

## APPENDIX A - SAR MEASUREMENT DATA

### Itronix Corporation FCC ID: KBCIX260MPIA555BT

SAM Phantom; Flat Section; Position: (90°,0°)  
Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0  
Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>  
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0  
Cube 5x5x7  
SAR (1g): 1.21 mW/g, SAR (10g): 0.528 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

Cisco DSSS WLAN Card MPI-350 Mini-PCI with Internal Antenna

Co-located with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card (PCS) with External Dipole Antenna  
and Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna

#### Single Transmit - WLAN Transmitter only

CW Mode

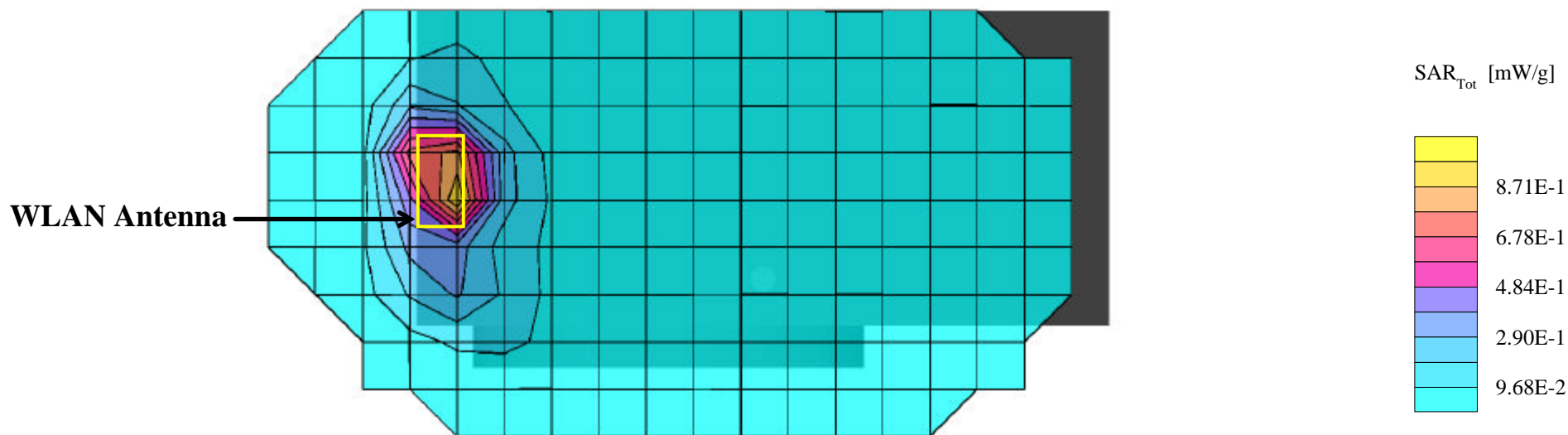
Channel 6 (2437 MHz)

Conducted Power: 21.2 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

#### WLAN Peak SAR Evaluation



# Itronix Corporation FCC ID: KBCIX260MPIA555BT

SAM Phantom; Flat Section; Position: (90°,0°)  
Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0  
Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>  
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0  
Cube 5x5x7  
SAR (1g): 1.18 mW/g, SAR (10g): 0.513 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

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**Single Transmit - WLAN Transmitter only**

