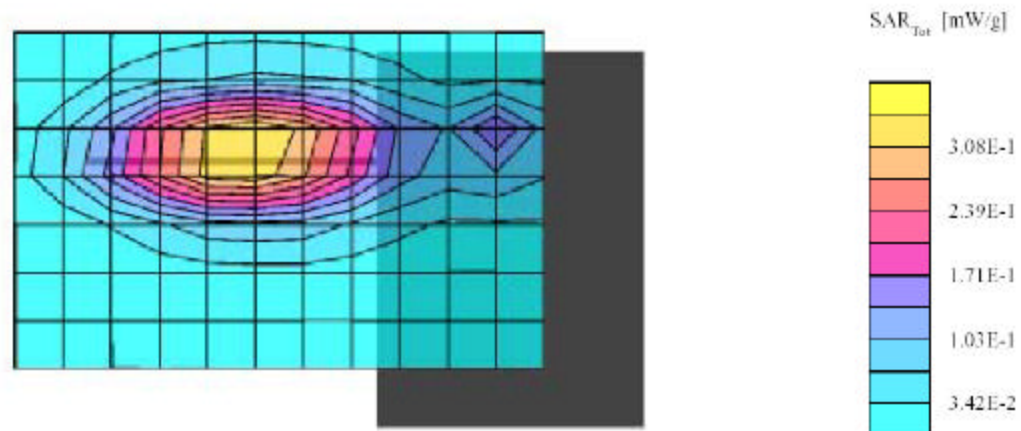
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ES3DV2 - SN3019; ConvF(6,10,6,10,6,10); Crest factor: 1.0; Body 835 MHz: $\sigma = 0.99 \text{ mho/m}$, $\epsilon_r = 52.7$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7: SAR (1g): 0.373 mW/g, SAR (10g): 0.190 mW/g, (Worst-case extrapolation)

Coarse: Dx = 13.0, Dy = 13.0, Dz = 10.0

Powerdrift: 0.04 dB



Plot #1

Verifone, Omni5600(CDMA800, Top Side of the DUT faced toward and in touch with flat phantom, Antenna 2, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/2/04)

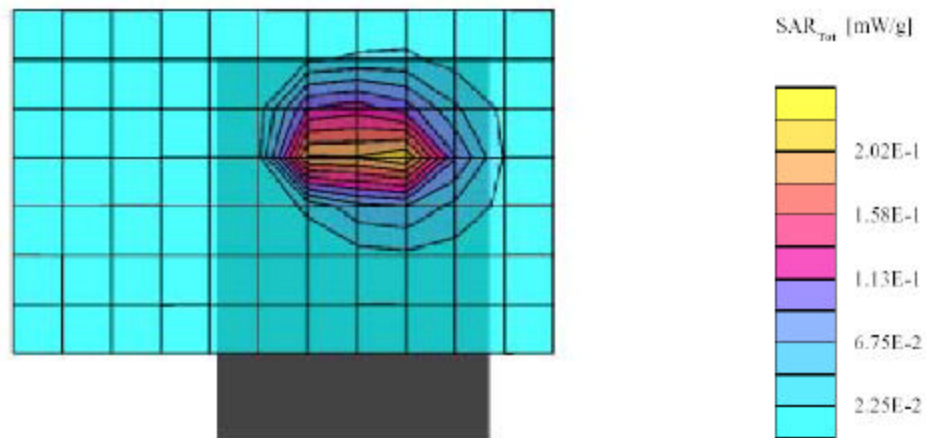
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ES3DV2 - SN3019; ConvF(6,10,6,10,6,10); Crest factor: 1.0; Body 835 MHz: $\sigma = 0.99$ mho/m $\epsilon_r = 52.7$ $\rho = 1.00$ g/cm³

Cube 5x5x7; SAR (1g): 0.219 mW/g, SAR (10g): 0.109 mW/g, (Worst-case extrapolation)

Coarse: Dx = 13.0, Dy = 13.0, Dz = 10.0

Powerdrift: 0.03 dB



Plot #2

Verifone, Omni5600(CDMA800, Back Side of the DUT faced toward and in touch with flat phantom, Antenna 1, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/2/04)

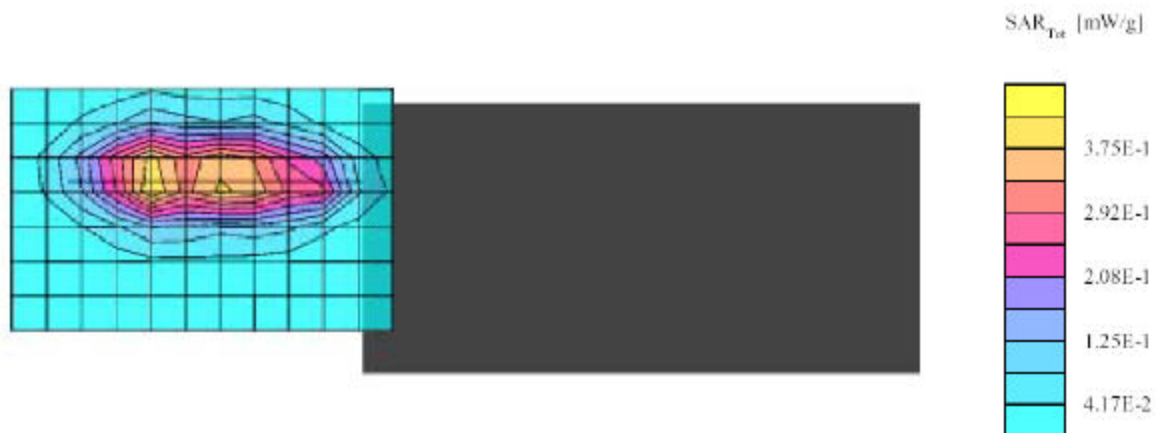
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ES3DV2 - SN3019; ConvF(6.10,6.10,6.10); Crest factor: 1.0; Body 835 MHz: $\sigma = 0.99$ mho/m $\epsilon_r = 52.7$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.567 mW/g, SAR (10g): 0.259 mW/g, (Worst-case extrapolation)

Coarse: Dx = 13.0, Dy = 13.0, Dz = 10.0

Powerdrift: -0.02 dB



Plot #3

Verifone, Omni5600(CDMA800, Back Side of the DUT faced toward and in touch with flat phantom, Antenna 2, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/2/04)

