

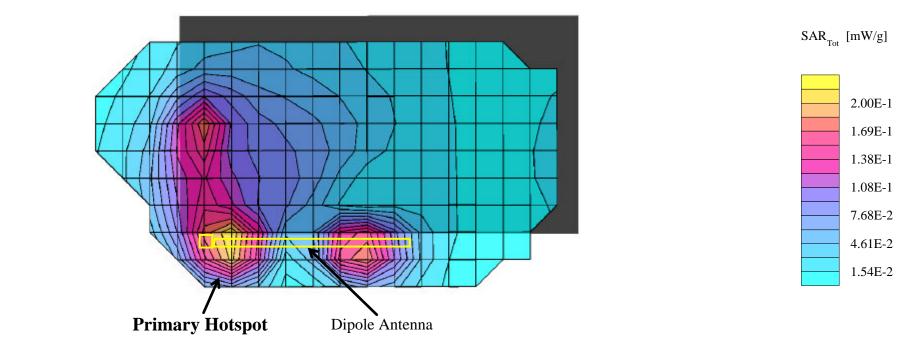
#### **APPENDIX A - SAR MEASUREMENT DATA**

 $\begin{array}{l} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI}\\ & SAM \mbox{Phantom; Flat Section; Position: (0^\circ,0^\circ)}\\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0}\\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho}m \ensuremath{\epsilon_r} = 51.1 \ensuremath{\rho} = 1.00 \ensuremath{ g/cm^3}\\ & Coarse: \ensuremath{Dx} = 15.0, \ensuremath{Dy} = 15.0, \ensuremath{Dz} = 10.0 \ensuremath{\car{Cube}}\ensuremath{Sxx7}\\ & Cube \ensuremath{Sxx7}\\ & SAR (1g): 0.215 \ensuremath{\car{W}}\ensuremath{g/g}\ensuremath{SxR}\ensuremath{(10g)}\ensuremath{:} 0.123 \ensuremath{\car{W}}\ensuremath{\car{W}}\ensuremath{\car{W}}\ensuremath{\car{Sxr7}}\ensuremath{\car{Sxr7}}\ensuremath{\car{Sxr7}}\ensuremath{\car{W}}\ensuremath{\car{W}}\ensuremath{\car{Sxr7}}\ensuremath{\car{W}}\ensuremath{\car{W}}\ensuremath{\car{W}}\ensuremath{\car{Sxr7}}\ensuremath{\car{Sxr7}}\ensuremath{\car{Sxr7}}\ensuremath{\car{W}}\ensuremath{\car{W}}\ensuremath{\car{Sxr7}}\ensuremath{\c$ 

Body SAR - Back of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Back of LCD Display to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C

