

APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

Mode 1



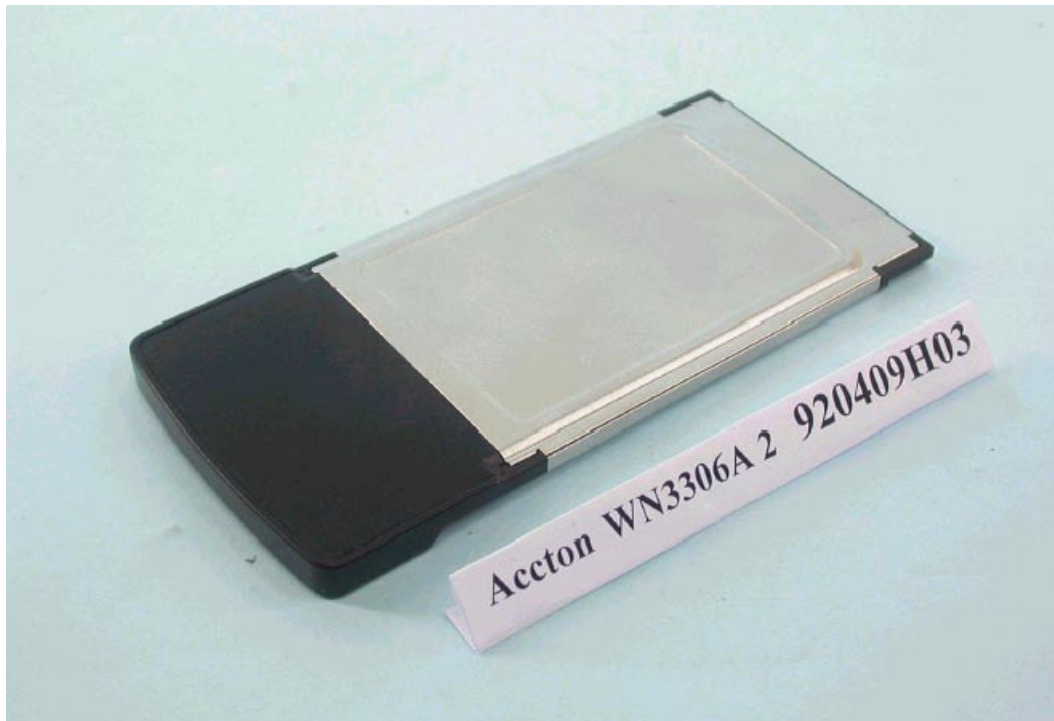
Mode 2



Mode 3



EUT Photo



A2: TEST DATA

Date/Time: 04/17/03 15:23:06

Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 1 channel 01

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.9$ mho/m, $\epsilon_r = 52.5$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 11mm(The bottom of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm

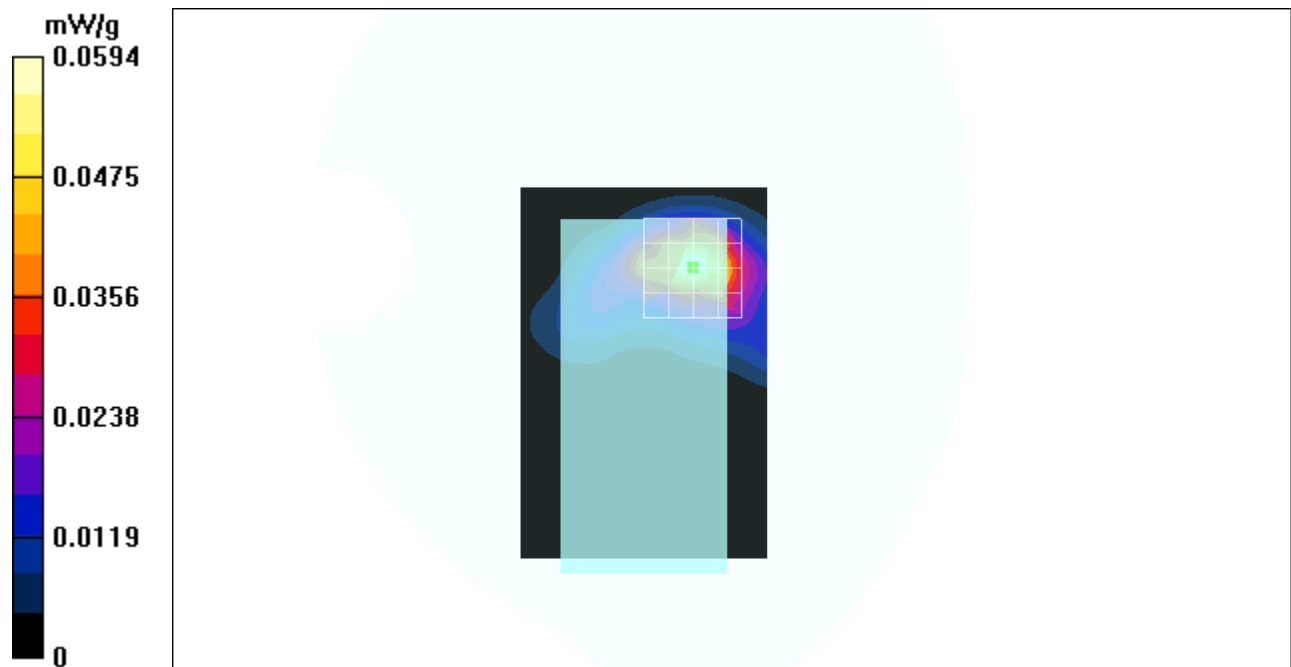
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.35 V/m