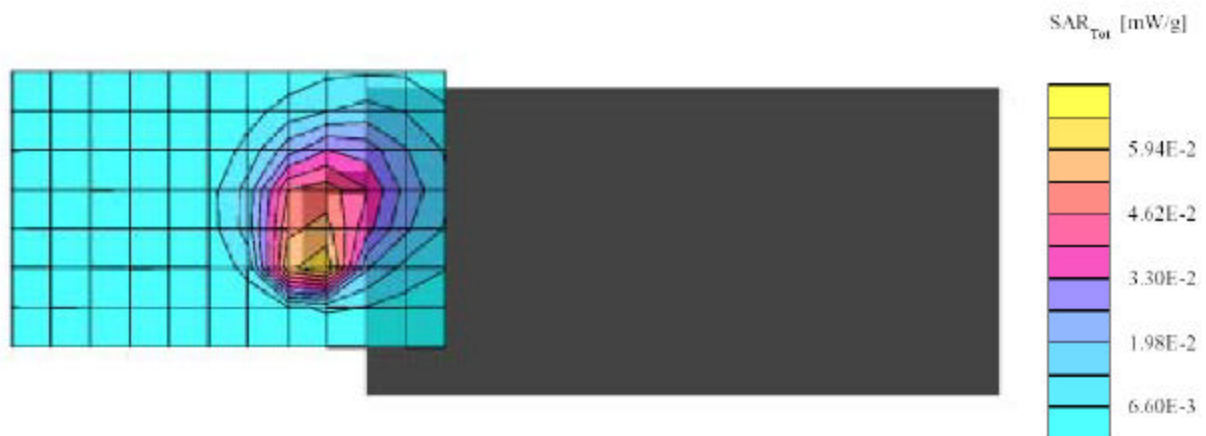
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 836 MHz

Probe: ES3DV2 - SN3019; ConvF(6,10,6,10,6,10); Crest factor: 1.0; Body 835 MHz: $\sigma = 0.99 \text{ mho/m}$, $\epsilon_r = 52.7$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7; SAR (1g): 0.0930 mW/g, SAR (10g): 0.0351 mW/g, (Worst-case extrapolation)

Coarse: Dx = 13.0, Dy = 13.0, Dz = 10.0

Powerdrift: -0.00 dB



Plot #4

Verifone, Omni5600(CDMA1900, Top Side of the DUT faced toward and 1.5cm separation with flat phantom, Antenna 1, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/4/04)

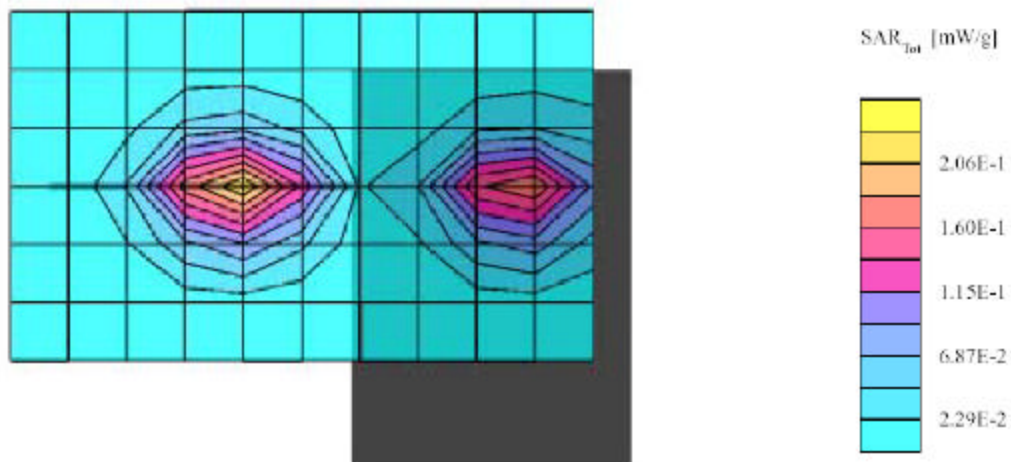
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 1.0; Body 8351900 MHz: $\sigma = 1.51 \text{ mho/m}$, $\epsilon_r = 52.0$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7; SAR (1g): 0.205 mW/g, SAR (10g): 0.110 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: -0.02 dB



Plot #5

Verifone, Omni5600(CDMA 1900, Top Side of the DUT faced toward and 1.5cm separation with flat phantom, Antenna 2, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/4/04)

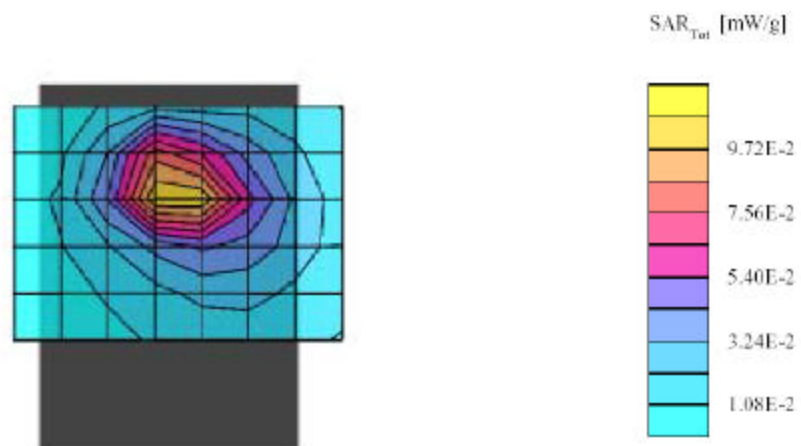
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 1.0; Body 1900 MHz: $\sigma = 1.51$ mho/m $\epsilon_r = 52.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7; SAR (1g): 0.110 mW/g, SAR (10g): 0.0573 mW/g, (Worst-case extrapolation)

Coarse: Dx = 13.0, Dy = 13.0, Dz = 10.0

Powerdrift: -0.00 dB



Plot #6

Verifone, Omni5600(CDMA1900, Back Side of the DUT faced toward and 1.5cm separation with flat phantom, Antenna 1, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/4/04)