Date Tested: March 24, 2003

# **Primary Hotspot Evaluation**

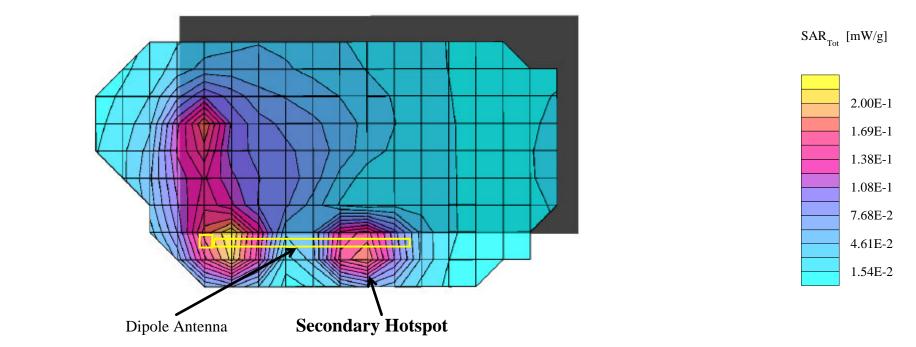


 $\begin{array}{l} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI}\\ SAM Phantom; Flat Section; Position: (0^{\circ},0^{\circ})\\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0}\\ \mbox{1900 MHz Muscle: } \sigma = 1.55 \mbox{ mho}m \ensuremath{\epsilon_r} = 51.1 \ensuremath{\rho} = 1.00 \ensuremath{ g/cm^3}\\ \mbox{Coarse: Dx} = 15.0, \ensuremath{Dy} = 15.0, \ensuremath{Dz} = 10.0 \ensuremath{Cube}\ensuremath{Sxx7}\\ \mbox{Cube } 5x5x7\\ \mbox{SAR (1g): 0.187 \ mW/g, SAR (10g): 0.108 \ mW/g \end{array}$ 

Body SAR - Back of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Back of LCD Display to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C

Date Tested: March 24, 2003

## **Secondary Hotspot Evaluation**

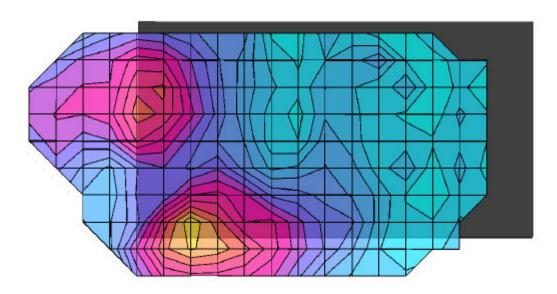


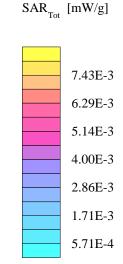
# Itronix Corporation FCC ID: KBCIX260AC750-MPI

 $\begin{array}{l} SAM \mbox{ Phantom; Flat Section; Position: } (0^{\circ},0^{\circ}) \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: } 2.0 \\ \mbox{1900 MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \mbox{ } \rho = 1.00 \mbox{ g/cm}^3 \\ \mbox{Coarse: } Dx = 15.0, Dy = 15.0, Dz = 10.0 \end{array}$ 

Body SAR - Back of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Back of LCD Display to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003

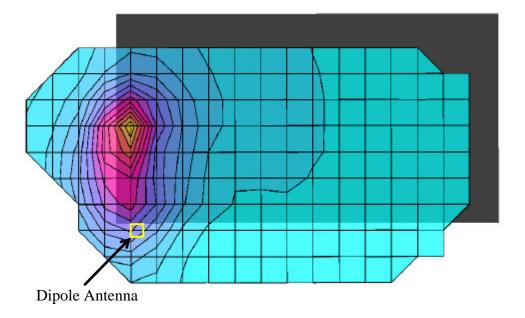
# Coarse scan to show Left Half of LCD Display (Back Side)

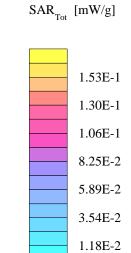




 $\begin{array}{l} \label{eq:sample} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI}\\ & SAM \mbox{Phantom; Flat Section; Position: (0°,0°)}\\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0}\\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \mbox{ } \rho = 1.00 \mbox{ g/cm}^3\\ & Coarse: \mbox{ Dx = 15.0, Dy = 15.0, Dz = 10.0}\\ & Cube \mbox{ 5x5x7}\\ & SAR \mbox{ (1g): 0.149 } \mbox{ mW/g, SAR (10g): 0.0791 } \mbox{ mW/g} \end{array}$ 

Body SAR - Back of LCD Display (Closed) - Antenna Perpendicular to Planar Phantom (180°) 1.5 cm Separation Distance from Back of LCD Display to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003