Peak SAR = 0.0684 W/kg

SAR(1 g) = 0.0443 mW/g; SAR(10 g) = 0.0211 mW/g

Power Drift = -0.4 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 1 channel 06

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.92$ mho/m, $\epsilon_r = 52.43$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 11mm(The bottom of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm

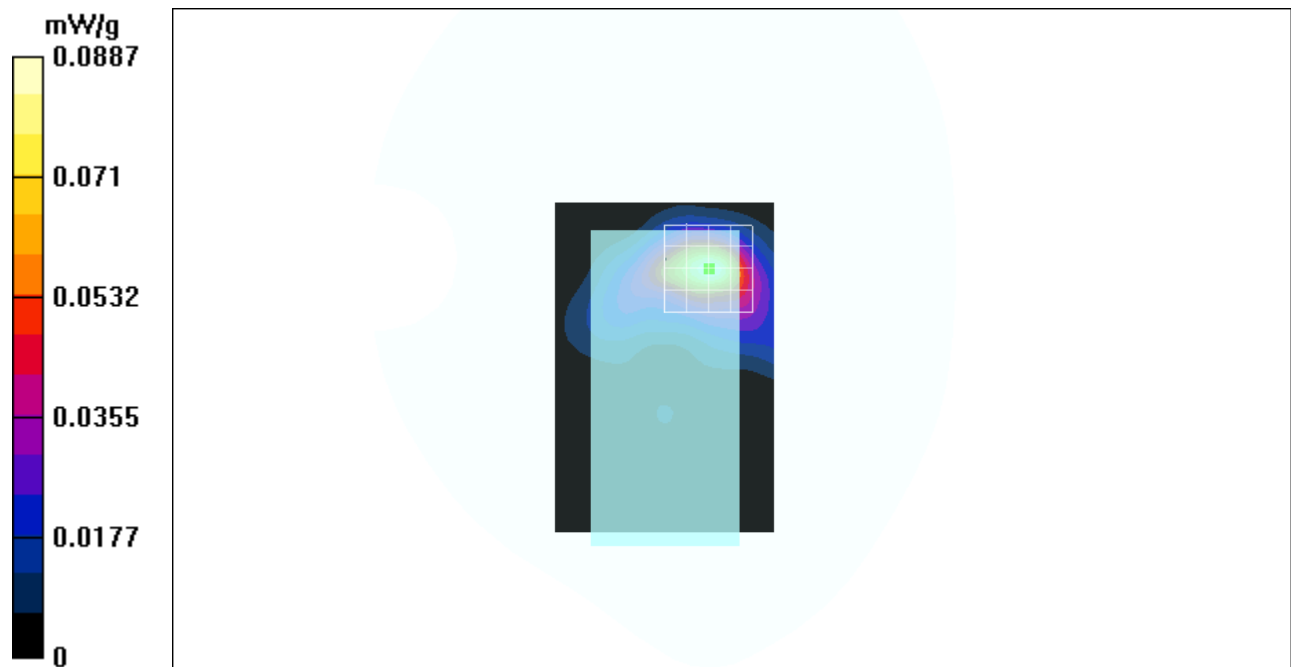
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.44 V/m