CW Mode

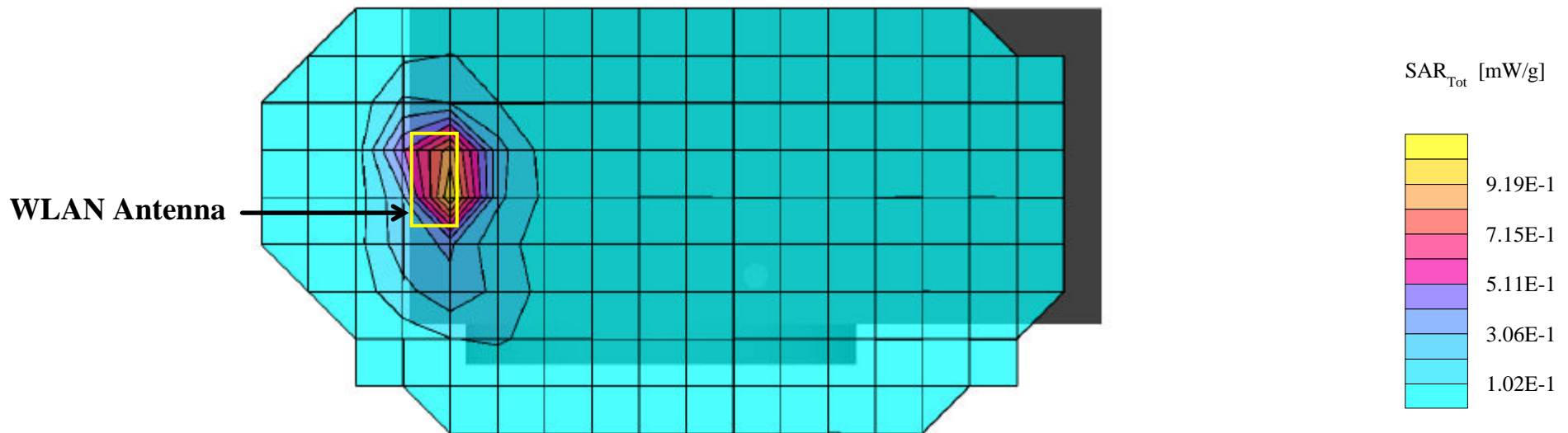
Channel 1 (2412MHz)

Conducted Power: 21.2 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation



# Itronix Corporation FCC ID: KBCIX260MPIA555BT

SAM Phantom; Flat Section; Position: (90°,0°)  
Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0  
Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>  
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0  
Cube 5x5x7  
SAR (1g): 0.980 mW/g, SAR (10g): 0.427 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

Cisco DSSS WLAN Card MPI-350 Mini-PCI with Internal Antenna

Co-located with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card (PCS) with External Dipole Antenna  
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**Single Transmit - WLAN Transmitter only**

CW Mode

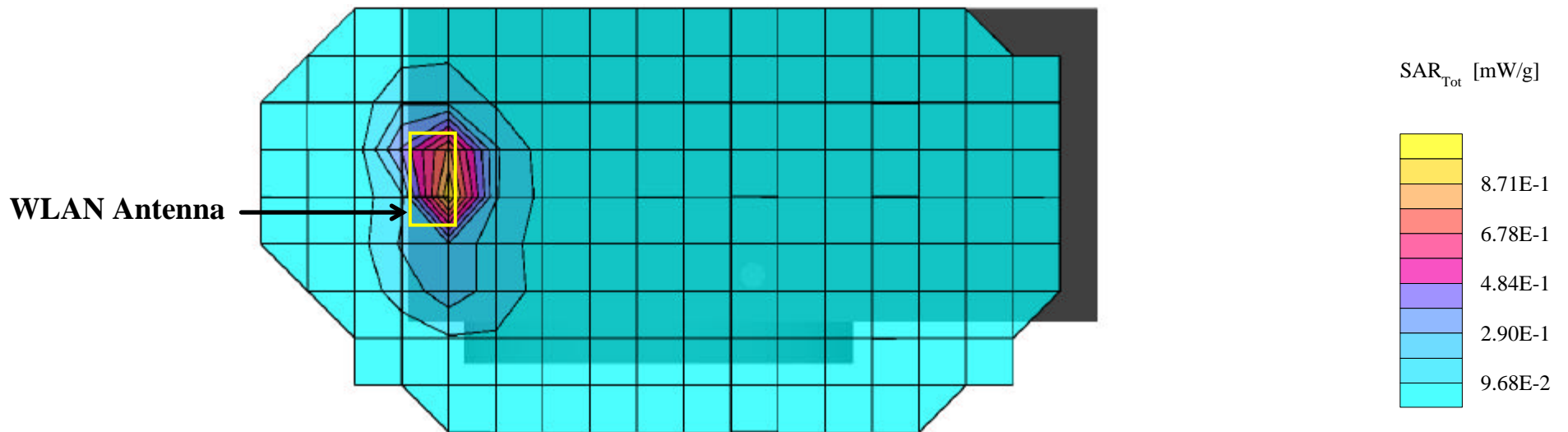
Channel 11 (2462 MHz)