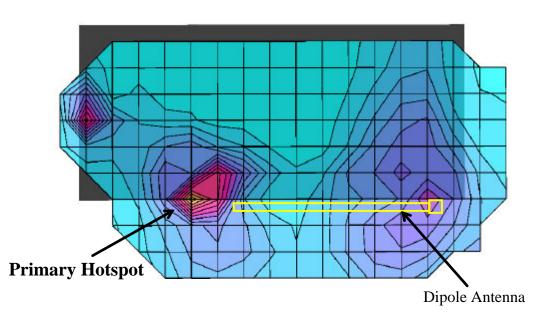


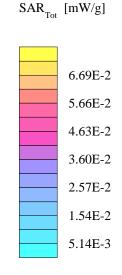
 $\begin{array}{c} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ & SAM \mbox{Phantom; Flat Section; Position: (0°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \mbox{ } \rho = 1.00 \mbox{ g/cm}^3 \\ & Coarse: \mbox{ Dx = 15.0, Dy = 15.0, Dz = 10.0} \\ & Cube \mbox{ } 5x5x7 \\ & SAR \mbox{ (1g): 0.0828 \mbox{ mW/g, SAR (10g): 0.0413 \mbox{ mW/g}} \end{array}$ 

Body SAR - Bottom of Laptop PC (LCD Display Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 0.0 cm Separation Distance from Bottom of Laptop PC to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C

Date Tested: March 24, 2003

#### **Primary Hotspot Evaluation**

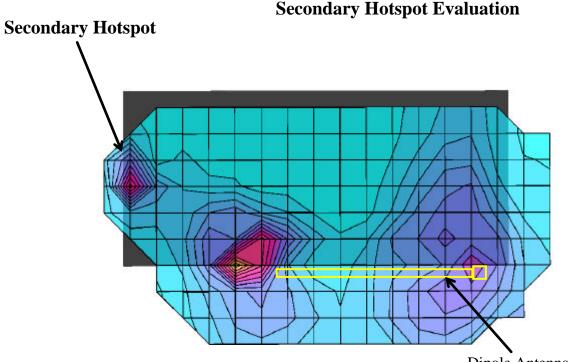


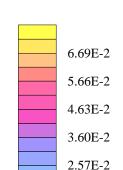


 $\begin{array}{l} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI}\\ SAM Phantom; Flat Section; Position: (0^{\circ},0^{\circ})\\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0}\\ \mbox{1900 MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \ \mbox{$\rho$} = 1.00 \ \mbox{$g$/cm^3$}\\ \mbox{Coarse: } Dx = 15.0, Dy = 15.0, Dz = 10.0 \\ \mbox{Cube } 5x5x7\\ \mbox{SAR (1g): 0.0706 mW/g, SAR (10g): 0.0284 mW/g} \end{array}$ 

Body SAR - Bottom of Laptop PC (LCD Display Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 0.0 cm Separation Distance from Bottom of Laptop PC to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C

Date Tested: March 24, 2003





1.54E-2

5.14E-3

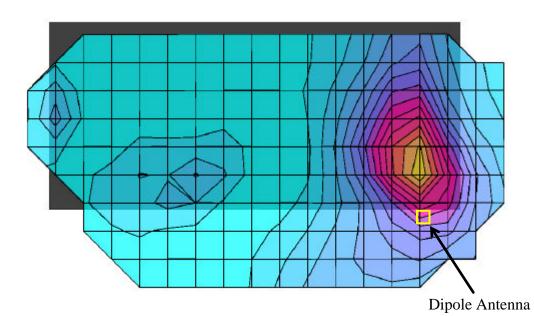
 $SAR_{Tot} [mW/g]$ 

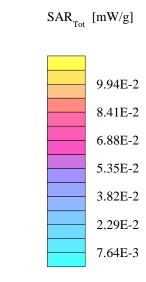
Dipole Antenna

#### Itronix Corporation FCC ID: KBCIX260AC750-MPI SAM Phantom; Flat Section; Position: (0°,0°) Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0

1900 MHz Muscle:  $\sigma = 1.55$  mho/m  $ε_r = 51.1$   $\rho = 1.00$  g/cm<sup>3</sup> Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0 Cube 5x5x7 SAR (1g): 0.104 mW/g, SAR (10g): 0.0624 mW/g

Body SAR - Bottom of Laptop PC (LCD Display Closed) - Antenna Perpendicular to Planar Phantom (Extended Position) 0.0 cm Separation Distance from Bottom of Laptop PC to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003