Peak SAR = 0.106 W/kg

SAR(1 g) = 0.0658 mW/g; SAR(10 g) = 0.0328 mW/g

Power Drift = -0.2 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 1 channel 11

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99$ mho/m, $\epsilon_r = 52.35$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 11mm(The bottom of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm

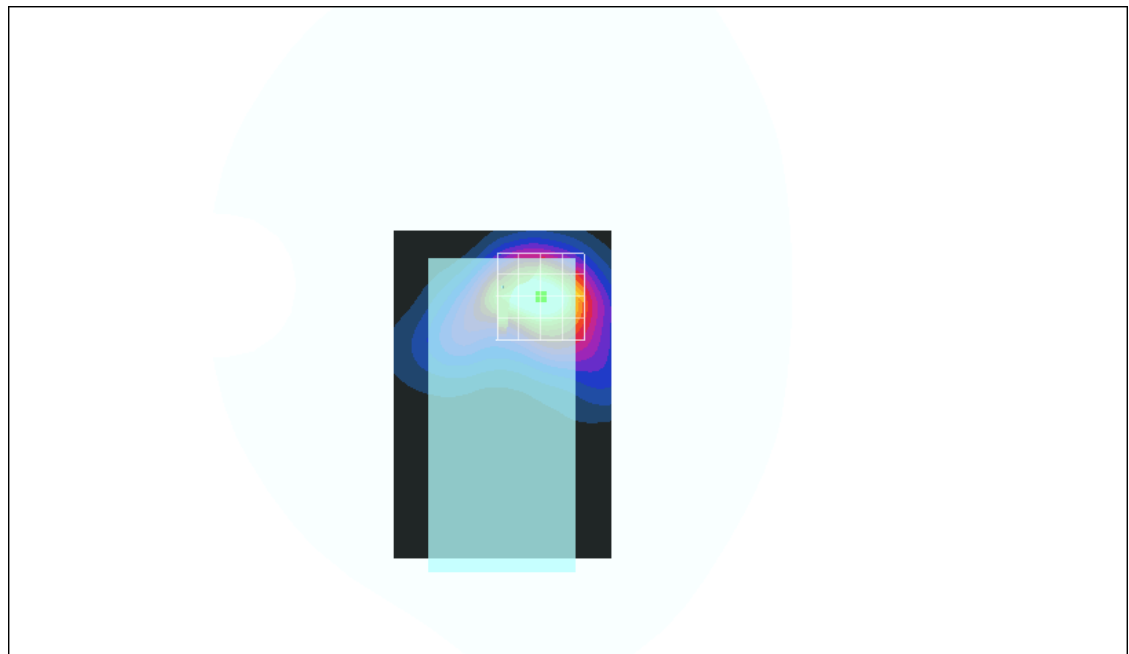
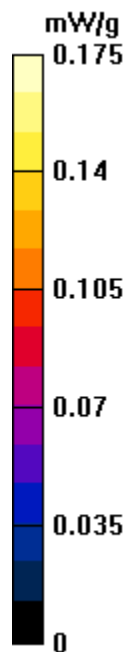
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.07 V/m

Peak SAR = 0.0894 W/kg

SAR(1 g) = 0.0614 mW/g; SAR(10 g) = 0.0303 mW/g

Power Drift = -0.3 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 2 channel 01

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.9$ mho/m, $\epsilon_r = 52.5$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 15mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x4x1): Measurement grid: dx=20mm, dy=20mm

