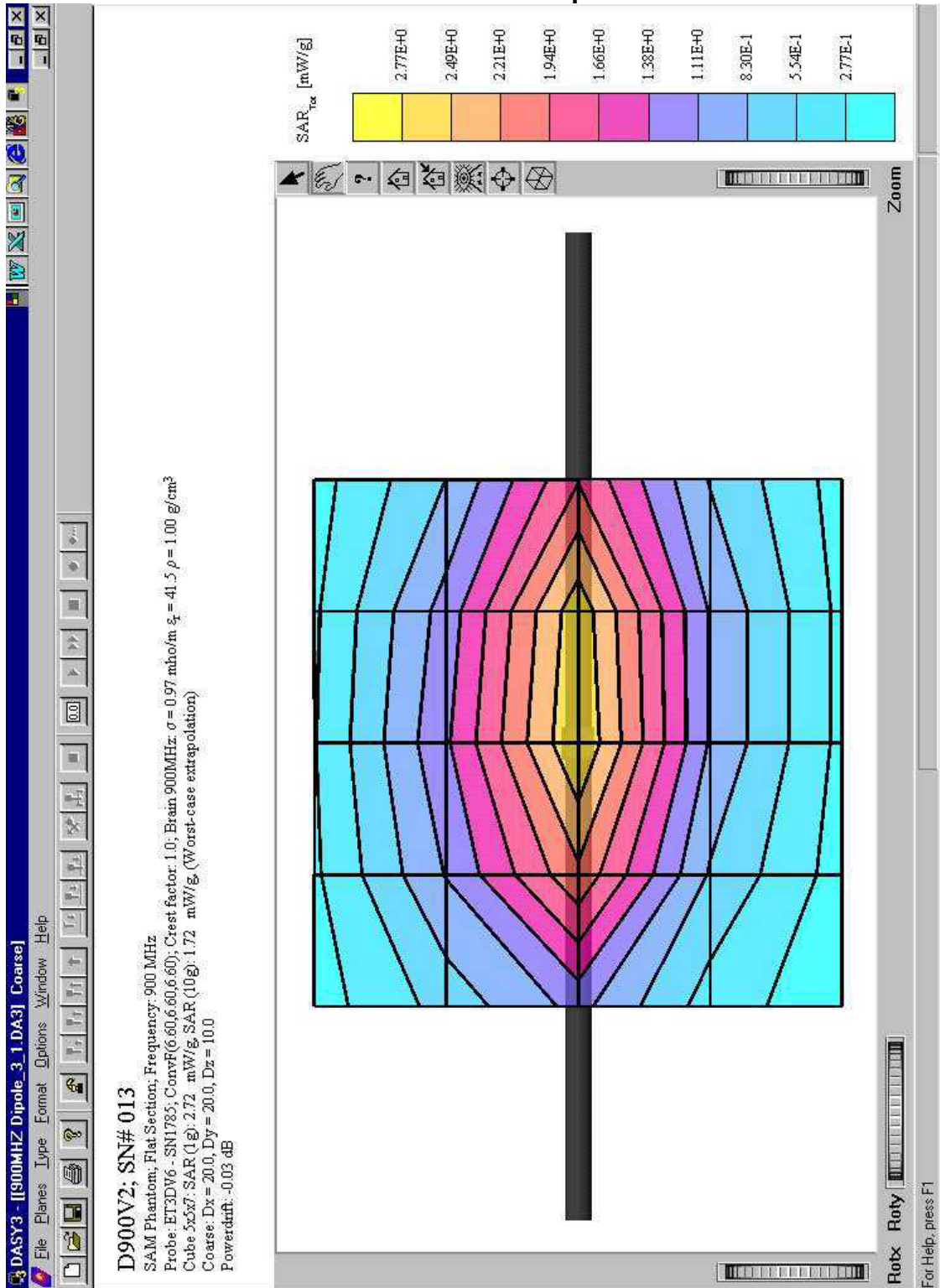Symbol Technologies, Model No: MC9063

1.0 GRAPHICAL TEST RESULTS

Please note that the graphical visualization of the device position onto the SAR distribution gives only limited information on the current distribution of the device, since the curvature of the head results in graphical distortion. Full information can only be obtained either by H-field scans in free space or SAR evaluation with a flat phantom.
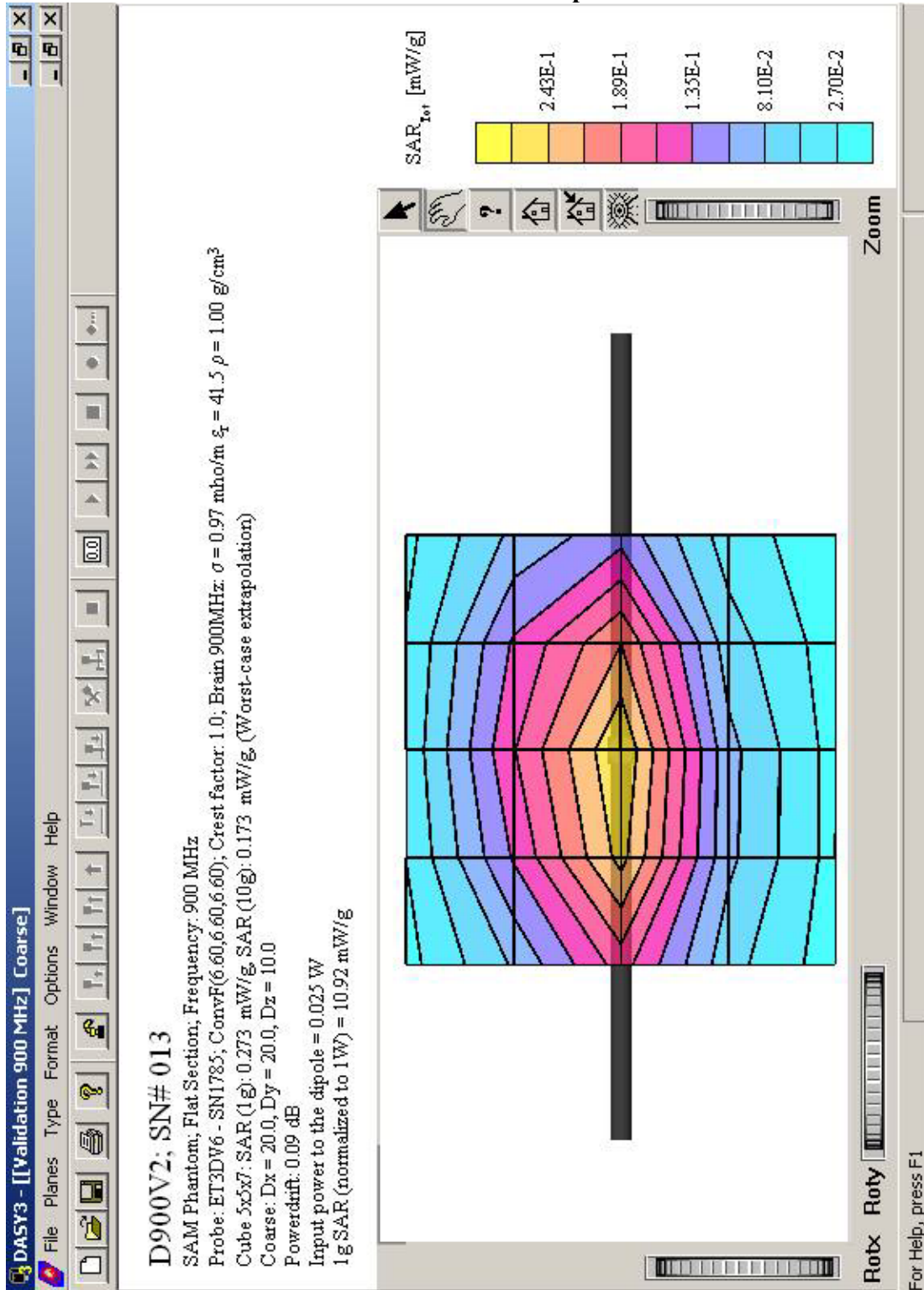
Symbol Technologies, Model No: MC9063

SAR PLOTS FOR SYSTEM VERIFICATION

Exhibit 1: 900 MHz Dipole Validation

D900V2; SN# 013

SAM Phantom, Flat Section; Frequency: 900 MHz

Probe: ET3DV6 - SN1785; ConvF(6.60,6.60,6.60); Crest factor: 1.0; Brain 900MHz: σ = 0.97 mho/m ε_r = 41.5 ρ = 1.00 g/cm³

Cube 5x5x7: SAR (1g): 2.72 mW/g, SAR (10g): 1.72 mW/g (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Powerdrift: -0.03 dB

Symbol Technologies, Model No: MC9063

Exhibit 2: 900 MHz Dipole Validation

D900V2; SN# 013

SAM Phantom; Flat Section; Frequency: 900 MHz

Probe: ET3DV6 - SN1785; ConvF(6.60,6.60,6.60); Crest factor: 1.0; Brain 900MHz: $\sigma = 0.97$ mho/m $\varepsilon_r = 41.5$ $\rho = 1.00$ g/cm^3

Cube 5x5x7: SAR (1g): 0.273 mW/g, SAR (10g): 0.173 mW/g (Worst-case extrapolation)

Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0

Powerdrift: 0.09 dB

Input power to the dipole = 0.025 W

1g SAR (normalized to 1W) = 10.92 mW/g

Symbol Technologies, Model No: MC9063

Exhibit 3: 1800 MHz Dipole Validation

D1800V2; SN: 224
SAM Phantom; Flat Section; Frequency: 1800 MHz
Probe: ET3DV6 - SN1785; ConvF(5.20,5.20,5.20); Crest factor: 1.0; Brain 1800 MHz: σ = 1.35 mho/m εr = 40.9 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 9.33 mW/g, SAR (10g): 4.91 mW/g (Worst-case extrapolation)
Coarse: Dx = 20.0, Dy = 20.0, Dz = 10.0
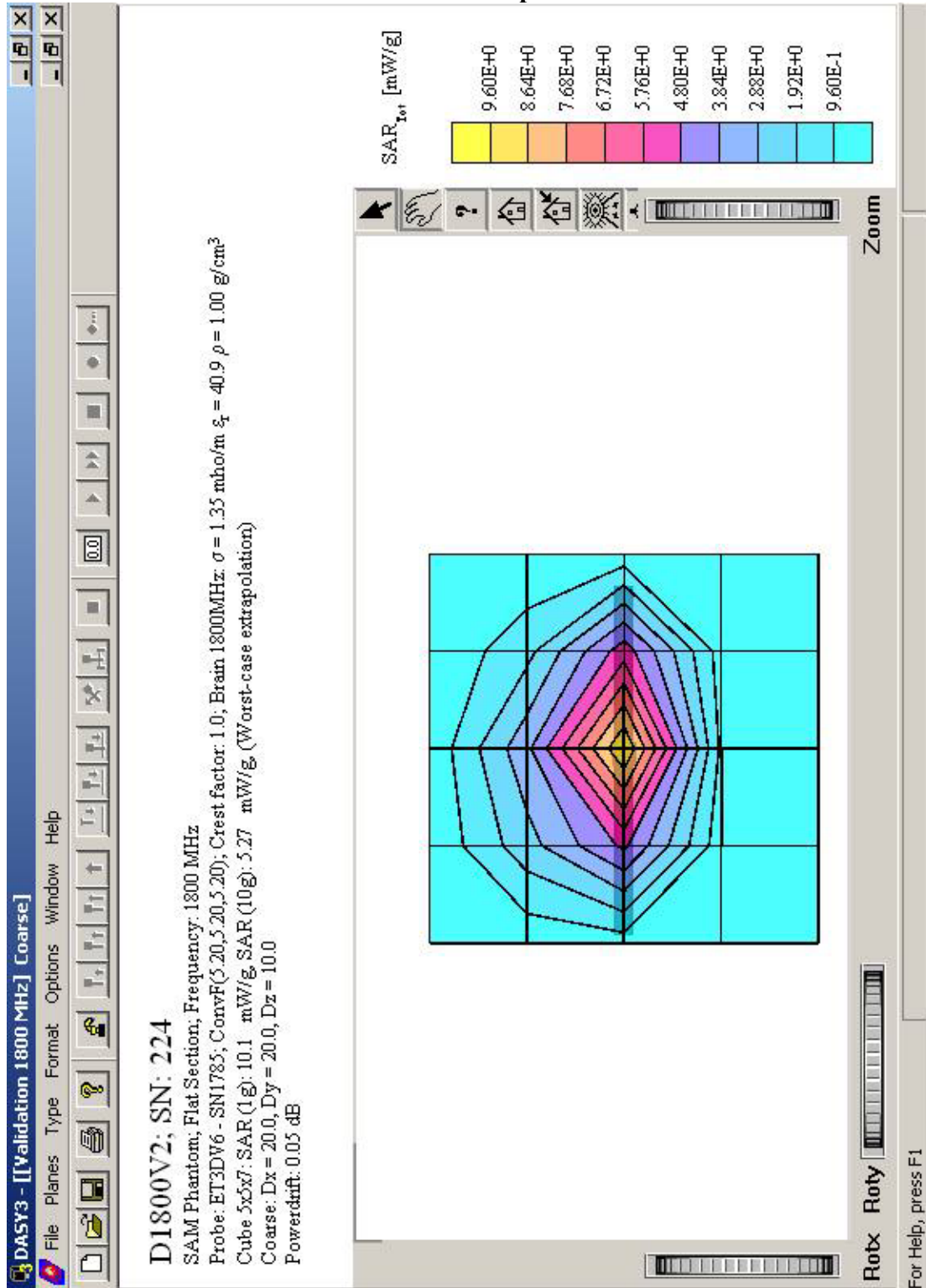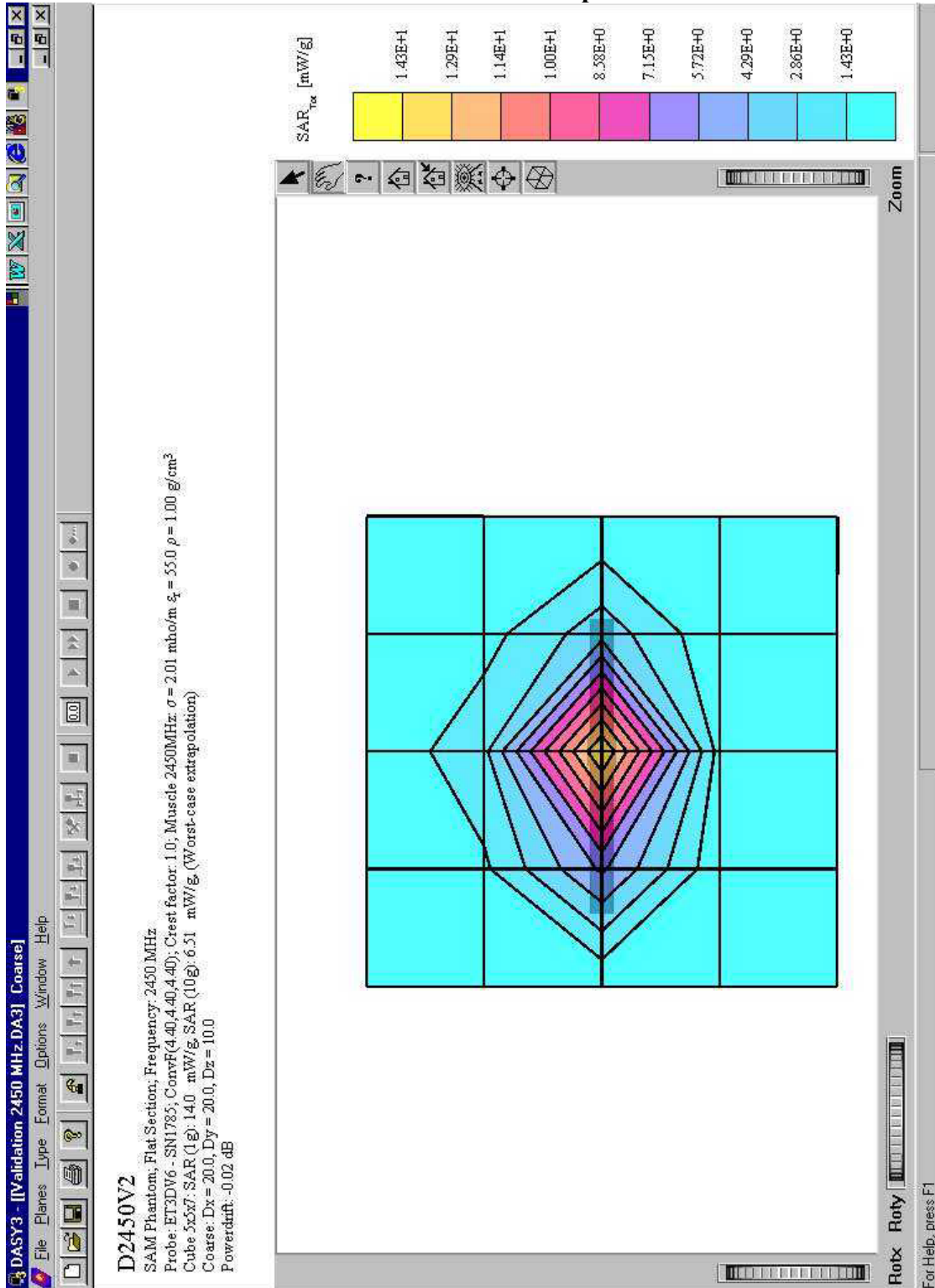Powerdrift: -0.13 dB
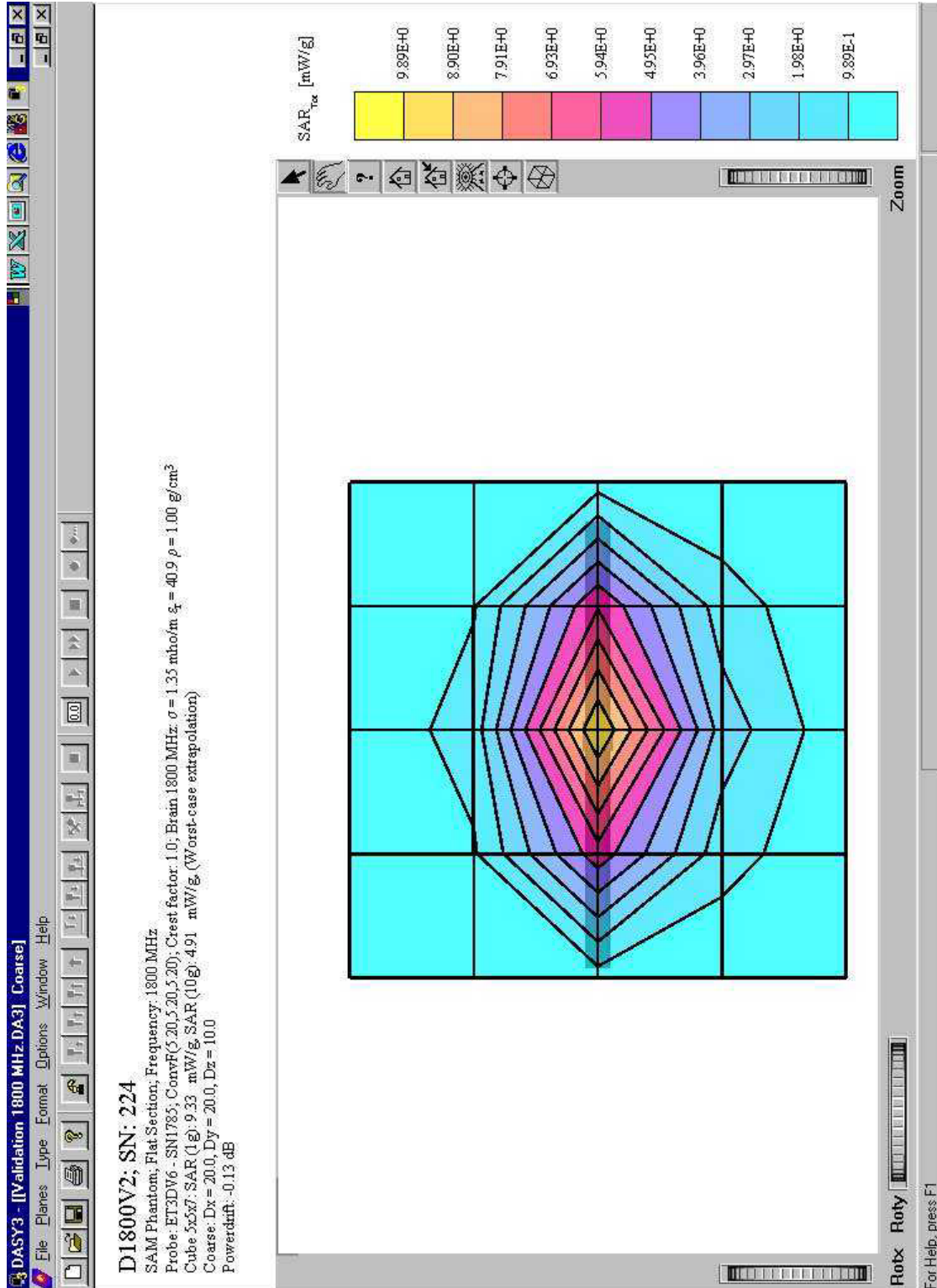
Symbol Technologies, Model No: MC9063
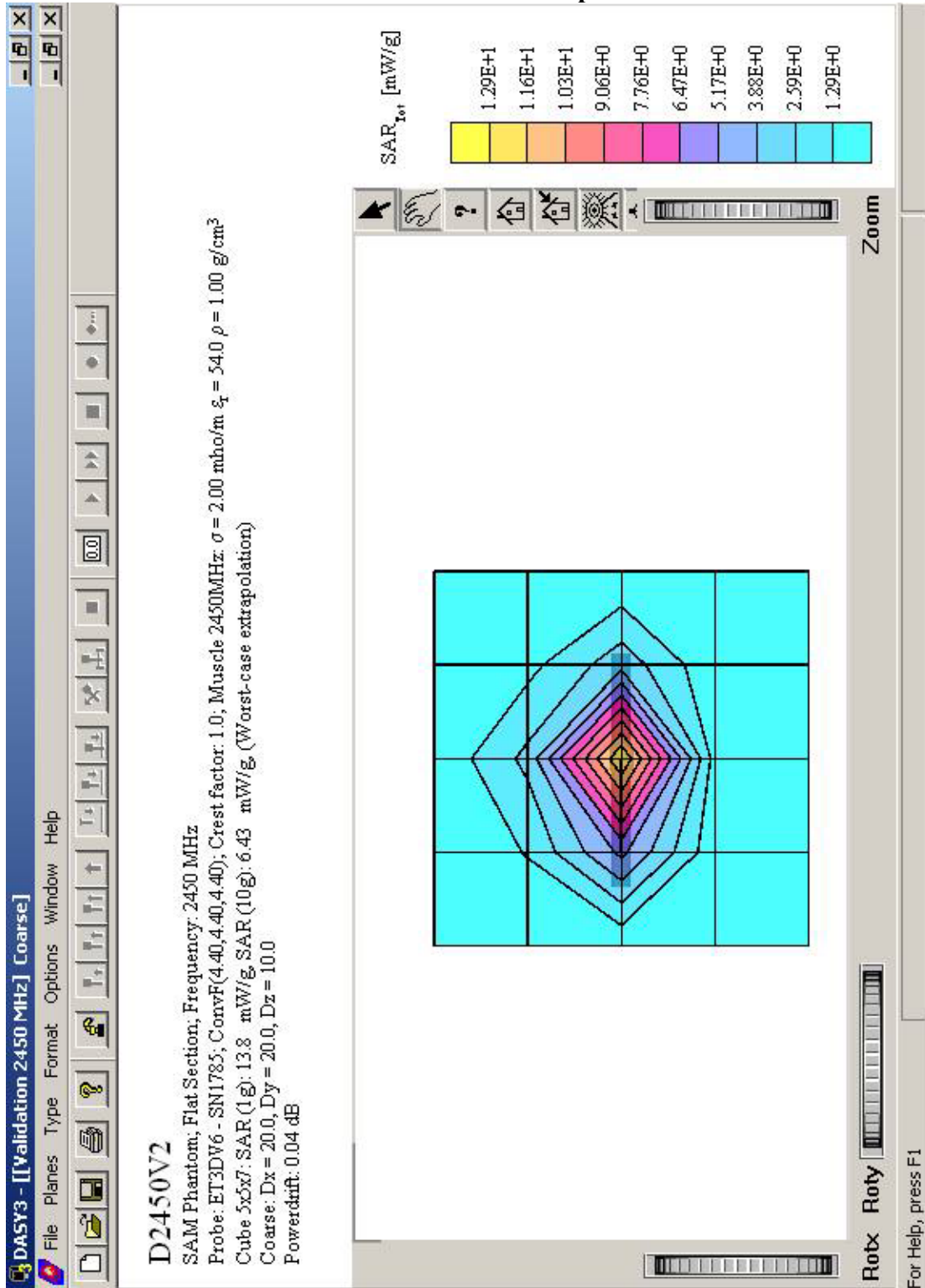
Exhibit 4: 1800 MHz Dipole Validation