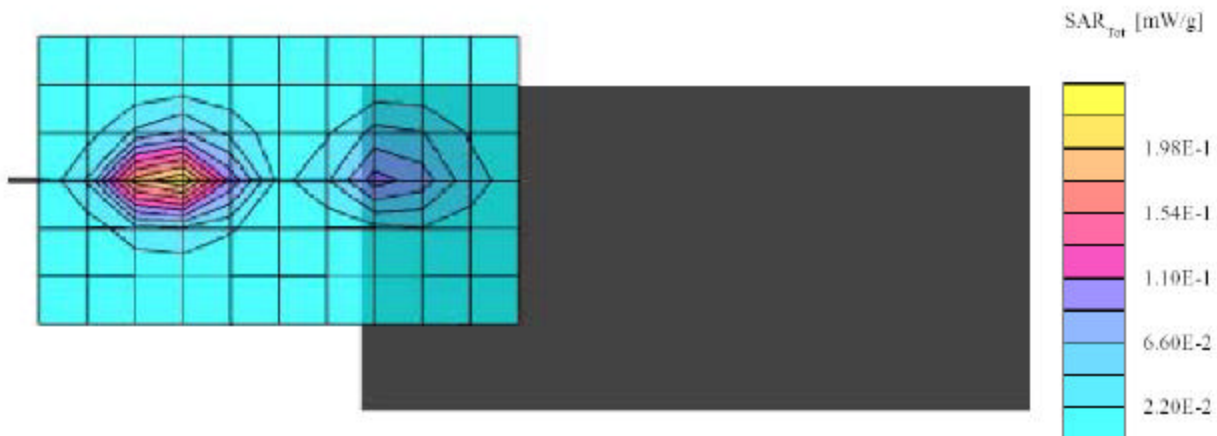
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 1.0; Body 1900 MHz: $\sigma = 1.51 \text{ mho/m}$, $\epsilon_r = 52.0$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7; SAR (1g): 0.196 mW/g, SAR (10g): 0.0979 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

Powerdrift: 0.03 dB



Plot #7

Verifone, Omni5600(CDMA1900, Back Side of the DUT faced toward and 1.5cm separation with flat phantom, Antenna 2, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/4/04)

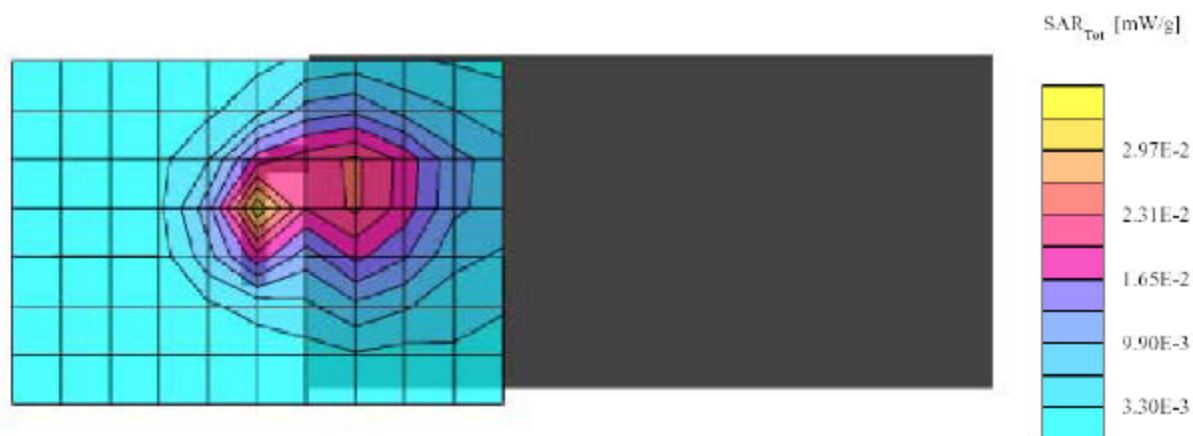
SAM Phantom; Flat Section; Position: (90°,90°); Frequency: 1900 MHz

Probe: ES3DV2 - SN3019; ConvF(4.60,4.60,4.60); Crest factor: 1.0; Body 1900 MHz: $\sigma = 1.51 \text{ mho/m}$, $\epsilon_r = 52.0$, $\rho = 1.00 \text{ g/cm}^3$

Cube 5x5x7; SAR (1g): 0.0279 mW/g, SAR (10g): 0.0148 mW/g, (Worst-case extrapolation)

Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0

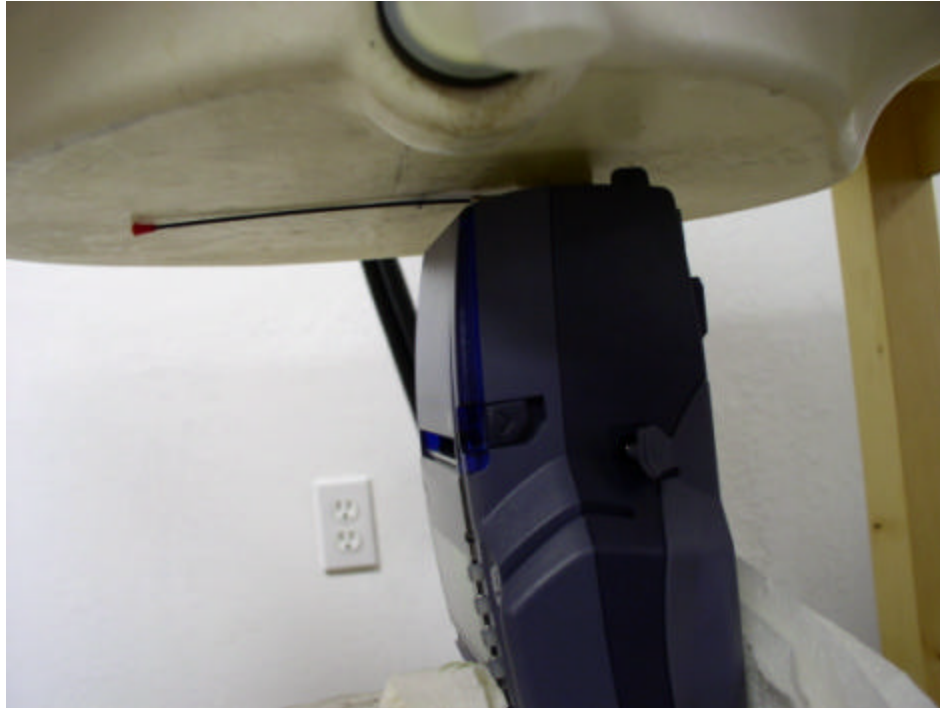
Powerdrift: -0.00 dB



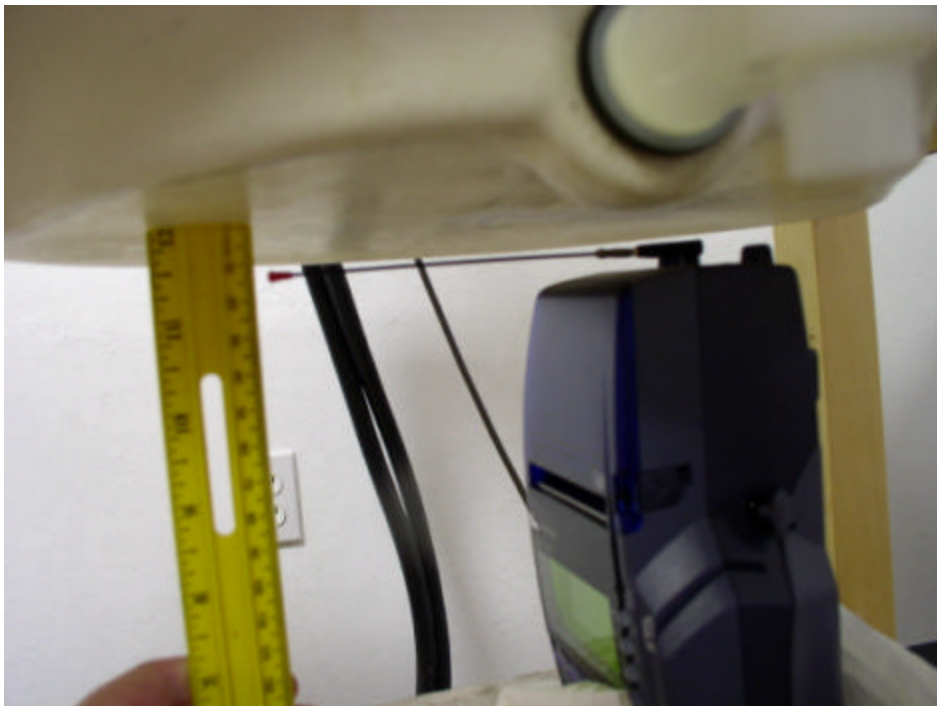
Plot #8

EXHIBIT A - SAR SETUP PHOTOGRAPHS

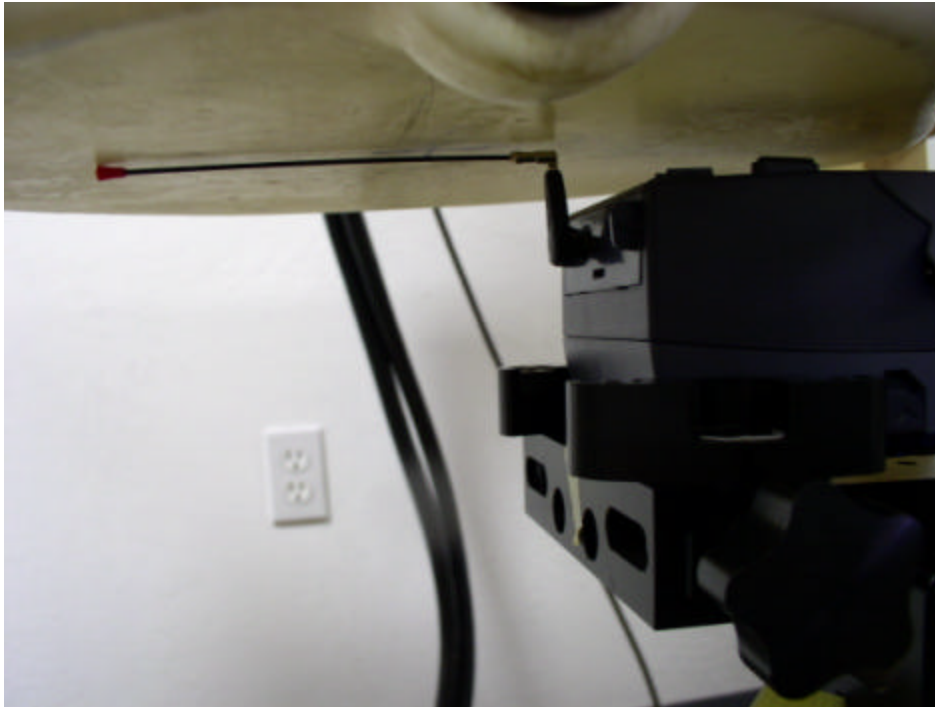
Top Side Touch 835MHz (Antenna 1)



Top Side 1.5cm Separation 1900MHz (Antenna 1)



Back Side Touch 835MHz (Antenna 1)



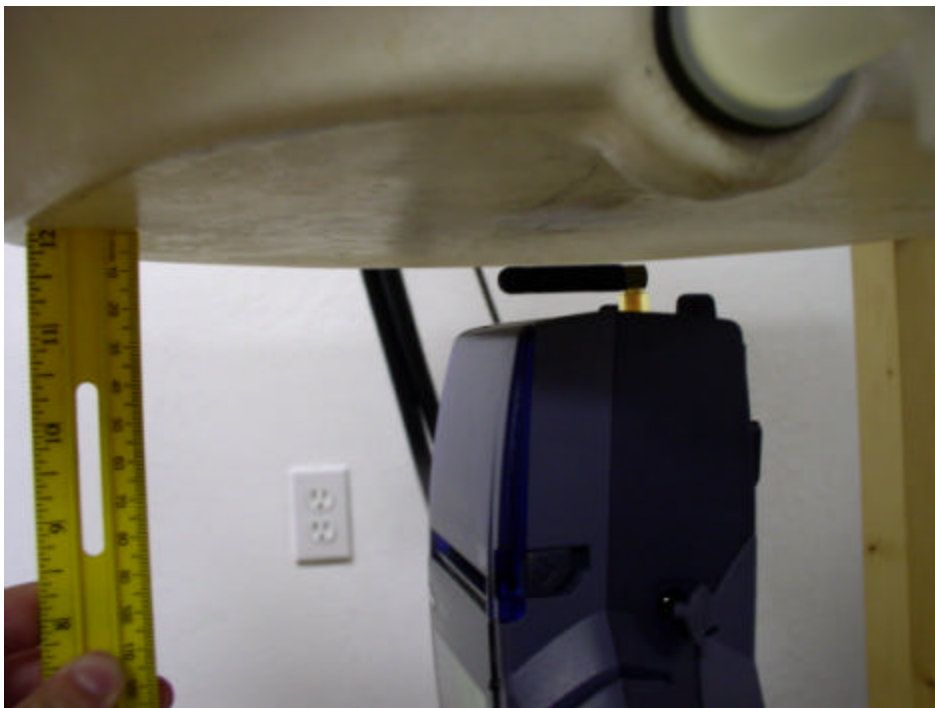
Back Side 1.5cm Separation 1900MHz (Antenna 1)