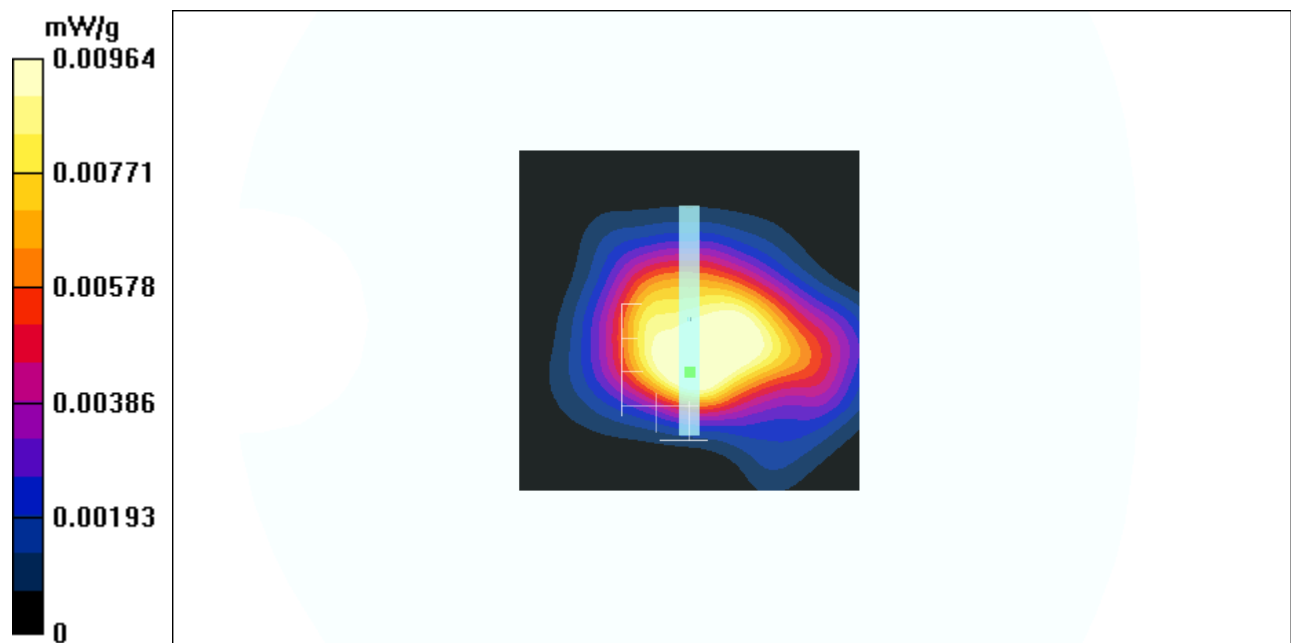
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.67 V/m

Peak SAR = 0.0201 W/kg

SAR(1 g) = 0.0123 mW/g; SAR(10 g) = 0.00694 mW/g

Power Drift = -0.13 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 2 channel 06

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.92$ mho/m, $\epsilon_r = 52.43$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 15mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x4x1): Measurement grid: dx=20mm, dy=20mm

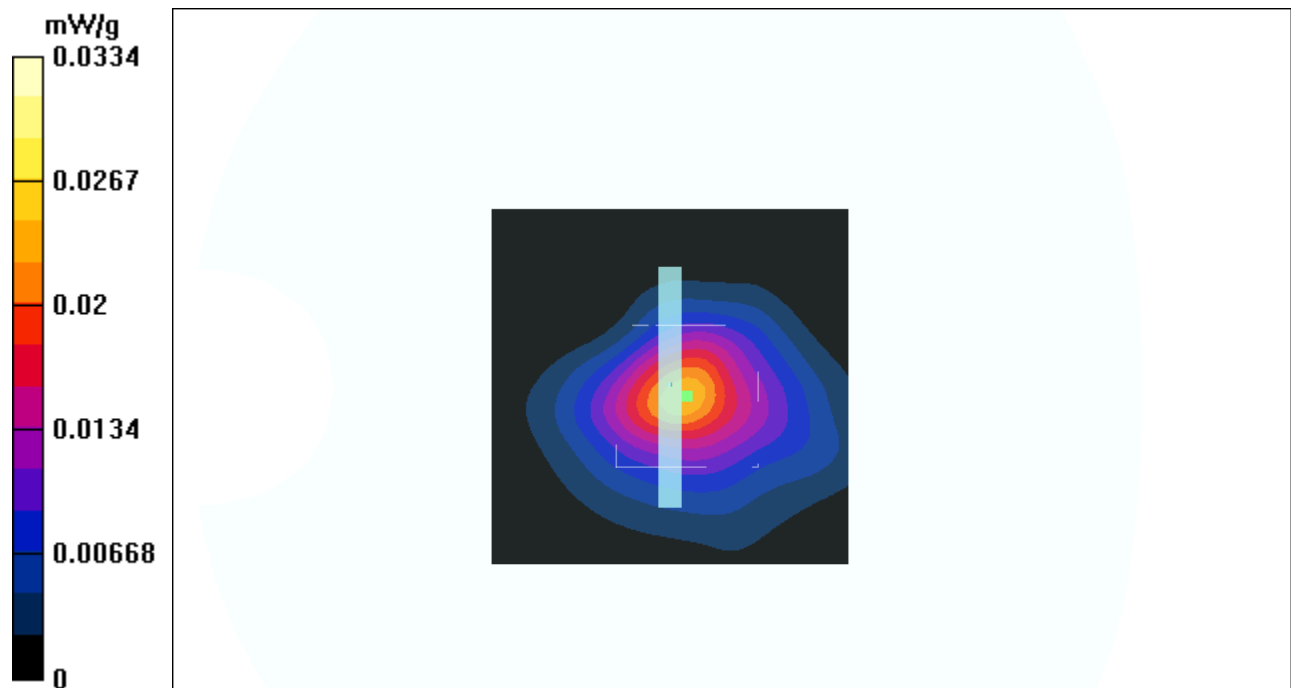
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3 V/m