Conducted Power: 21.1 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation



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SAM Phantom; Flat Section; Position: (90°,0°)

Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0

Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>

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

Cube 5x5x7

SAR (1g): 1.29 mW/g, SAR (10g): 0.603 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

Cisco DSSS WLAN Card MPI-350 Mini-PCI with Internal Antenna

Co-located with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card (PCS) with External Dipole Antenna

and Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna

**Simultaneous Transmit with co-located WLAN and PCS CDMA Transmitters**

CW Mode

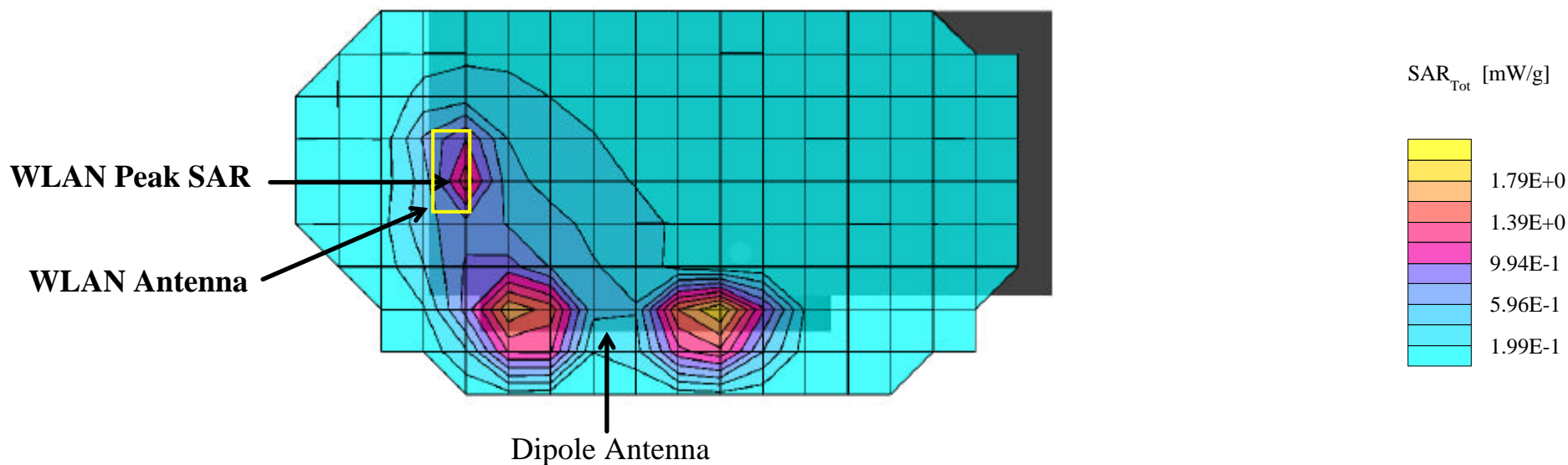
Channel 6 (2437 MHz)

Conducted Power: 21.2 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation



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SAM Phantom; Flat Section; Position: (90°,0°)  
Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0  
Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>  
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0  
Cube 5x5x7  
SAR (1g): 1.28 mW/g, SAR (10g): 0.591 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

Cisco DSSS WLAN Card MPI-350 Mini-PCI with Internal Antenna

Co-located with Sierra Wireless AirCard 555 Dual Band CDMA Modem Card (PCS) with External Dipole Antenna  
and Mitsumi WML-C11N Bluetooth Transmitter with Internal Antenna