Top Side Touch 835MHz (Antenna 2)



Top Side 1.5cm Separation 1900MHz (Antenna 2)



back side touch 835MHz (Antenna 2)



Back Side 1.5cm Separation 1900MHz (Antenna 2)

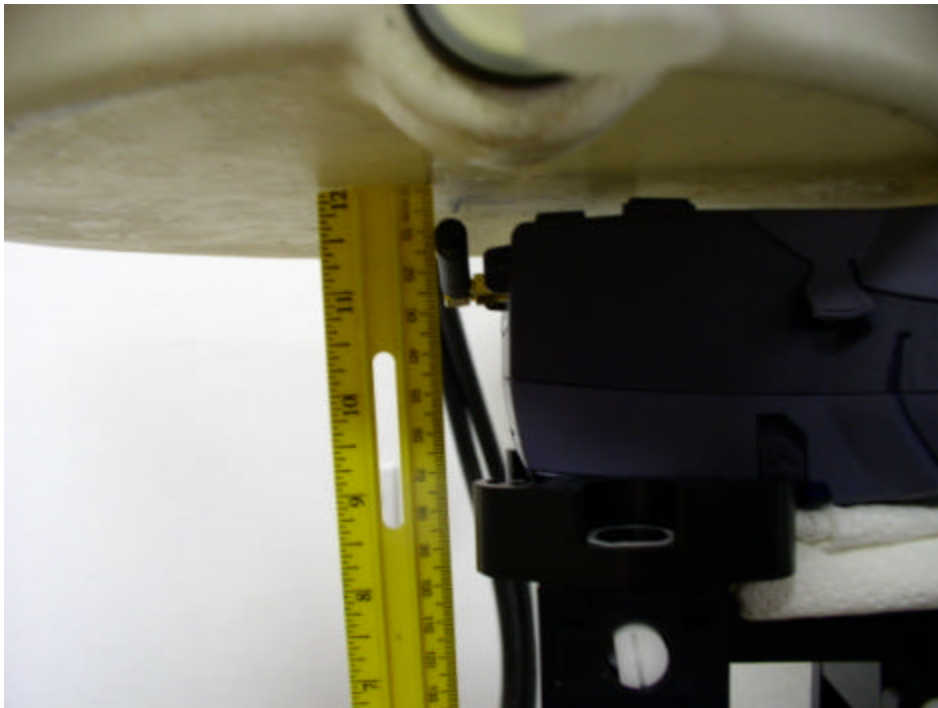


EXHIBIT B – EUT PHOTOGRAPHS