Peak SAR = 0.0344 W/kg

SAR(1 g) = 0.0146 mW/g; SAR(10 g) = 0.00714 mW/g

Power Drift = -0.3 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 2 channel 11

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99$ mho/m, $\epsilon_r = 52.35$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 15mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x4x1): Measurement grid: dx=20mm, dy=20mm

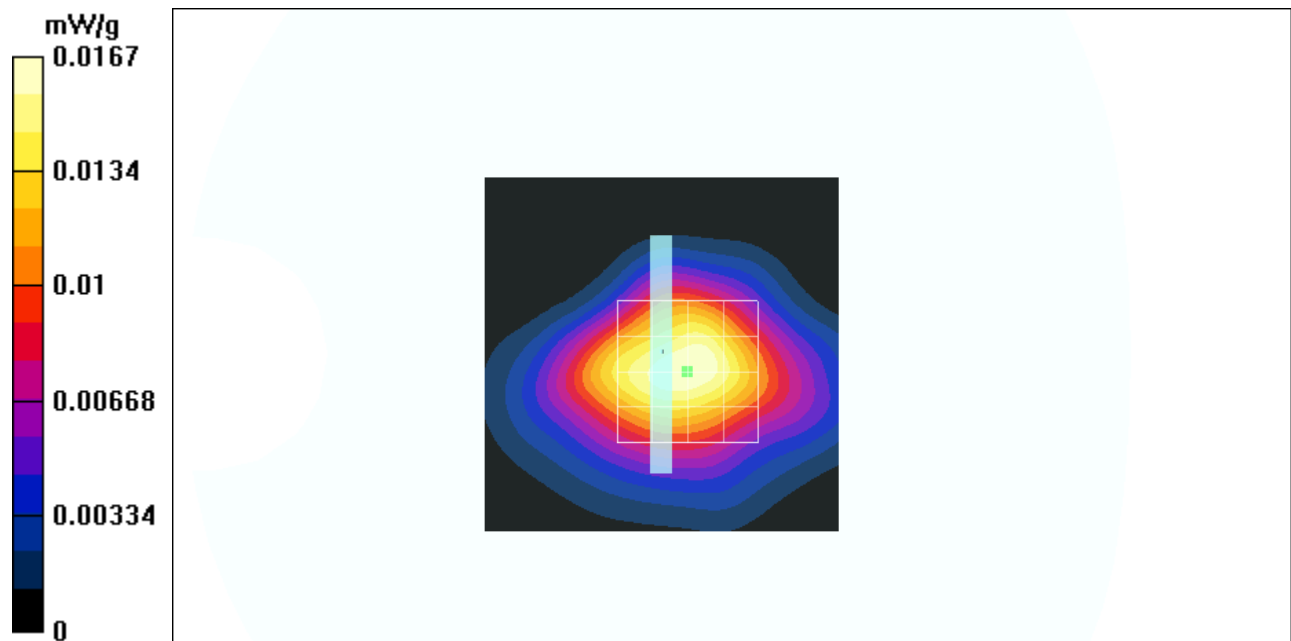
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.95 V/m

Peak SAR = 0.0211 W/kg

SAR(1 g) = 0.0143 mW/g; SAR(10 g) = 0.00749 mW/g

Power Drift = -0.09 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 3 channel 01

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.9$ mho/m, $\epsilon_r = 52.5$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x4x1): Measurement grid: dx=20mm, dy=20mm