**Simultaneous Transmit with co-located WLAN and PCS CDMA Transmitters**

CW Mode

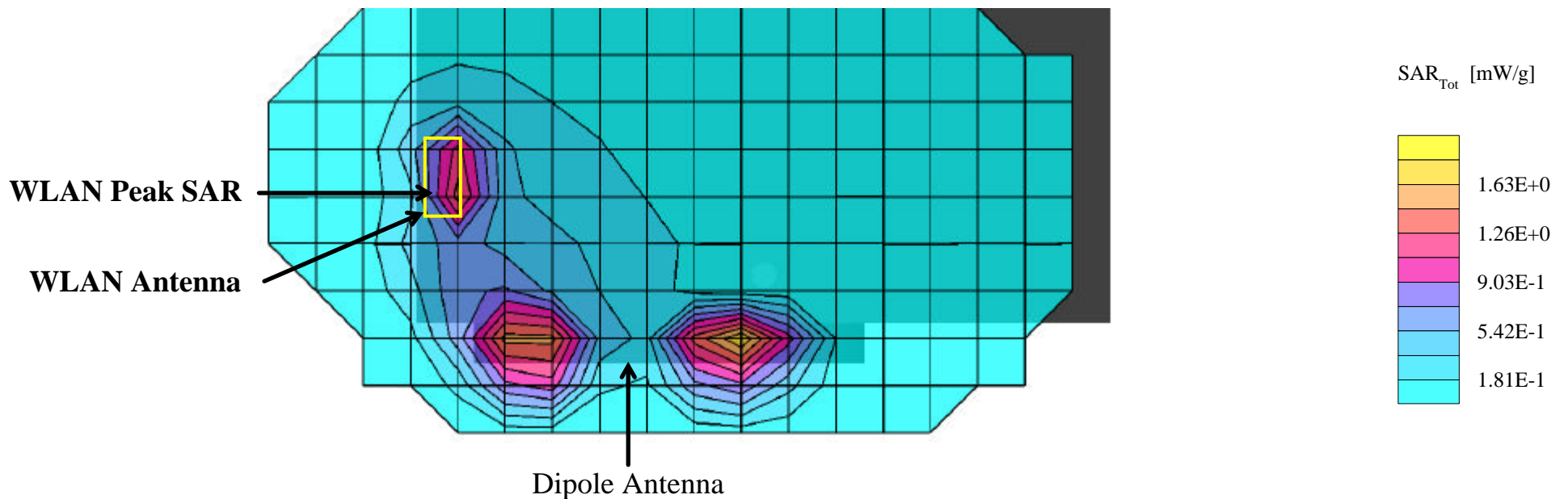
Channel 1 (2412 MHz)

Conducted Power: 21.2 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation



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SAM Phantom; Flat Section; Position: (90°,0°)  
Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0  
Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>  
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0  
Cube 5x5x7  
SAR (1g): 1.15 mW/g, SAR (10g): 0.515 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

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**Simultaneous Transmit with co-located WLAN and PCS CDMA Transmitters**

CW Mode

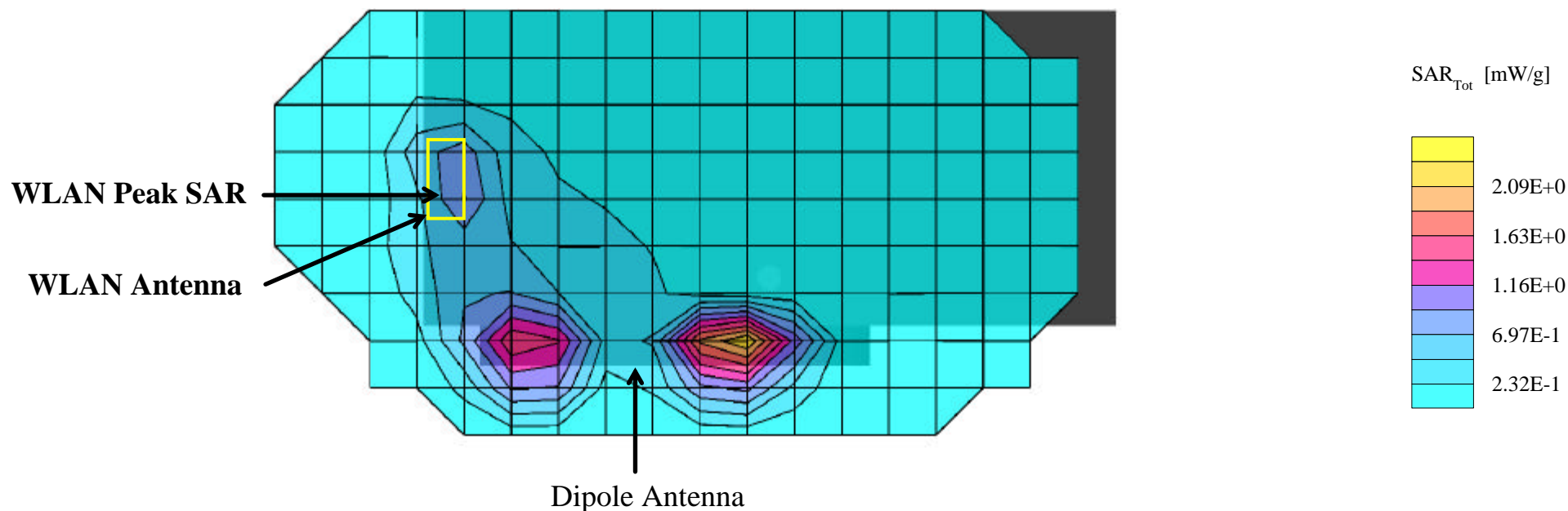
Channel 11 (2462 MHz)