EUT Front View



EUT Rear View



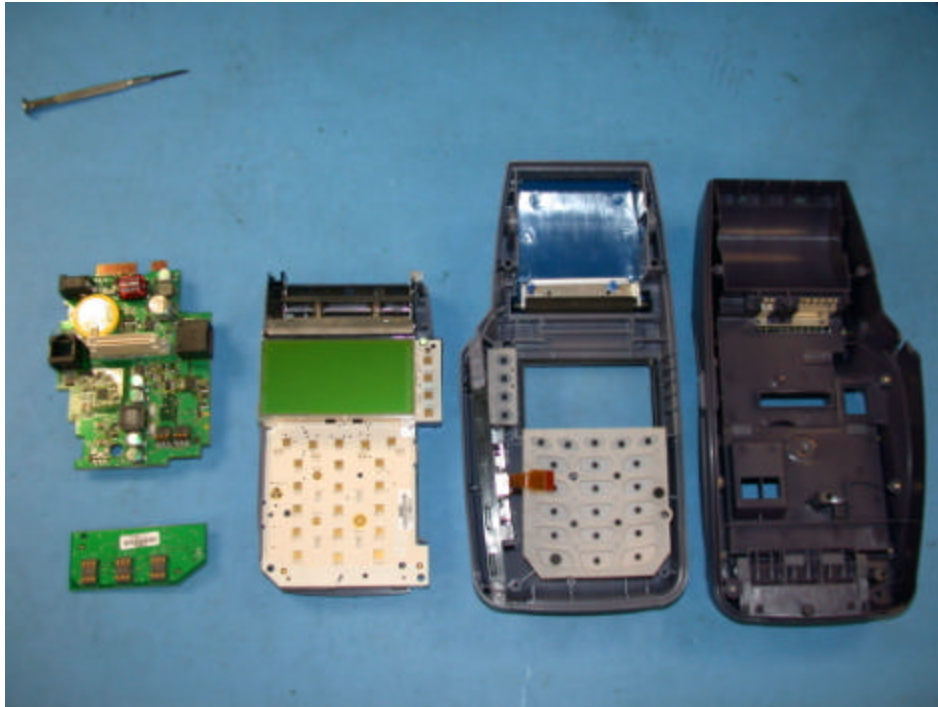
EUT Cover Off View



EUT Component View

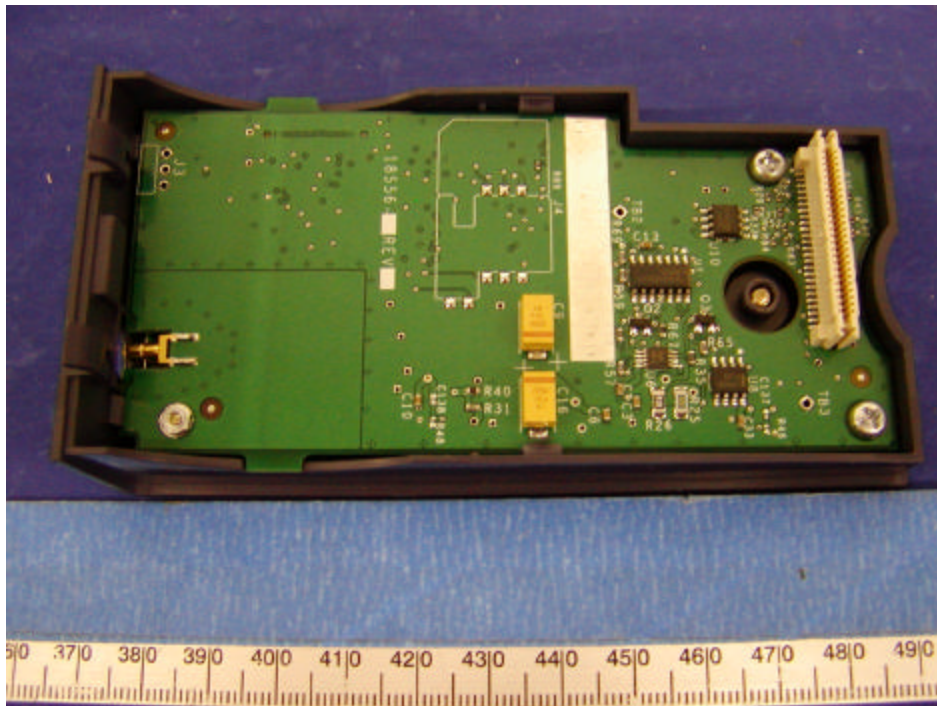


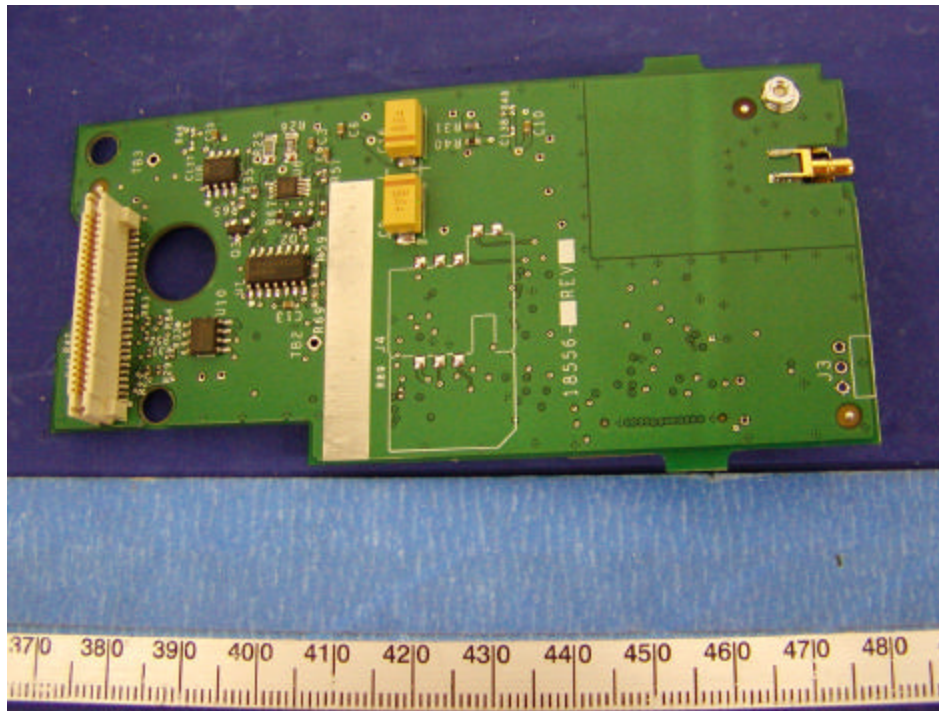
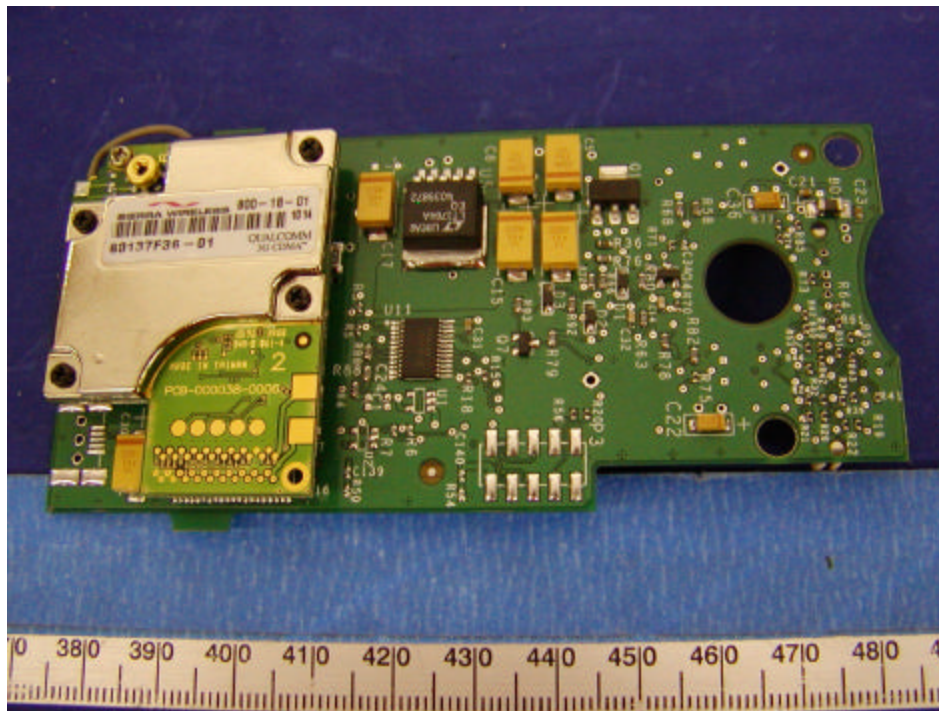
EUT Solder View