Symbol Technologies, Model No: MC9063

Exhibit 5: 2450 MHz Dipole Validation

Symbol Technologies, Model No: MC9063
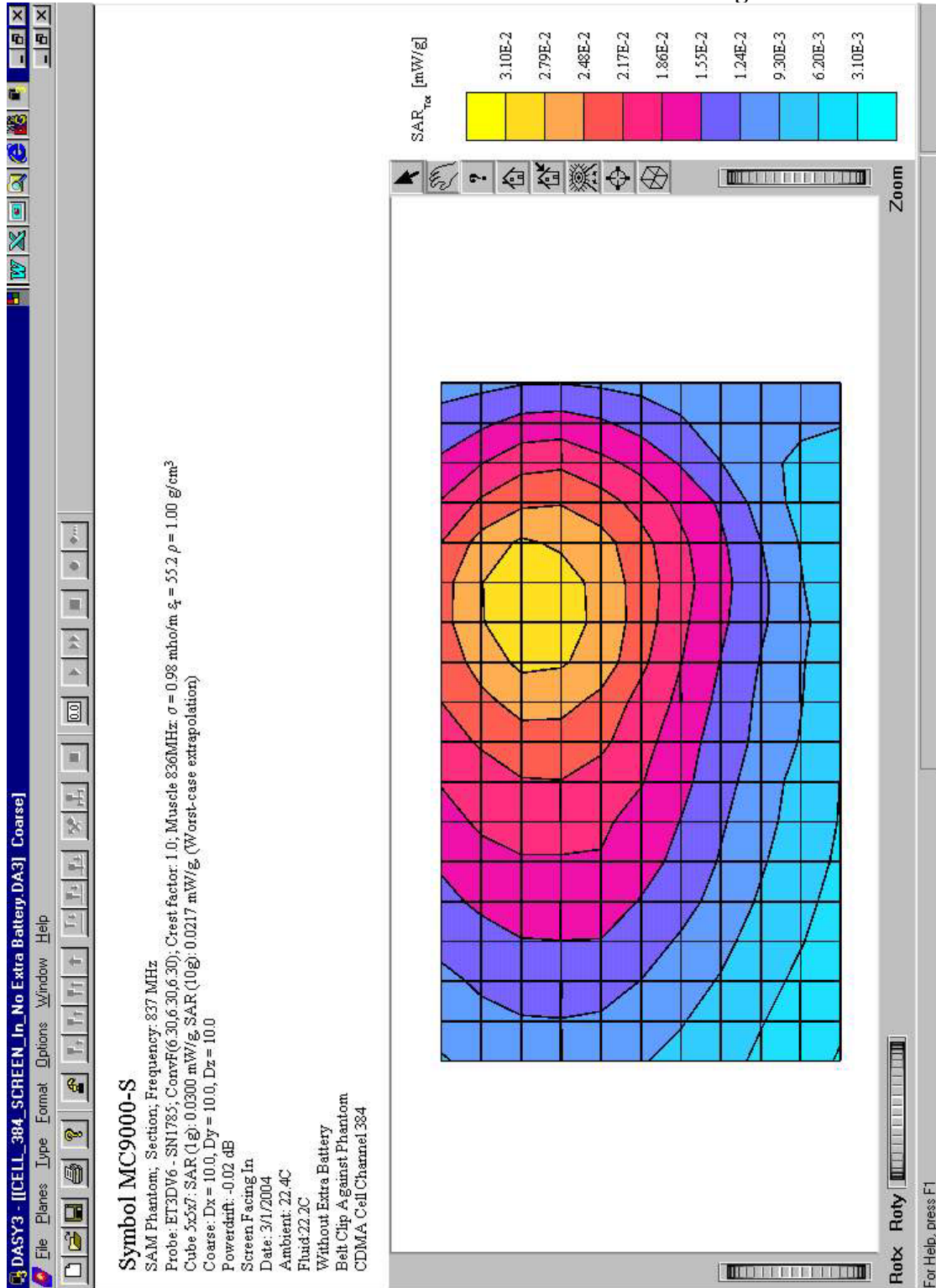
Exhibit 6: 2450 MHz Dipole Validation