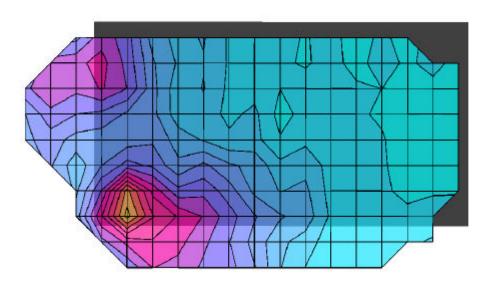


# Itronix Corporation FCC ID: KBCIX260AC750-MPI

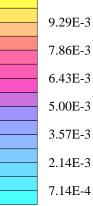
 $\label{eq:same state} \begin{array}{l} \mbox{SAM Phantom; Flat Section; Position: (0^{\circ},0^{\circ}) \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0 \\ \mbox{1900 MHz Muscle: $\sigma$ = 1.55 mho/m $\epsilon_r$ = 51.1 $\rho$ = 1.00 g/cm^3 \\ \mbox{Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0} \end{array}$ 

Body SAR - Bottom of Laptop PC (LCD Display Closed) - Antenna Perpendicular to Planar Phantom (Extended Position) 0.0 cm Separation Distance from Bottom of Laptop PC to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003

# Coarse scan to show Left Half of Bottom Side



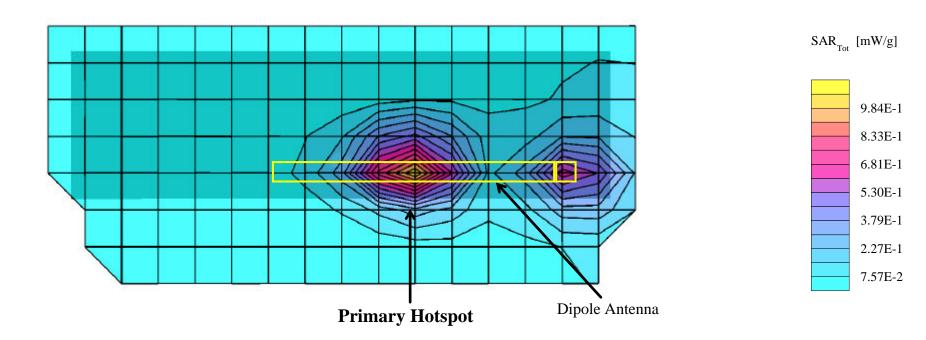




 $\begin{array}{l} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ \mbox{SAM Phantom; Flat Section; Position: (90°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ \mbox{1900 MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \ \rho = 1.00 \ g/cm^3 \\ \mbox{Coarse: } Dx = 15.0, Dy = 15.0, Dz = 10.0 \\ \mbox{Cube } 5x5x7 \\ \mbox{SAR (1g): 0.990 mW/g, SAR (10g): 0.523 mW/g} \end{array}$ 

Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003

## **Primary Hotspot Evaluation**

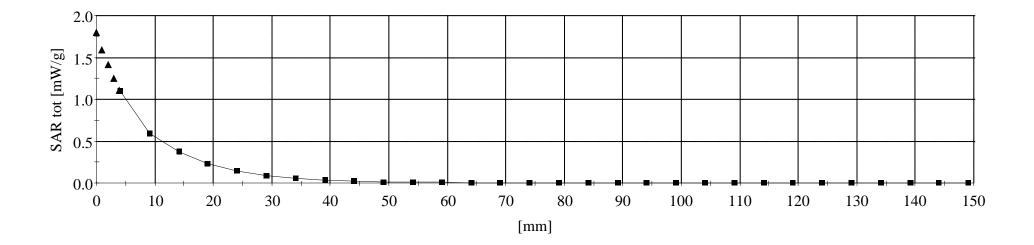


## Itronix Corporation FCC ID: KBCIX260AC750-MPI

SAM Phantom; Flat Section Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0 1900 MHz Muscle:  $\sigma = 1.55$  mho/m  $\epsilon_r = 51.1 \ \rho = 1.00 \text{ g/cm}^3$ 