Conducted Power: 21.1 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

### WLAN Peak SAR Evaluation



# Itronix Corporation FCC ID: KBCIX260MPIA555BT

SAM Phantom; Flat Section; Position: (90°,0°)

Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0

Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>

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

Cube 5x5x7

SAR (1g): 1.23 mW/g, SAR (10g): 0.573 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

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**Simultaneous Transmit with co-located WLAN, PCS CDMA, and Bluetooth Transmitters**

CW Mode

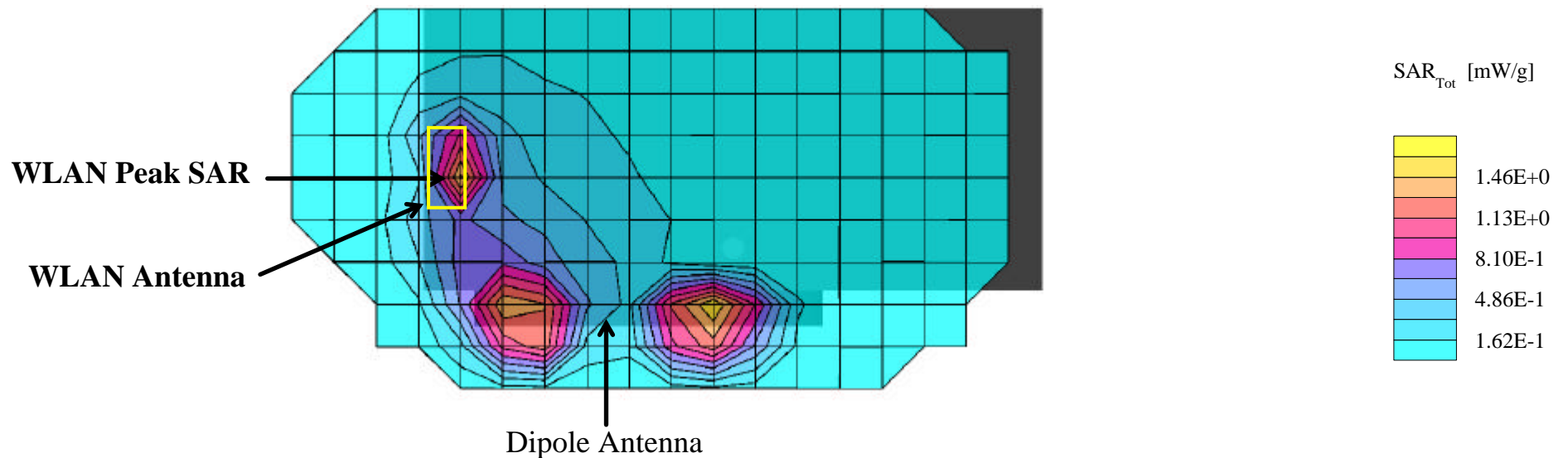
Channel 6 (2437 MHz)

Conducted Power: 21.2 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation





# Itronix Corporation FCC ID: KBCIX260MPIA555BT

SAM Phantom; Flat Section; Position: (90°,0°)  
Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0  
Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>  
Coarse: Dx = 15.0, Dy = 15.0, Dz = 10.0  
Cube 5x5x7  
SAR (1g): 1.31 mW/g, SAR (10g): 0.604 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)  
0.0 cm Separation Distance from Back of LCD to Planar Phantom