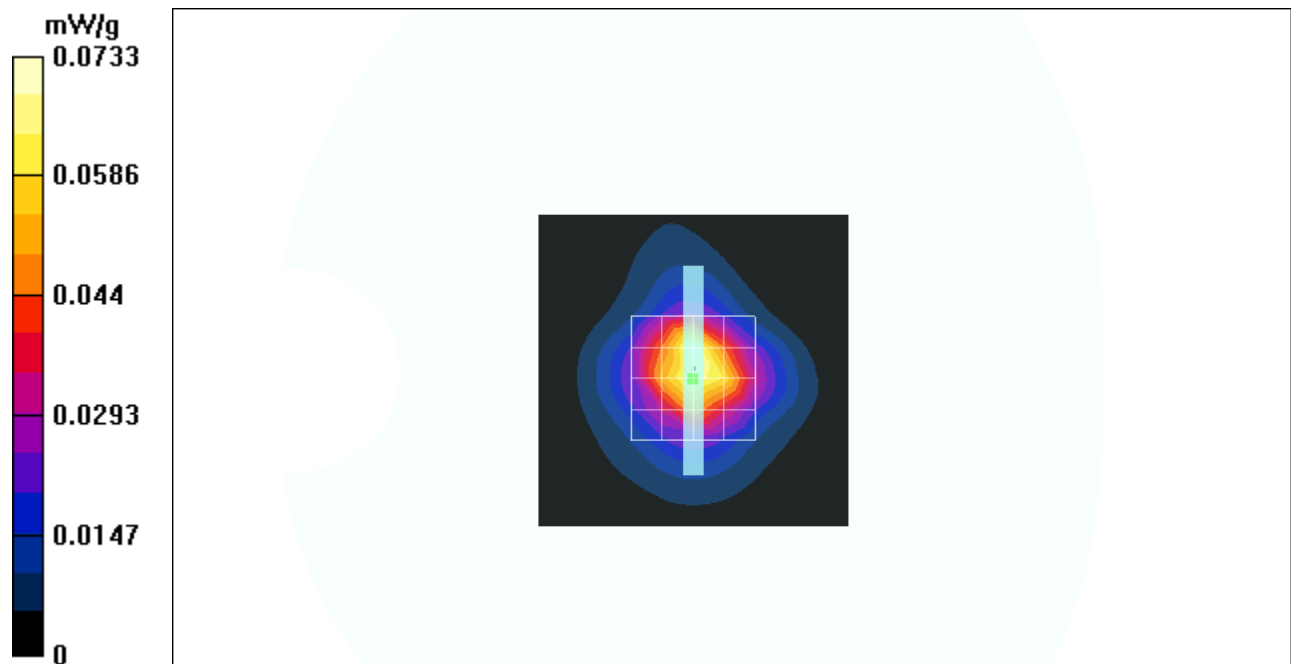
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.74 V/m

Peak SAR = 0.112 W/kg

SAR(1 g) = 0.0629 mW/g; SAR(10 g) = 0.0287 mW/g

Power Drift = -0.28 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 3 channel 06

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.92$ mho/m, $\epsilon_r = 52.43$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x4x1): Measurement grid: dx=20mm, dy=20mm

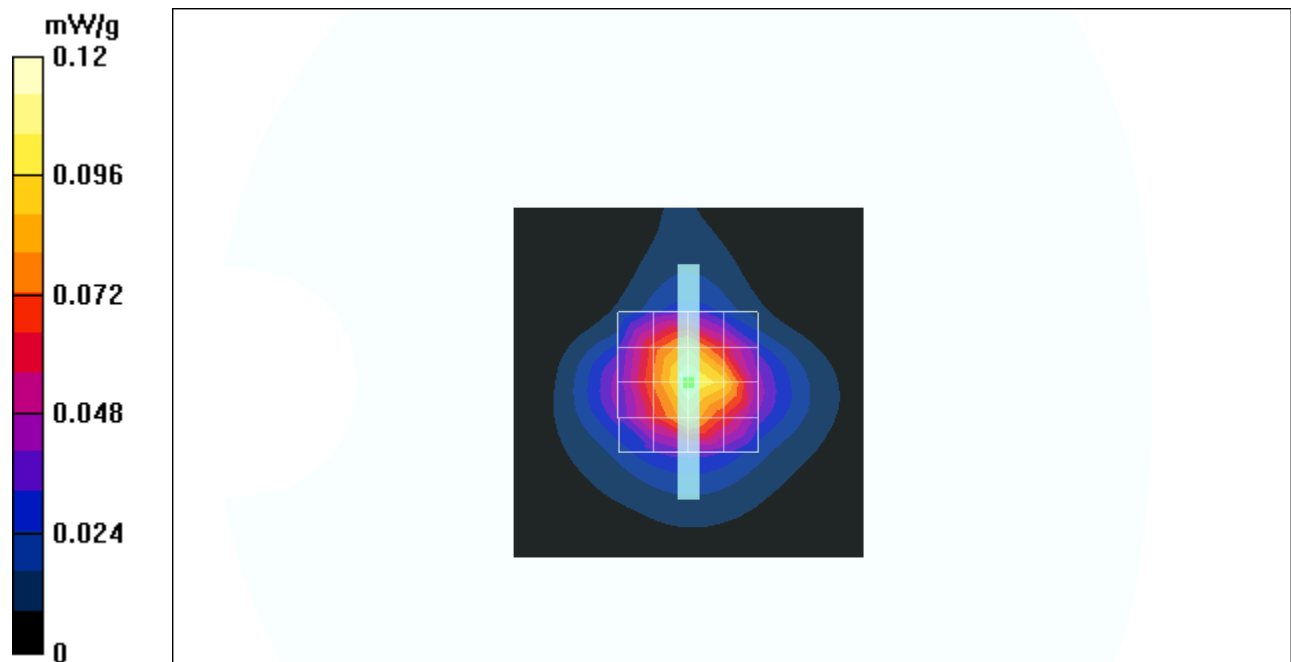
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.1 V/m