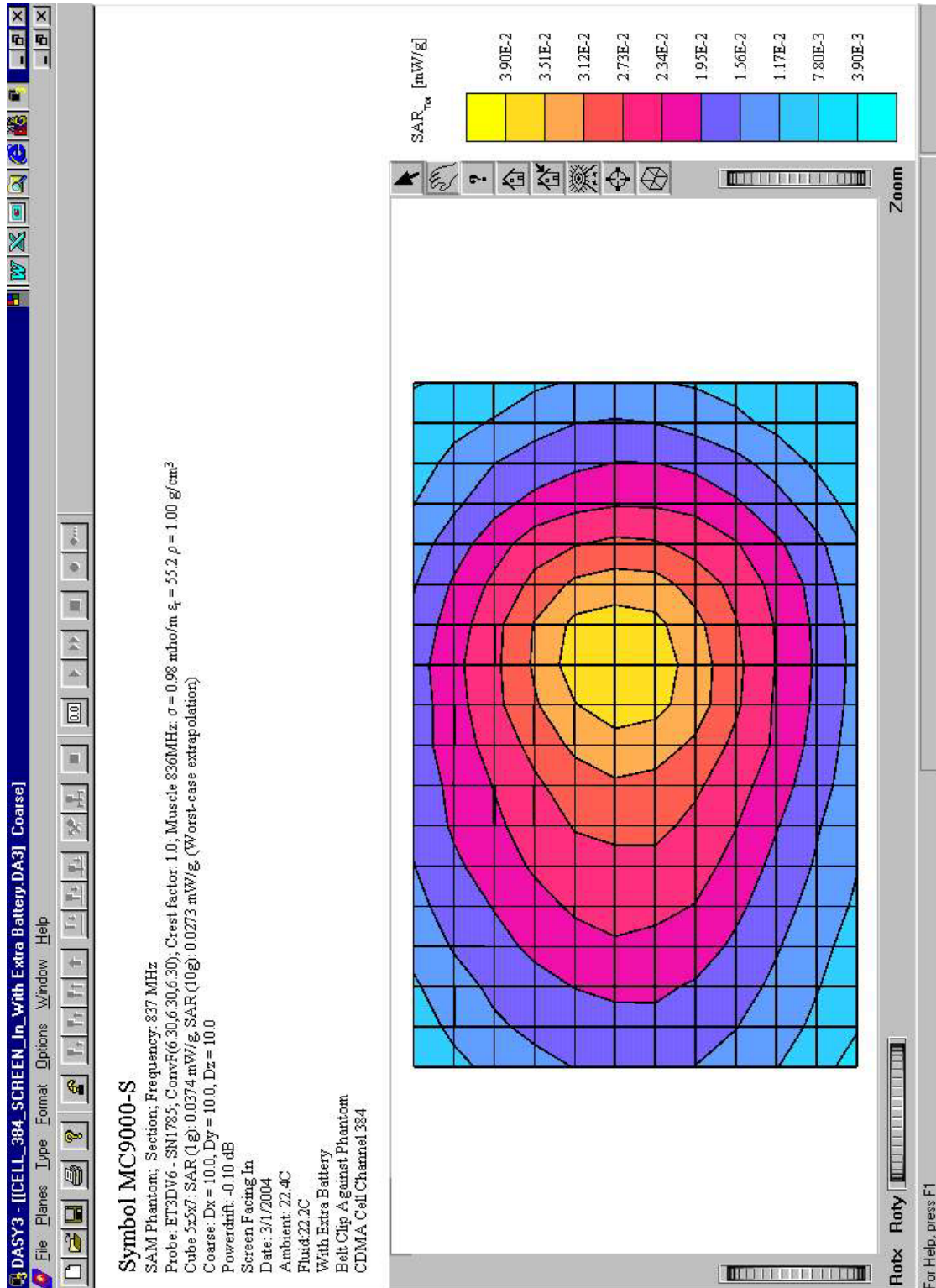Symbol Technologies, Model No: MC9063

SAR PLOTS FOR CDMA CELL AND PCS BANDS

Exhibit 7: CDMA Cell Channel 384 Screen Facing In

Symbol Technologies, Model No: MC9063

Exhibit 8: CDMA Cell Channel 384 Screen Facing In With Extra Battery

Symbol Technologies, Model No: MC9063

Exhibit 9: CDMA Cell Channel 384 Screen Facing Out
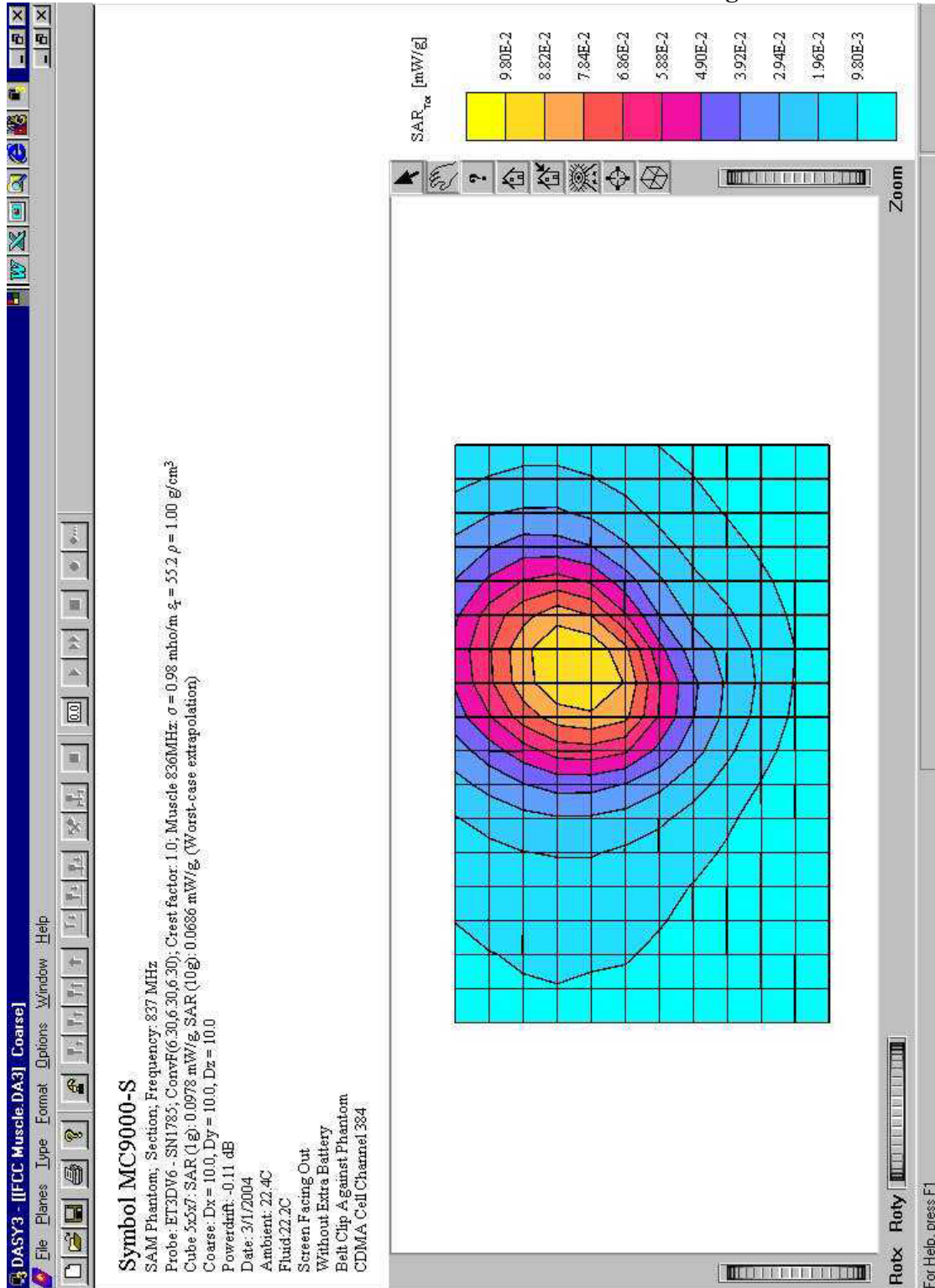
Symbol Technologies, Model No: MC9063

Exhibit 10: CDMA Cell Channel 384 Screen Facing Out With Extra Battery

Symbol MC9000-S

SAM Phantom; Section; Frequency: 837 MHz
Probe: ET3DV6 - SN1783; ConvF(6.30,6.30,6.30); Crest factor: 1.0; Muscle 836MHz: σ = 0.98 mho/m ε_r = 55.2 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 0.0925 mW/g, SAR (10g): 0.0658 mW/g (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Powerdrift: -0.16 dB
Date: 3/1/2004
Ambient: 22.4C
Fluid:22.2C
With Extra Battery
Belt Clip Against Phantom
CDMA Cell Channel 384
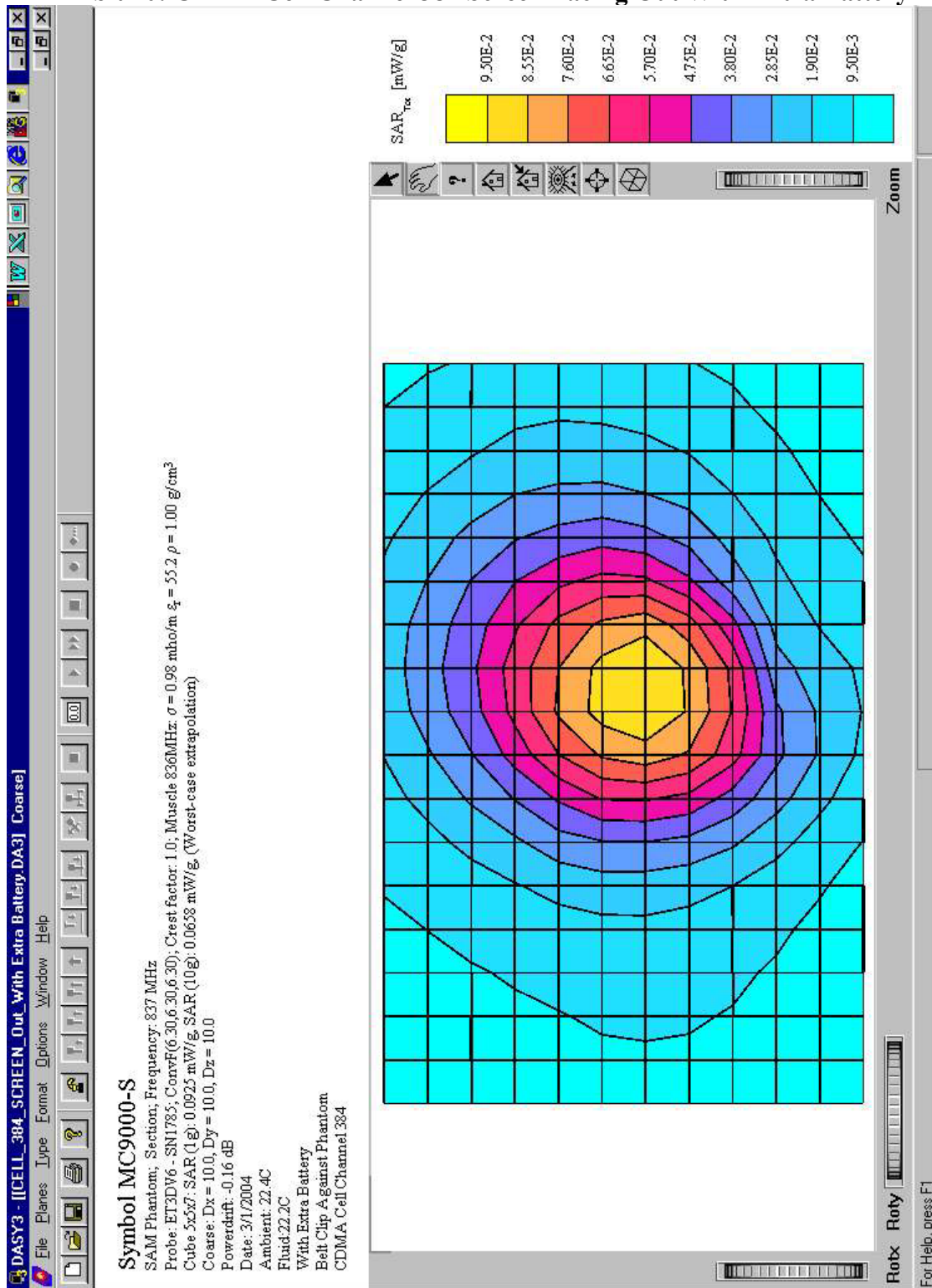
Symbol Technologies, Model No: MC9063