IX260 Rugged Laptop PC

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## Simultaneous Transmit with co-located WLAN, PCS CDMA, and Bluetooth Transmitters

CW Mode

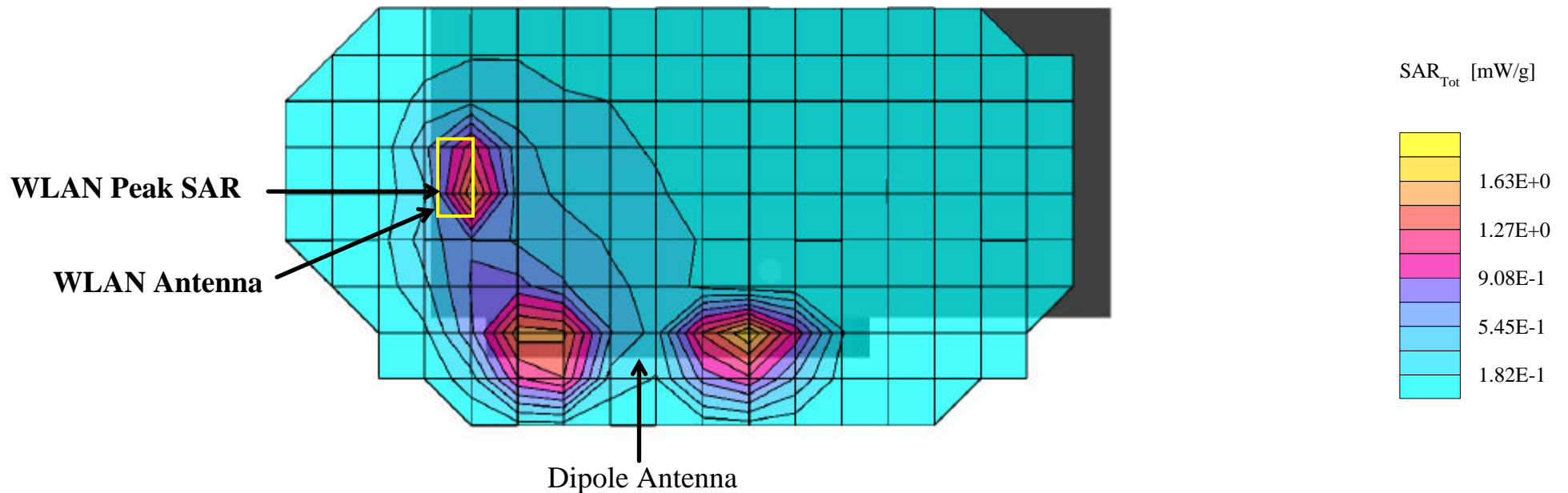
Channel 1 (2412 MHz)

Conducted Power: 21.2 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation



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SAM Phantom; Flat Section; Position: (90°,0°)

Probe: ET3DV6 - SN1387; ConvF(4.60,4.60,4.60); Crest factor: 1.0

Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>

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

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CW Mode

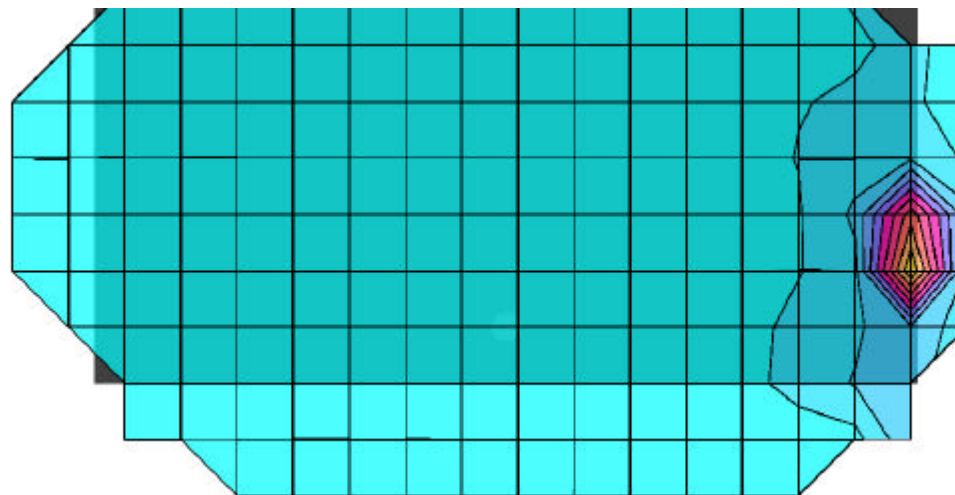
Channel 1 (2412 MHz)