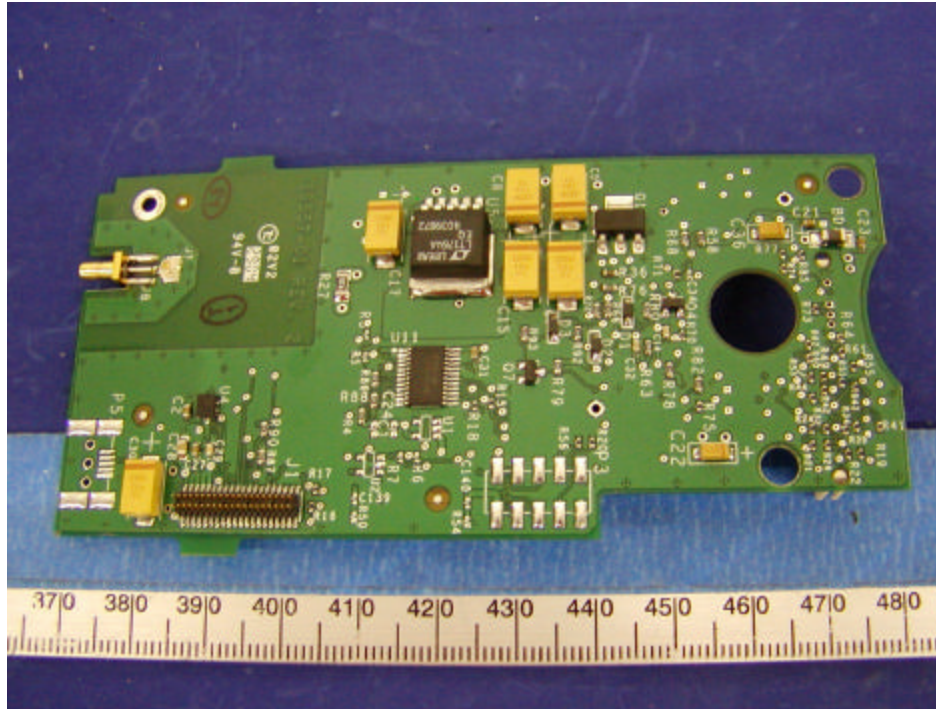
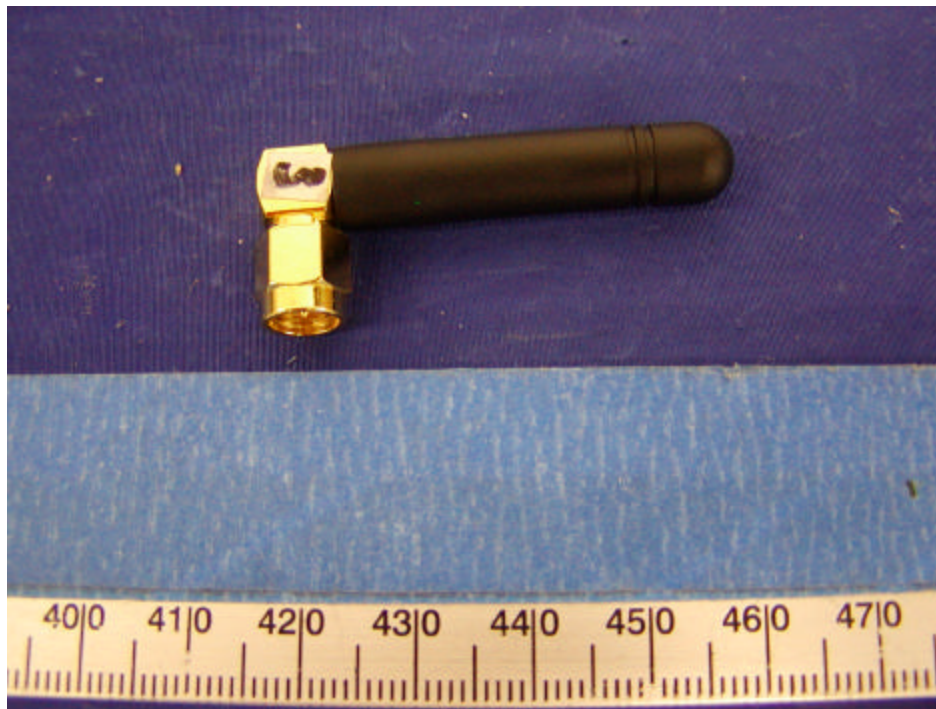


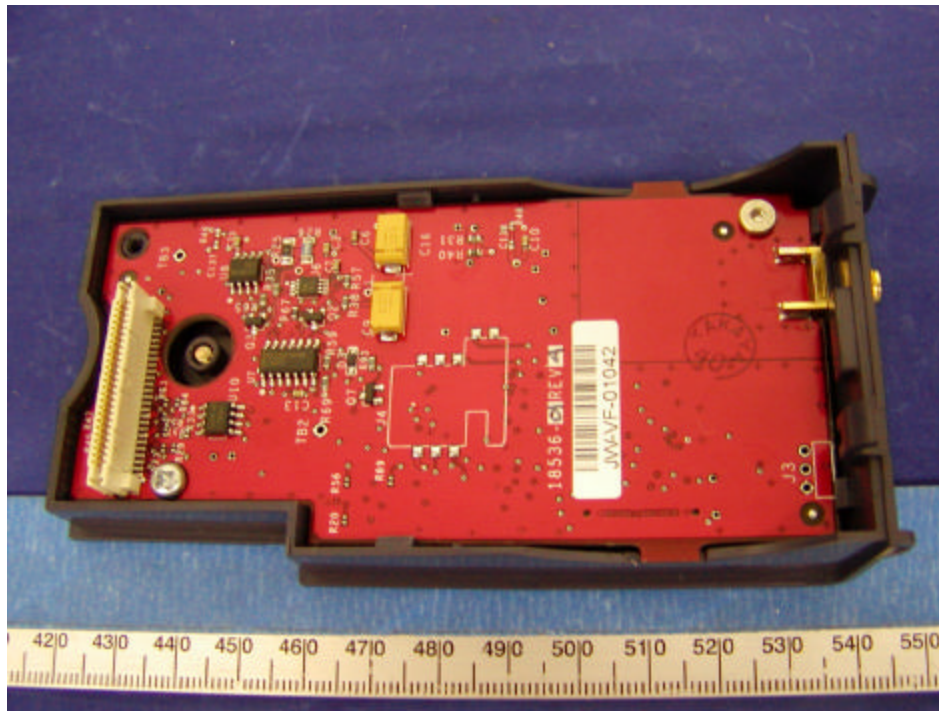
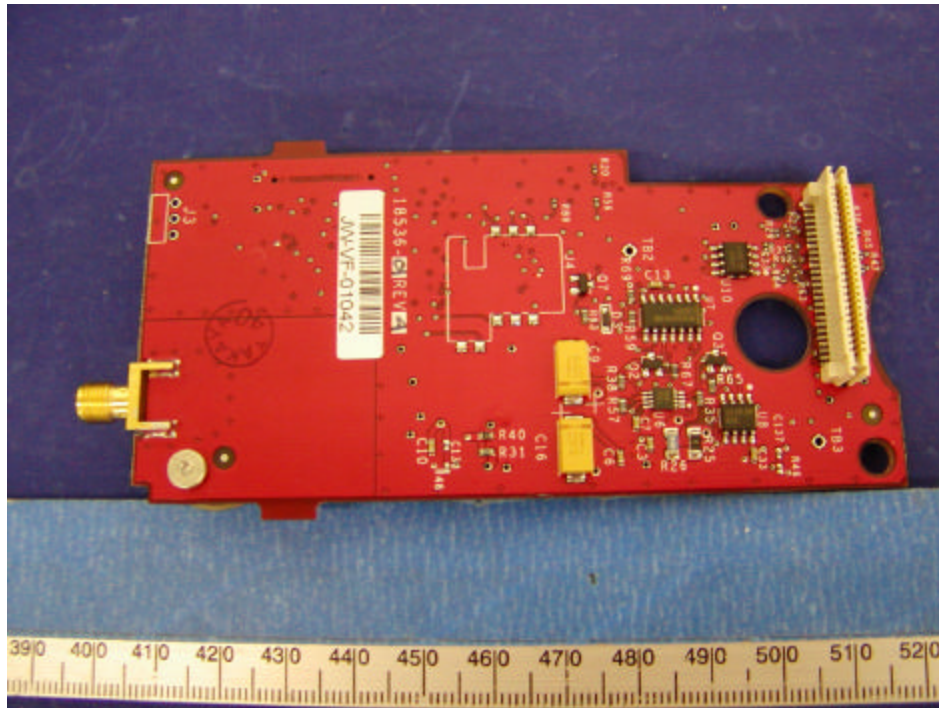
Battery View