Exhibit 11: CDMA Cell Channel 600 Screen Facing In

Symbol MC9000-S
SAM Phantom; Section; Frequency: 1880 MHz
Probe: ET3DV6 - SN1785; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Muscle 1880 MHz: σ = 1.48 mho/m ε_r = 51.3 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 0.0045 mW/g, SAR (10g): 0.0023 mW/g (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Powerdrift: Measurement value below zero
Screen Facing In
Date: 3/2/2004
Ambient: 22.4C
Fluid:22.2C
Without Extra Battery
Belt Clip Against Phantom
CDMA PCS Channel 600

Symbol Technologies, Model No: MC9063

Exhibit 12: CDMA Cell Channel 600 Screen Facing In With Extra Battery

Symbol MC9000-S

SAM Phantom; Section; Frequency 1880 MHz

Probe: ET3DV6 - SN1785; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Muscle 1880 MHz: $\sigma = 1.48$ mho/m $\xi_r = 51.3$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.0057 mW/g, SAR (10g): 0.0029 mW/g (Worst-case extrapolation)

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

Powerdrift: Reference value below zero

Screen Facing In

Date: 3/1/2004

Ambient: 22.4C

Fluid:22.2C

Extra Battery

Belt Clip Against Phantom

CDMA PCS Channel 600

SAR$_{Tot}$ [mW/g]

	7.00E-3
	6.30E-3
	5.60E-3
	4.90E-3
	4.20E-3
	3.30E-3
	2.80E-3
	2.10E-3
	1.40E-3
	7.00E-4

Symbol Technologies, Model No: MC9063

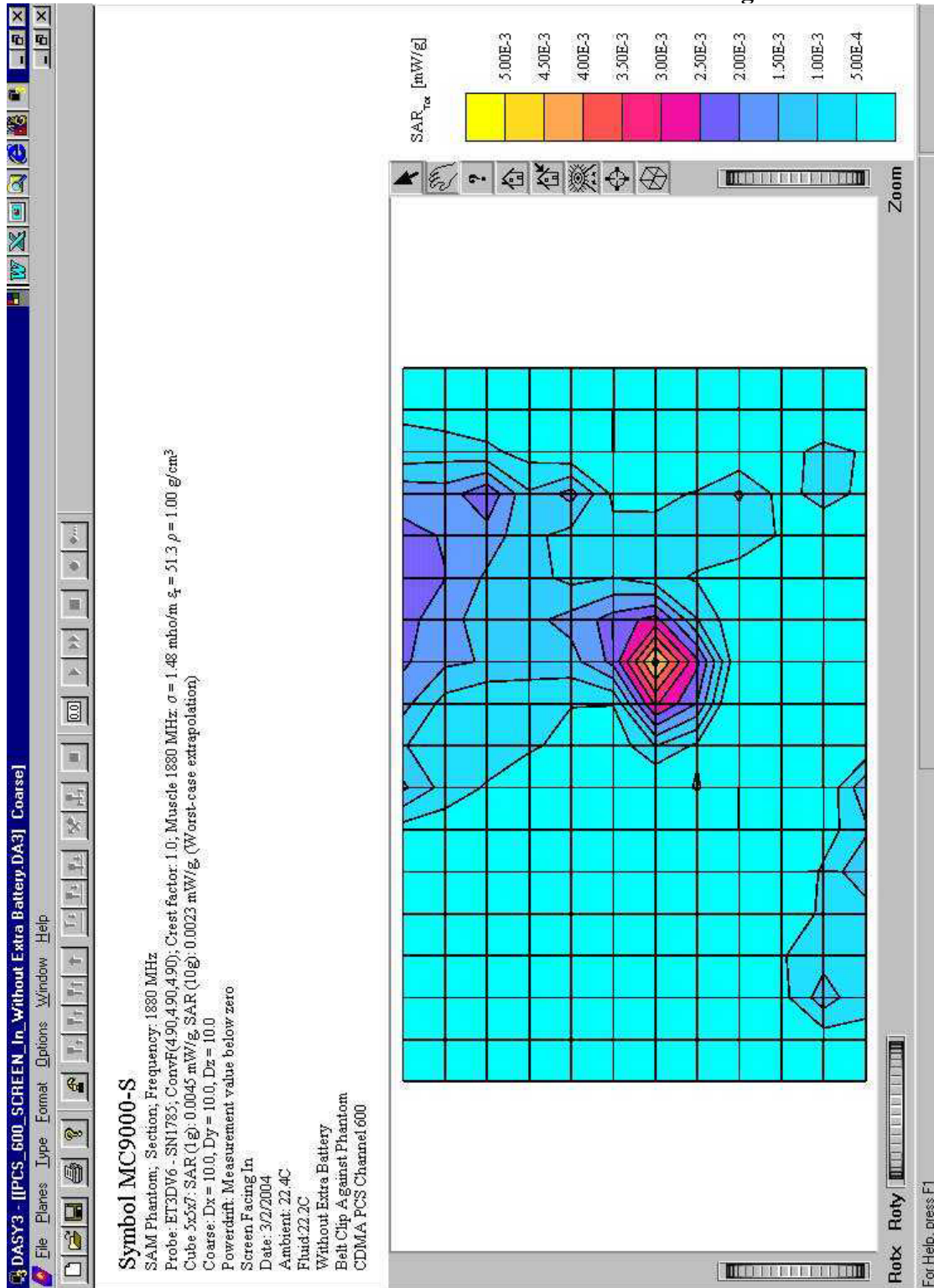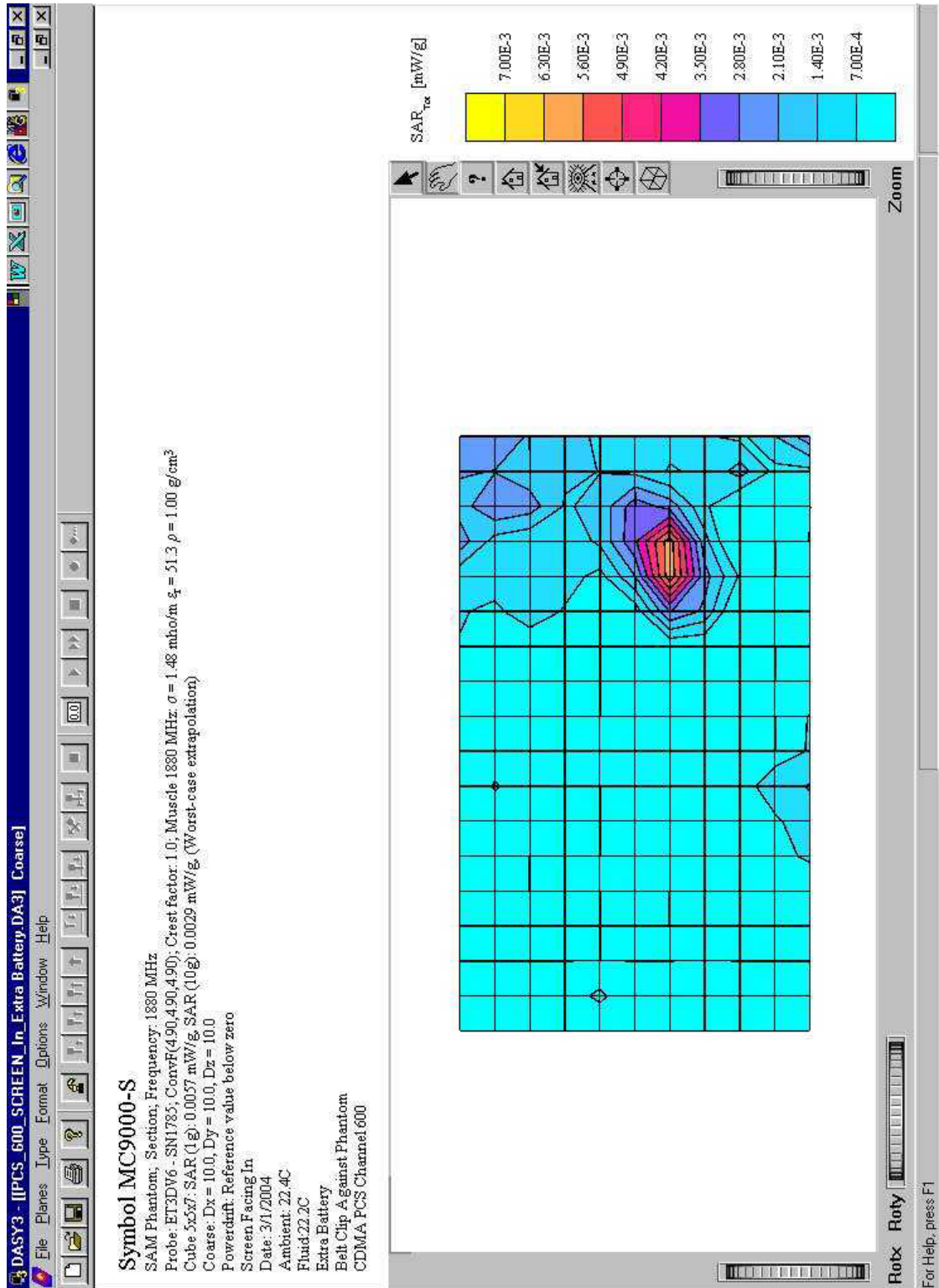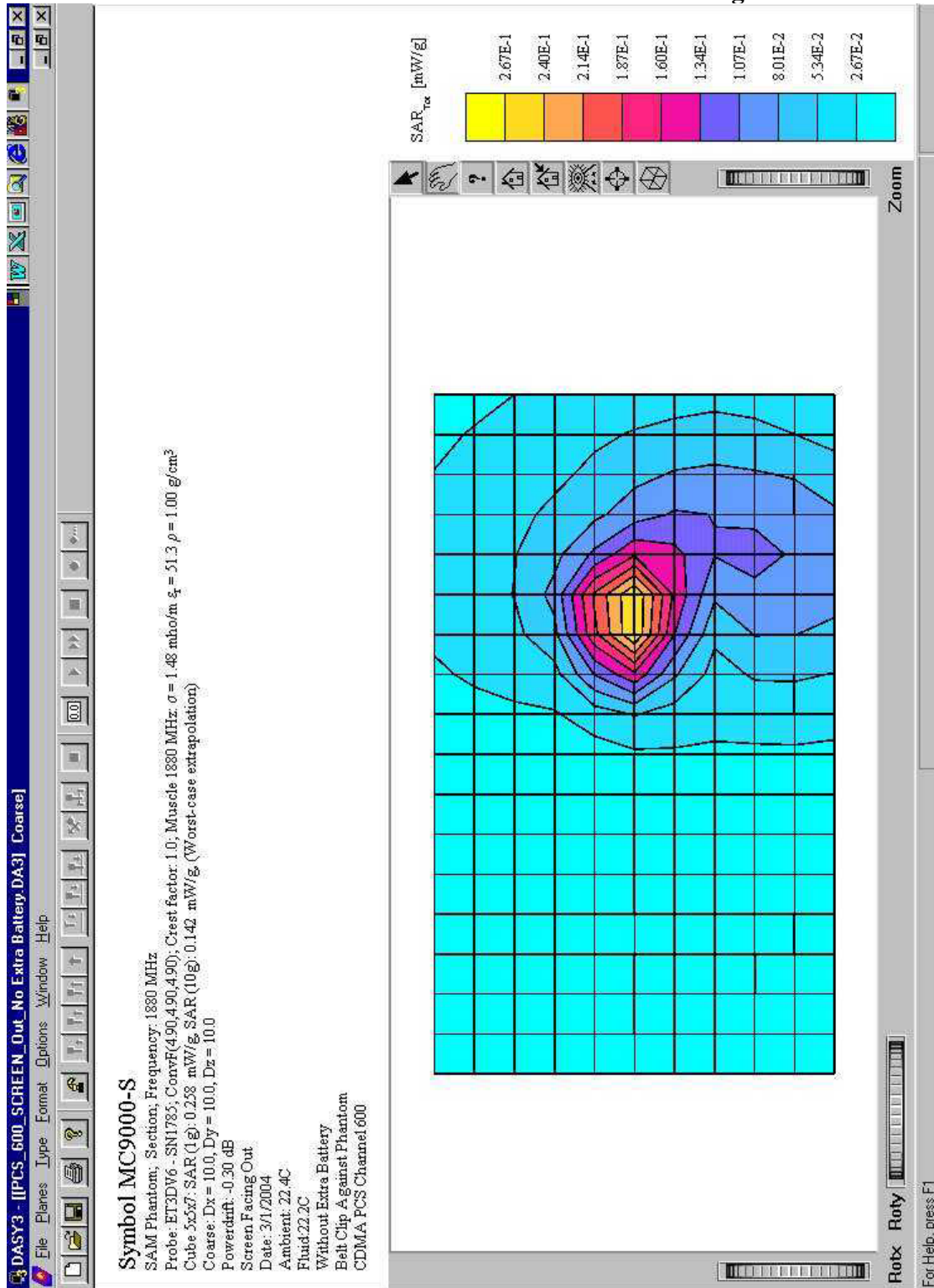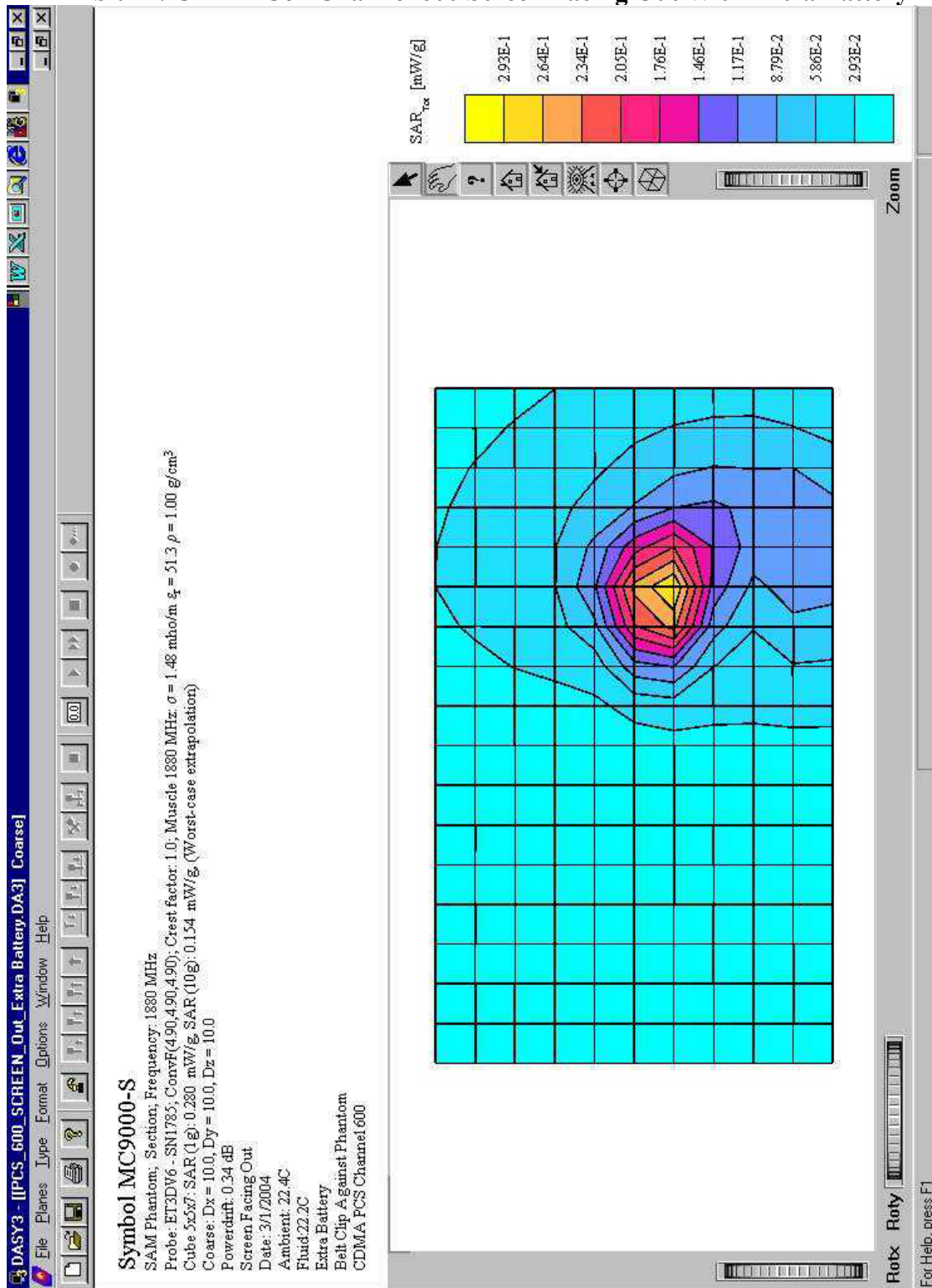**Exhibit 13: CDMA Cell Channel 600 Screen Facing Out**