Conducted Power: 21.2 dBm

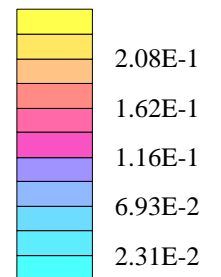
Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

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## Coarse Scan to show 2nd Half of LCD Display Back



SAR<sub>Tot</sub> [mW/g]



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Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>

## Z-Axis Extrapolation at Peak SAR Location

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

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**Simultaneous Transmit with co-located WLAN, PCS CDMA, and Bluetooth Transmitters**

CW Mode

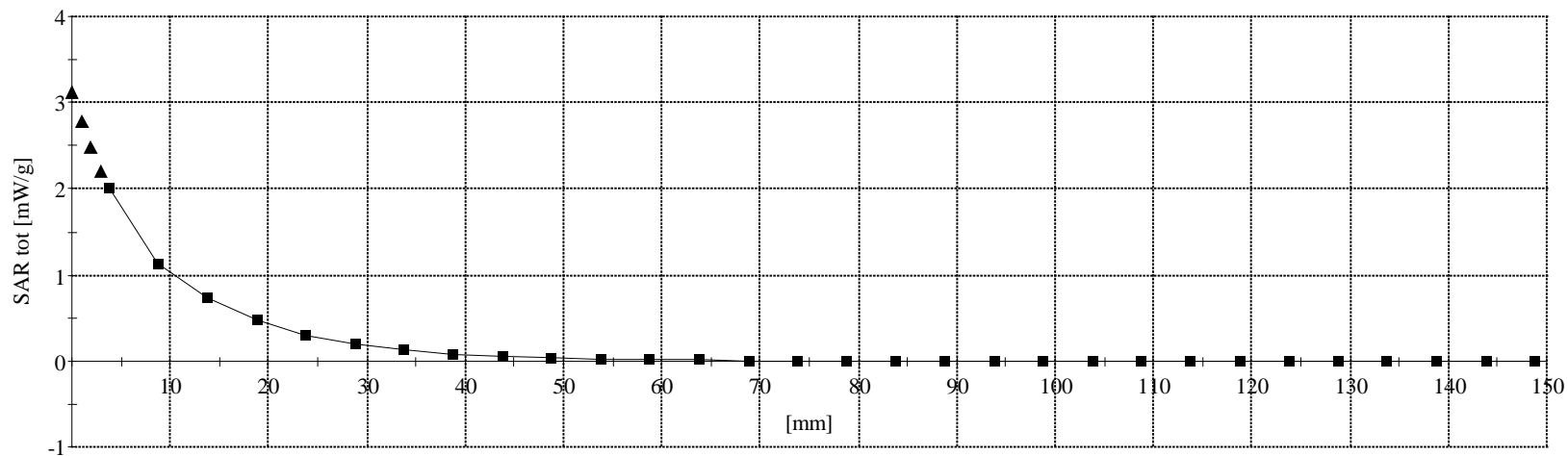
Channel 1 (2412 MHz)

Conducted Power: 21.2 dBm

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Muscle 2450 MHz:  $\sigma = 1.98$  mho/m  $\epsilon_r = 50.3$   $\rho = 1.00$  g/cm<sup>3</sup>

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

Cube 5x5x7

SAR (1g): 1.11 mW/g, SAR (10g): 0.520 mW/g

Back of LCD - Display Closed (CDMA Dipole Antenna Parallel to Planar Phantom - Stowed Position)

0.0 cm Separation Distance from Back of LCD to Planar Phantom

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CW Mode

Channel 11 (2462 MHz)

Conducted Power: 21.1 dBm

Ambient Temp: 23.9°C; Fluid Temp: 23.9°C

Date Tested: August 29, 2003

## WLAN Peak SAR Evaluation