Peak SAR = 0.158 W/kg

SAR(1 g) = 0.0947 mW/g; SAR(10 g) = 0.0449 mW/g

Power Drift = -0.3 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 3 channel 11

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99$ mho/m, $\epsilon_r = 52.35$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna ; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Area Scan (4x4x1): Measurement grid: dx=20mm, dy=20mm

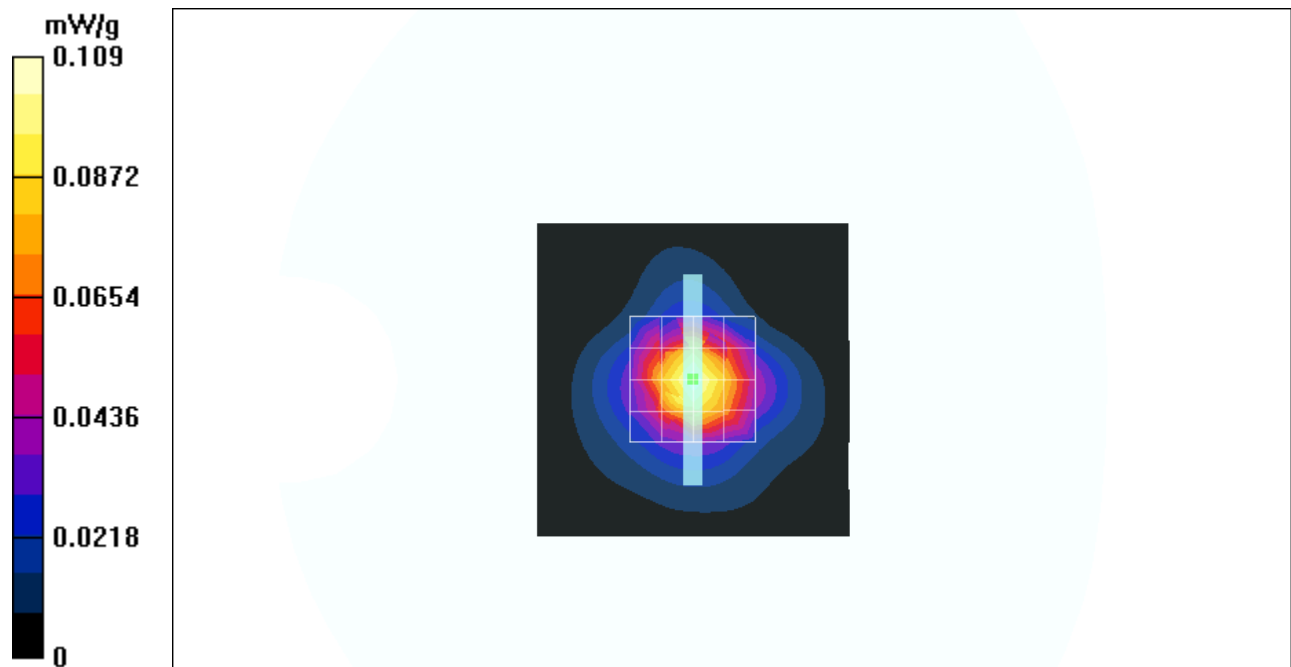
System testing procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.95 V/m