Symbol Technologies, Model No: MC9063

Exhibit 14: CDMA Cell Channel 600 Screen Facing Out With Extra Battery

Symbol Technologies, Model No: MC9063

SAR PLOTS FOR RLAN BANDS

Exhibit 15: RLAN Channel 6 Screen Facing In

Symbol Technologies, Model No: MC9063

Exhibit 16: RLAN Channel 6 Screen Facing In With Extra Battery

Symbol MC9000-S
SAM Phantom; Section; Frequency: 2437 MHz
Probe: ET3DV6 - SN1785; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Muscle 2450MHz: σ = 2.01 mho/m ε_r = 55.0 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 0.0135 mW/g, SAR (10g): 0.0076 mW/g (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Powerdrift: -0.70 dB
Screen Facing In
Date: 3/2/2004
Ambient: 22.4C
Fluid:22.2C
Extra Battery
Belt Clip Against Phantom
RLAN Channel 6 (2437 MHz)

Symbol Technologies, Model No: MC9063

Exhibit 17: RLAN Channel 6 Screen Facing Out

Symbol Technologies, Model No: MC9063

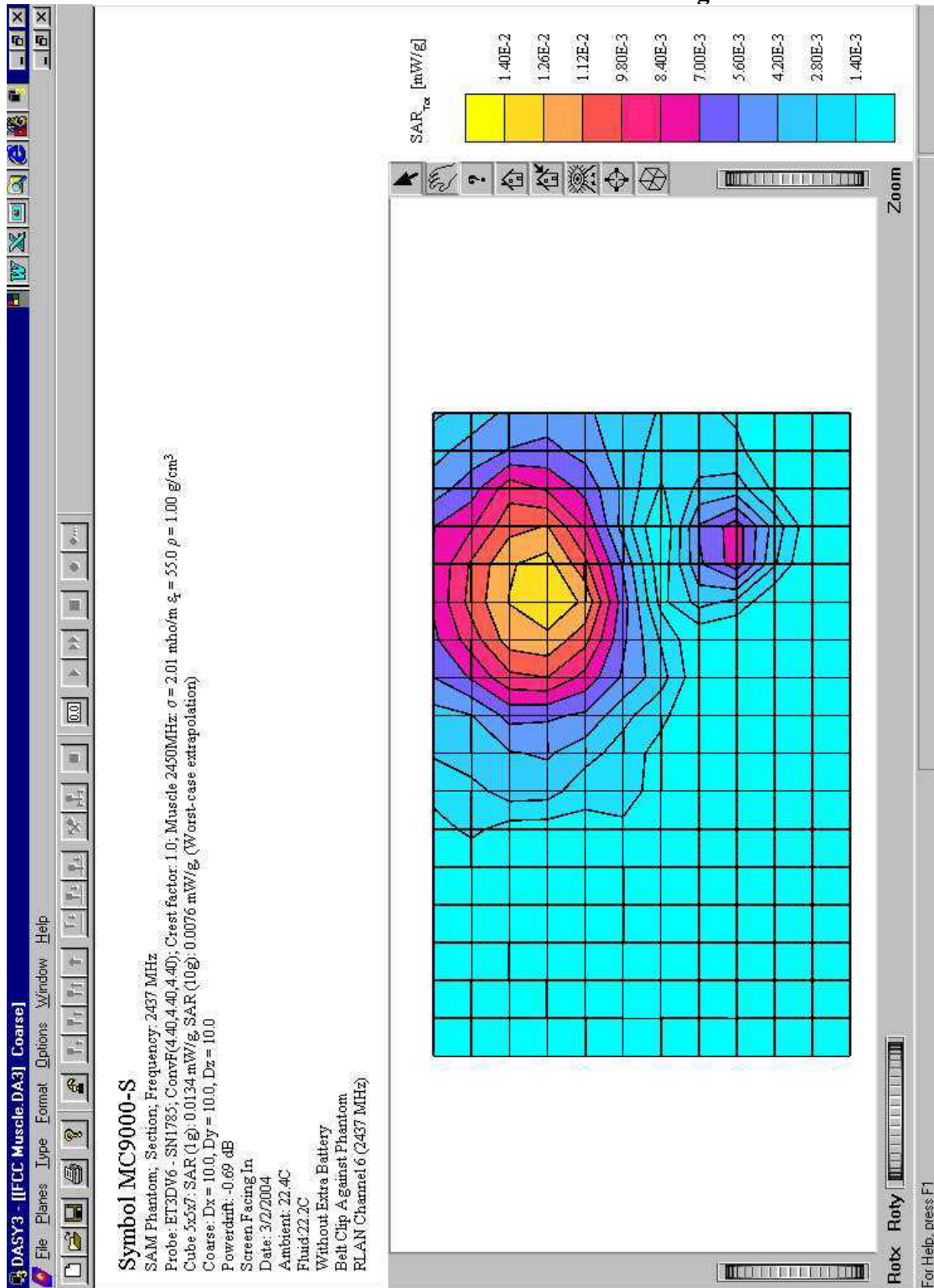**Exhibit 18: RLAN Channel 6 Screen Facing Out With Extra Battery**
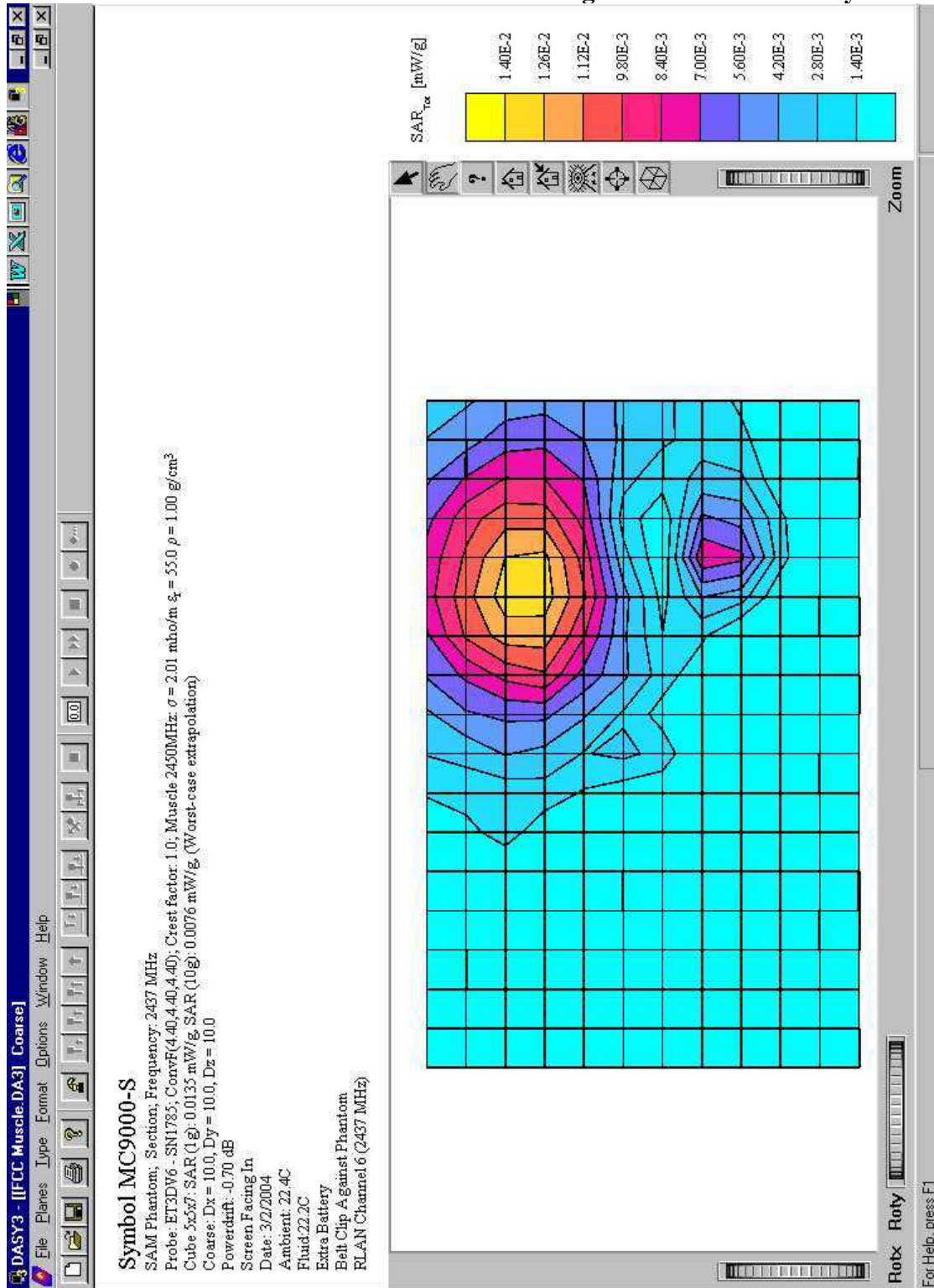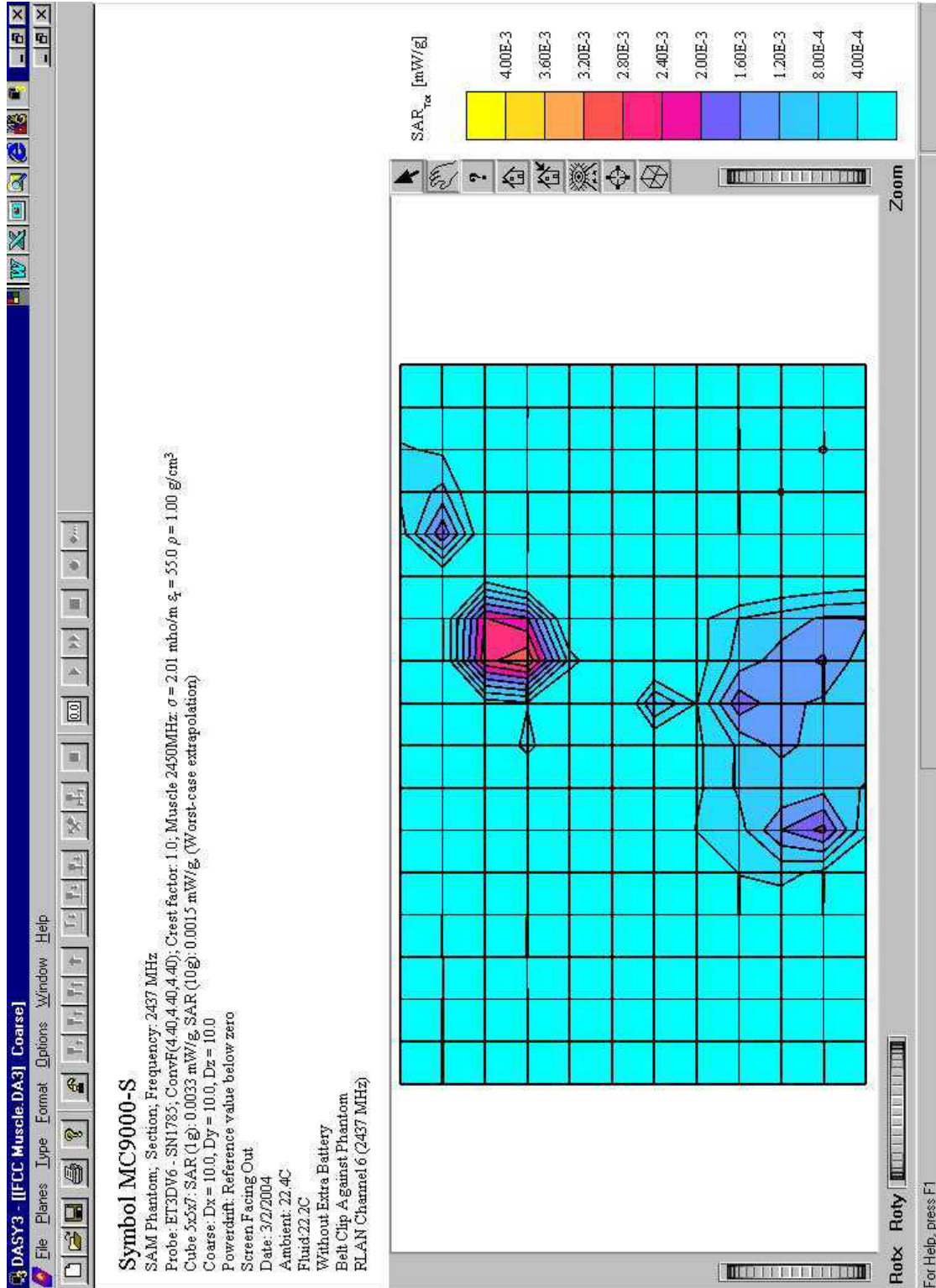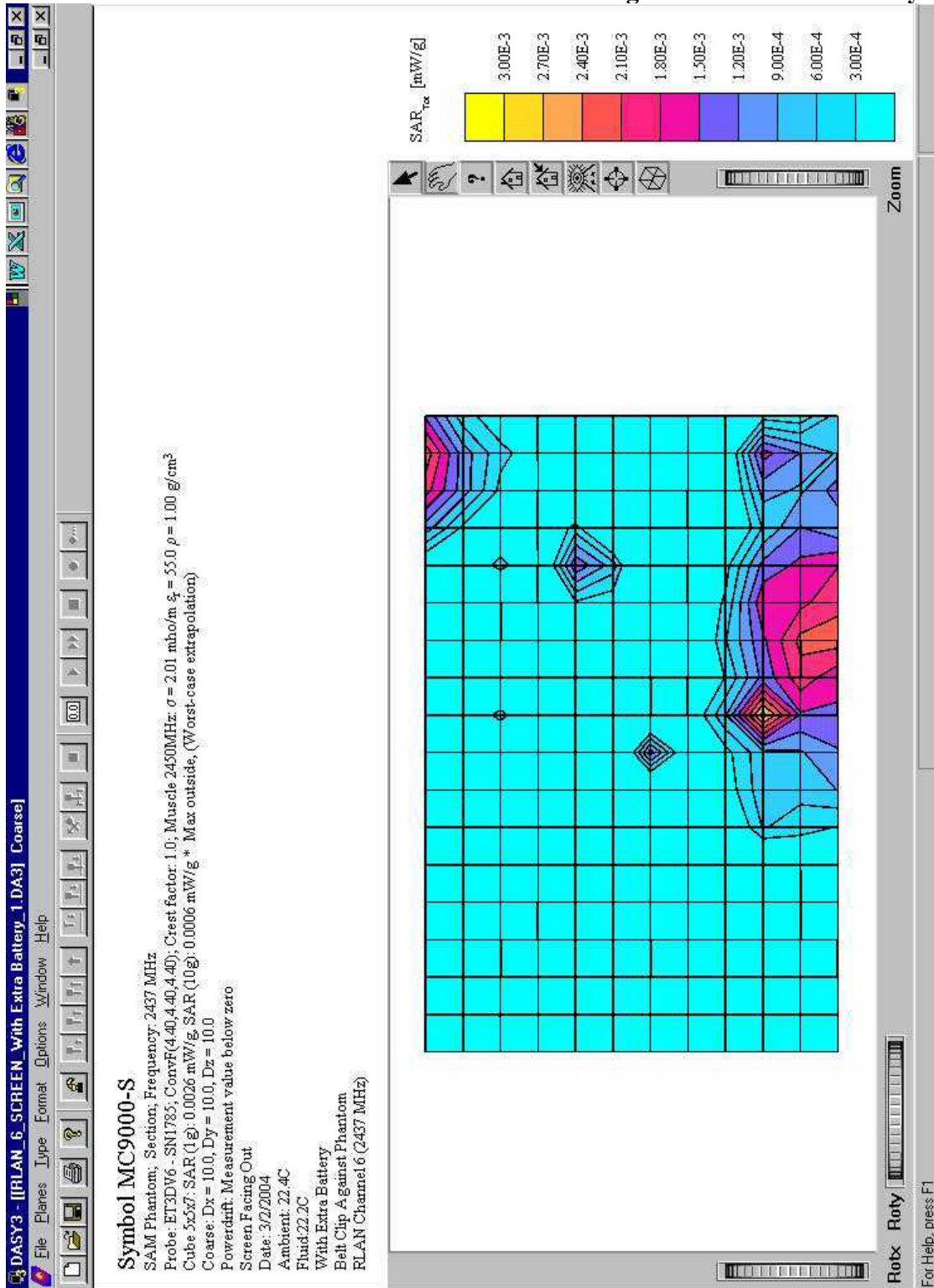
Symbol Technologies, Model No: MC9063