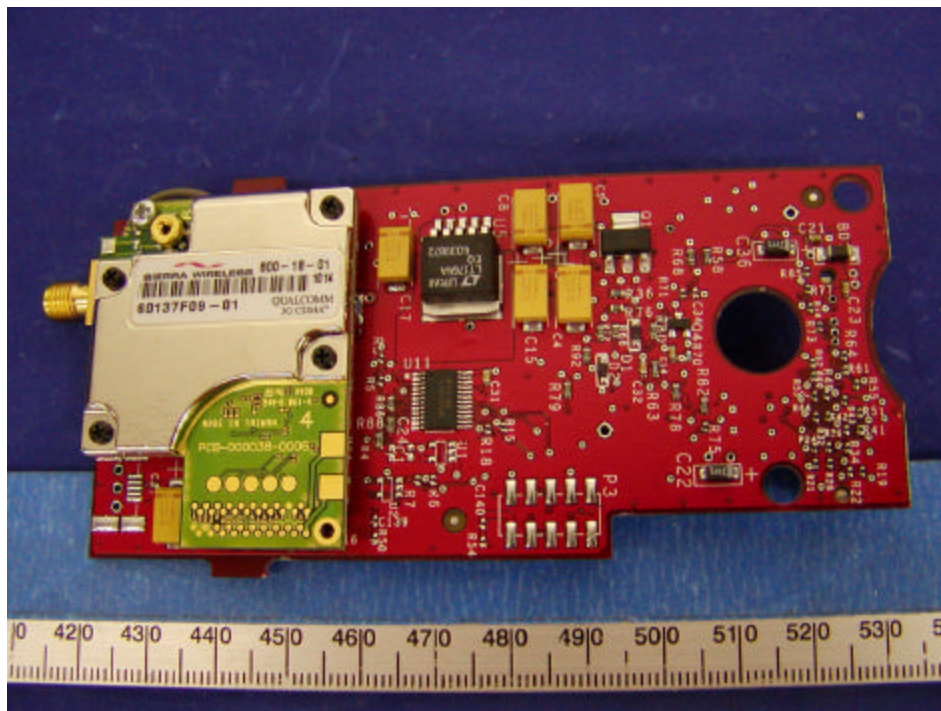
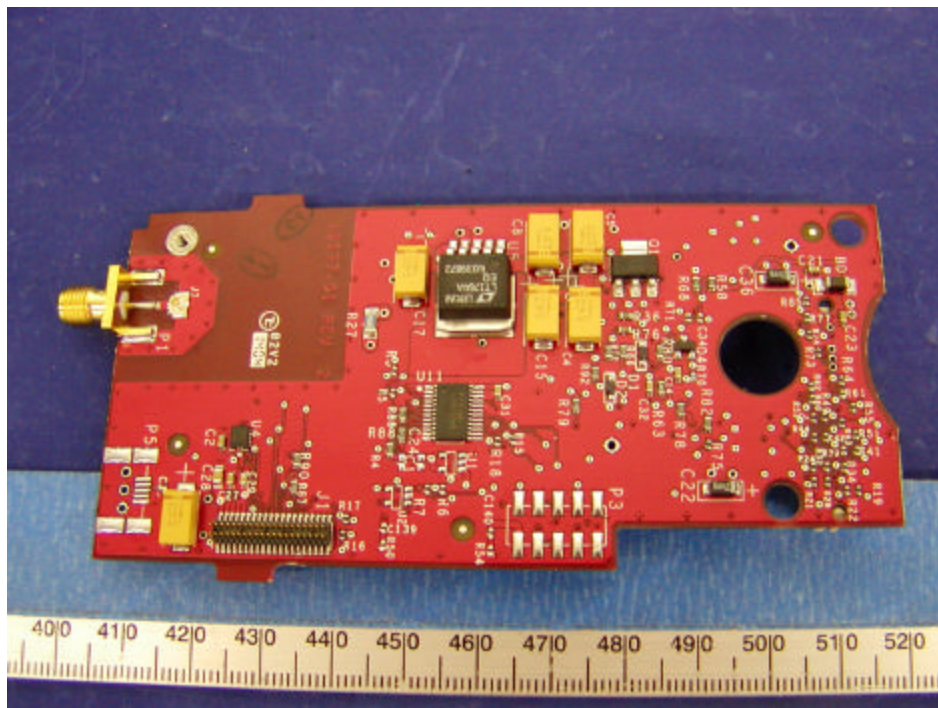


Antenna 1 View**Interface Board View (For Antenna 1 Connector)**

Interface Board Solder View (For Antenna 1 Connector)**Interface Board with CDMA Module Component (For Antenna 1 Connector)**

Interface Board without CDMA Module Component (For Antenna 1 Connector)**Antenna 2 View**

Interface Board View (For Antenna 2 Connector)**Interface Board Solder View (For Antenna 2 Connector)**

Interface Board with CDMA Module Component (For Antenna 2 Connector)**Interface Board without CDMA Module Component (For Antenna 2 Connector)**

Power Adapter



EXHIBIT C – Z-Axis

Verifone, Omni5600(CDMA800, Back Side of the DUT faced toward and in touch with flat phantom, Antenna, Ambient Temp = 23 Deg C, Liquid Temp = 22 Deg C, 8/2/04)

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

Probe: ES3DV2 - SN3019; ConvF(6.10,6.10,6.10); Crest factor: 1.0; Body 835 MHz: $\sigma = 0.99$ mho/m $\epsilon_r = 52.7$ $\rho = 1.00$ g/cm³

∴, 0

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