Peak SAR = 0.171 W/kg

SAR(1 g) = 0.0962 mW/g; SAR(10 g) = 0.0447 mW/g

Power Drift = -0.3 dB



A3: VALIDATION TEST DATA

Date/Time: 04/17/03 09:30:14

Test Laboratory: Advance Data Technology Corporation

System Validation Check-MSL2450MHz 2003-04-17

DUT: Dipole 2450 MHz ; Type: D2450V2

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW

Medium: MSL2450 ($\sigma = 1.94$ mho/m, $\epsilon_r = 52.4$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 10mm(The feetpoint of the dipole to the Phantom)

Air tempreature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System Validation procedure/Area Scan (4x6x1): Measurement grid: dx=20mm, dy=20mm

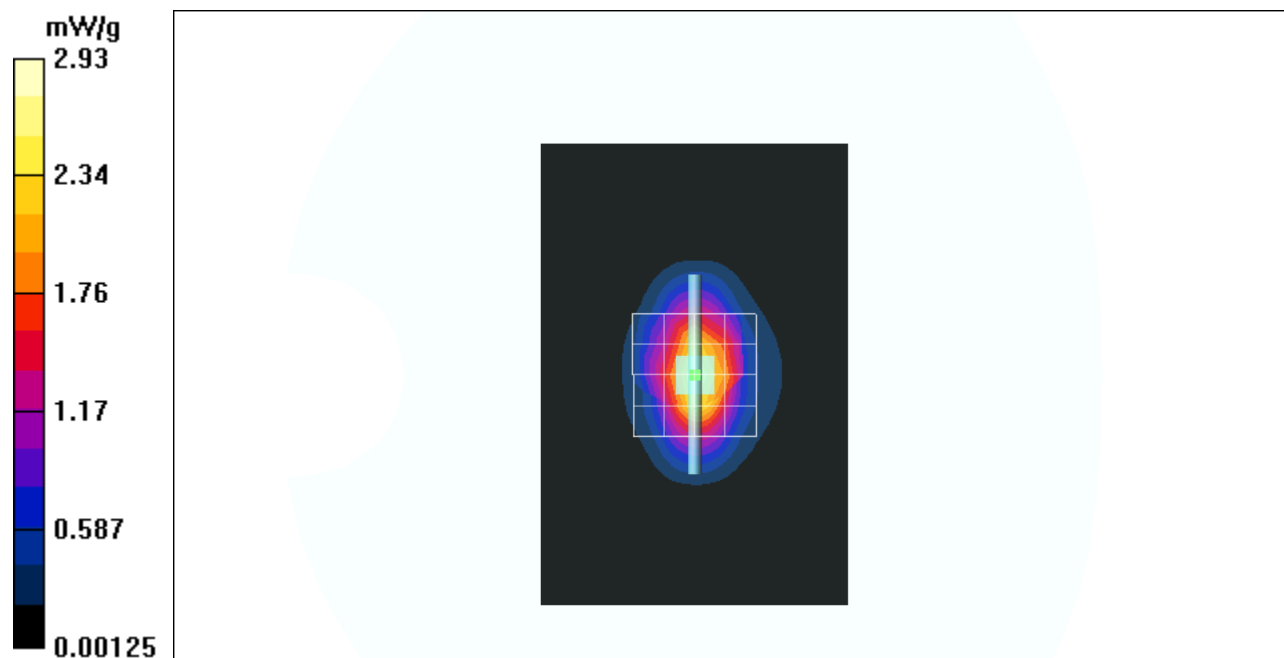
System Validation procedure/Zoon Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 39.8 V/m

Peak SAR = 3.9 W/kg

SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.17 mW/g

Power Drift = -0.2 dB



Test Laboratory: Advance Data Technology Corporation

WN3306A 2 Mode 3 channel 11

DUT: PCMCIA Wireless LAN Card ; Type: WN3306A 2

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: DSSS

Medium: MSL2450 ($\sigma = 1.99$ mho/m, $\epsilon_r = 52.35$, $\rho = 1000$ kg/m³) ; Liquid level : 154mm

Phantom section: Flat Section ; Separation distance : 0mm(The tip of the card to the Phantom)

Antenna type : Internal Antenna; Air temperature : 23.0 degrees ; Liquid temperature : 22.0 degrees

DASY4 Configuration:

- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn510; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom V4.0; Type: QD 000 P40 CA; Serial: TP-1150
- Measurement SW: DASY4, V4.1 Build 33; Postprocessing SW: SEMCAD, V1.6 Build 109

System testing procedure/Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=2mm