SAR Plots for Simultaneous Transmitter Operation
Exhibit 19: Cell Channel 384 and RLAN Measuring Cell

Symbol MC9063
SAM Phantom; Flat Section; Frequency: 837 MHz
Probe: ET3DV6 - SN1785; ConvF(6.30,6.30,6.30); Crest factor: 1.0; Muscle 836MHz: σ = 0.98 mho/m ε_r = 55.2 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 0.106 mW/g SAR (10g): 0.0746 mW/g (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Powerdrift: -0.16 dB
Date: 5/5/2004; Ambient Temp: 22.1; Fluid Temp: 21.8
Screen Facing Out
CDMA Cell Tx Channel: 384
RLAN Tx Channel 6
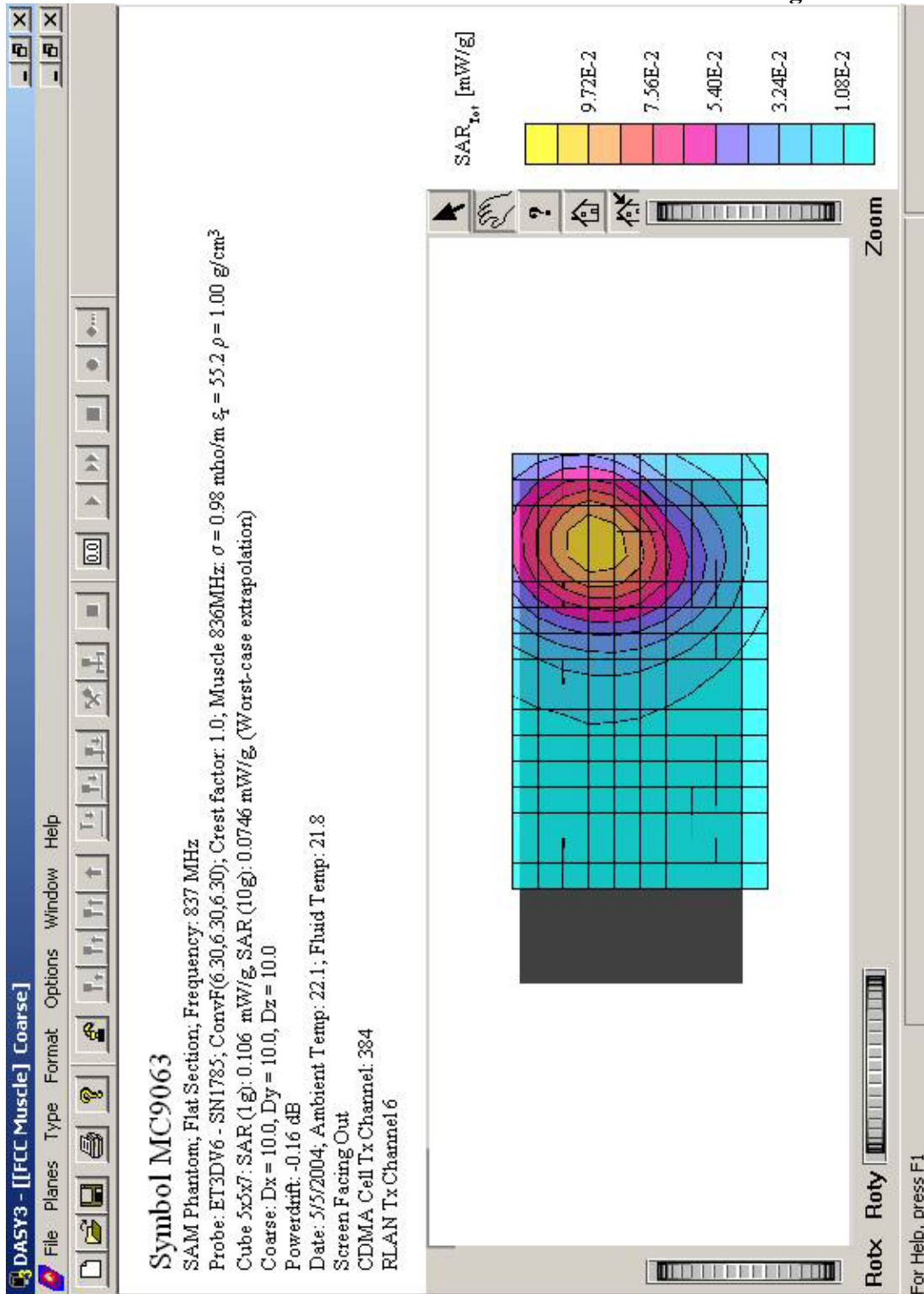
Symbol Technologies, Model No: MC9063

Exhibit 20: PCS Channel 600 and RLAN Measuring PCS

Symbol MC9063
SAM Phantom, Flat Section; Frequency: 1880 MHz
Probe: ET3DV6 - SN1785; ConvF(4.90,4.90,4.90); Crest factor: 1.0; Muscle 1800 MHz: σ = 1.46 mho/m ε_r = 54.9 ρ = 1.00 g/cm³
Cube 5x5x7: SAR (1g): 0.342 mW/g SAR (10g): 0.191 mW/g (Worst-case extrapolation)
Coarse: Dx = 10.0, Dy = 10.0, Dz = 10.0
Powerdrift: -0.06 dB
Date: 5/5/2004; Ambient Temp: 22.1; Fluid Temp: 21.8
Screen Facing Out
CDMA PCS Tx Channel: 600
RLAN Tx Channel 6

SAR$_{Tot}$ [mW/g]

3.13E-1
2.44E-1
1.74E-1
1.04E-1
3.48E-2

Symbol Technologies, Model No: MC9063

Exhibit 21: Cell Channel 384 and RLAN Measuring RLAN

Symbol MC9063

SAM Phantom; Flat Section; Frequency: 2437 MHz

Probe: ET3DV6 - SN1785; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Muscle 2450MHz: σ = 2.00 mho/m ε_r = 54.0 ρ = 1.00 g/cm^3

Cube 5x5x7: SAR (1g): 0.299 mW/g SAR (10g): 0.246 mW/g * Max outside, (Worst-case extrapolation)

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

Powerdrift: 0.12 dB

Date: 5/4/2004; Ambient Temp: 22.1; Fluid Temp: 21.8

Screen Facing Out

CDMA Cell Tx Channel: 384

RLAN Channel 6

SAR$_{Tot}$ [mW/g]

2.71E-1
2.11E-1
1.50E-1
9.03E-2
3.01E-2

Symbol Technologies, Model No: MC9063

Exhibit 22: PCS Channel 600 and RLAN Measuring RLAN

Symbol MC9063

SAM Phantom; Flat Section; Frequency: 2437 MHz

Probe: ET3DV6 - SN1785; ConvF(4.40,4.40,4.40); Crest factor: 1.0; Muscle 2450MHz: $\sigma = 2.00$ mho/m $\varepsilon_r = 54.0$ $\rho = 1.00$ g/cm³

Cube 5x5x7: SAR (1g): 0.438 mW/g SAR (10g): 0.254 mW/g (Worst-case extrapolation)

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

Powerdrift: 0.10 dB

Date: 5/4/2004; Ambient Temp: 22.1; Fluid Temp: 21.8

Screen Facing Out

CDMA PCS Tx Channel: 600

RLAN Channel 6

SAR_{Tot} [mW/g]

3.81E-1
2.96E-1
2.11E-1
1.27E-1
4.23E-2