Z-Axis Extrapolation at Peak SAR Location

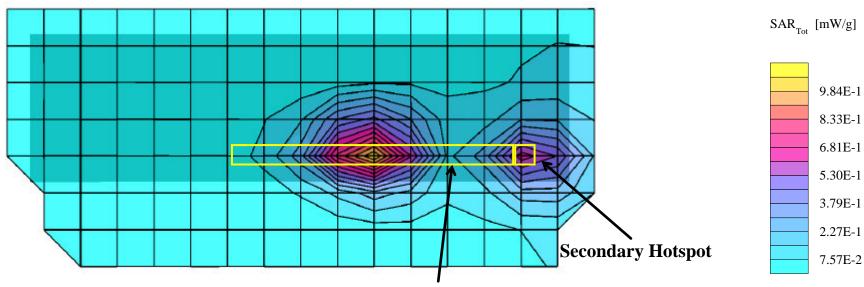
Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003



 $\begin{array}{l} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ \mbox{SAM Phantom; Flat Section; Position: (90°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ \mbox{1900 MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \ \rho = 1.00 \ g/cm^3 \\ \mbox{Coarse: } Dx = 15.0, Dy = 15.0, Dz = 10.0 \\ \mbox{Cube } 5x5x7 \\ \mbox{SAR (1g): 0.408 mW/g, SAR (10g): 0.215 mW/g} \end{array}$ 

Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003

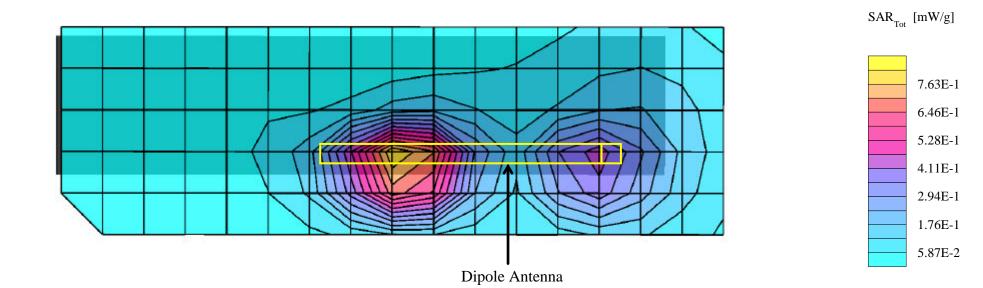
#### **Secondary Hotspot Evaluation**



Dipole Antenna

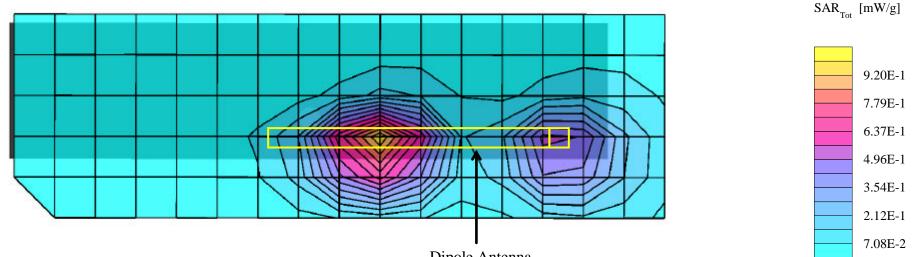
 $\begin{array}{c} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ & SAM \mbox{Phantom; Flat Section; Position: (90°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho}/m \ \epsilon_r = 51.1 \ \rho = 1.00 \ g/cm^3 \\ & Coarse: \mbox{Dx} = 15.0, \ \mbox{Dy} = 15.0, \ \mbox{Dz} = 10.0 \\ & Cube \ 5x5x7 \\ & SAR \ (1g): \ 0.793 \ \ mW/g, \ SAR \ (10g): \ 0.438 \ \ mW/g \end{array}$ 

Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 512 [1850.25 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003



 $\begin{array}{c} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ & SAM \mbox{Phantom; Flat Section; Position: (90°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho}/m \ \epsilon_r = 51.1 \ \rho = 1.00 \ g/cm^3 \\ & Coarse: \mbox{Dx} = 15.0, \ \mbox{Dy} = 15.0, \ \mbox{Dz} = 10.0 \\ & Cube \ 5x5x7 \\ & SAR \ (1g): \ 0.886 \ \ mW/g, \ SAR \ (10g): \ 0.470 \ \ mW/g \end{array}$ 

Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Stowed Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 810 [1909.875 MHz] Conducted Power: 27.8 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C Date Tested: March 24, 2003



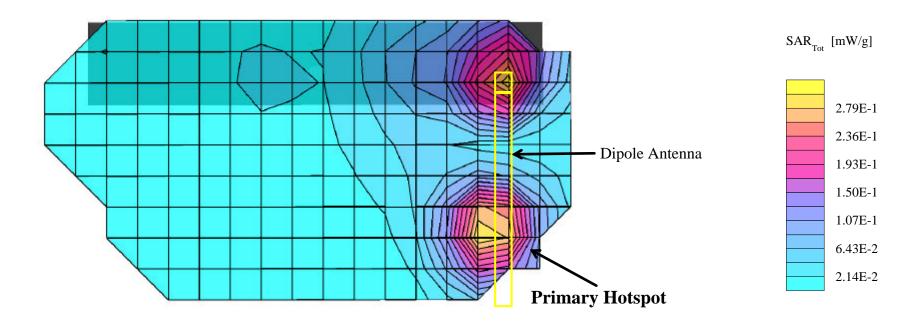
Dipole Antenna

 $\begin{array}{c} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ & SAM \mbox{Phantom; Flat Section; Position: (90°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \mbox{ } \rho = 1.00 \mbox{ g/cm}^3 \\ & Coarse: \mbox{ Dx = 15.0, Dy = 15.0, Dz = 10.0} \\ & Cube \mbox{ 5x5x7} \\ & SAR \mbox{ (1g): 0.309 \mbox{ mW/g, SAR (10g): 0.180 \mbox{ mW/g}} \end{array}$ 

Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Extended Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C

Date Tested: March 24, 2003

**Primary Hotspot Evaluation** 



 $\begin{array}{l} \mbox{Itronix Corporation FCC ID: KBCIX260AC750-MPI} \\ & SAM \mbox{Phantom; Flat Section; Position: (90°,0°)} \\ \mbox{Probe: ET3DV6 - SN1387; ConvF(4.90,4.90,4.90); Crest factor: 2.0} \\ & 1900 \mbox{ MHz Muscle: } \sigma = 1.55 \mbox{ mho/m } \epsilon_r = 51.1 \mbox{ } \rho = 1.00 \mbox{ g/cm}^3 \\ & Coarse: \mbox{ Dx = 15.0, Dy = 15.0, Dz = 10.0} \\ & Cube \mbox{ } 5x5x7 \\ & SAR \mbox{ } (1g): \mbox{ } 0.221 \mbox{ mW/g, SAR (10g): 0.129 \mbox{ mW/g}} \end{array}$ 

Body SAR - Right Side of LCD Display (Closed) - Antenna Parallel to Planar Phantom (Extended Position) 1.5 cm Separation Distance from Dipole Antenna to Planar Phantom Itronix IX260 Rugged Laptop PC with Sierra Wireless AirCard 750 PCS GSM/GPRS Modem Card co-located with Cisco MPI-350 Mini-PCI DSSS WLAN Card PCS GPRS Mode Simultaneous Transmit with co-located DSSS WLAN Card Channel 661 [1880.00 MHz] Conducted Power: 27.9 dBm Ambient Temp: 22.8°C; Fluid Temp: 23.1°C

Date Tested: March 24, 2003

#### **Secondary Hotspot Evaluation**

