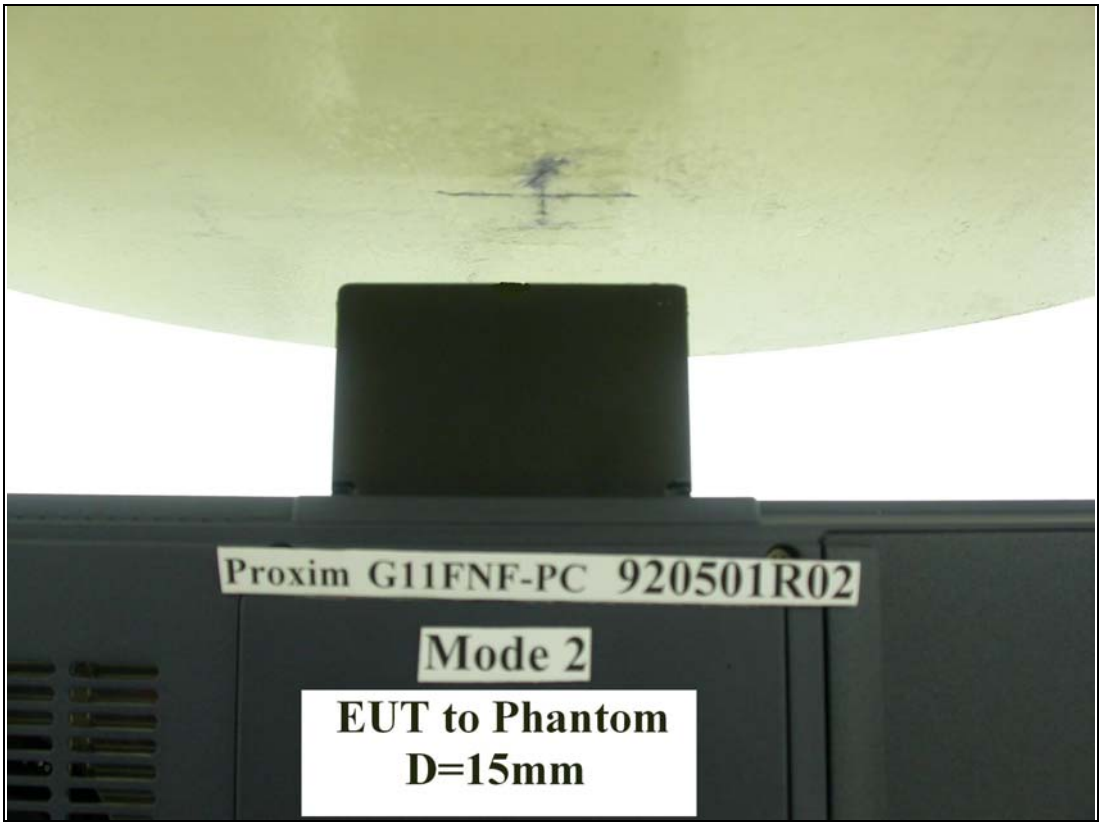
APPENDIX A: TEST CONFIGURATIONS AND TEST DATA

A1: TEST CONFIGURATION

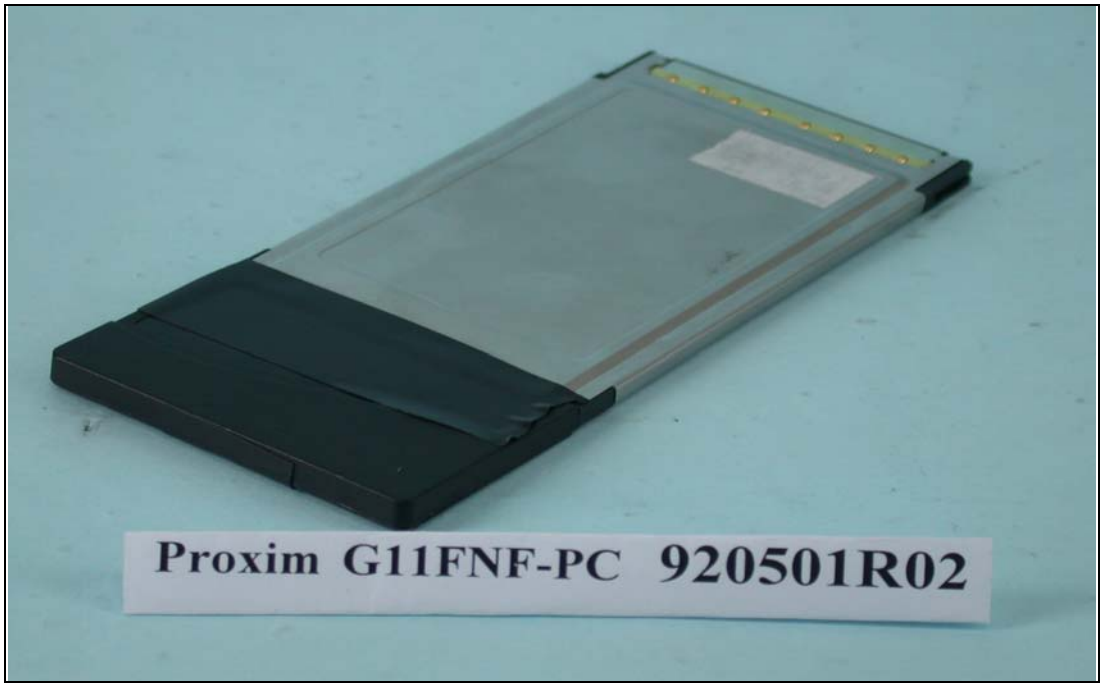
Mode 1

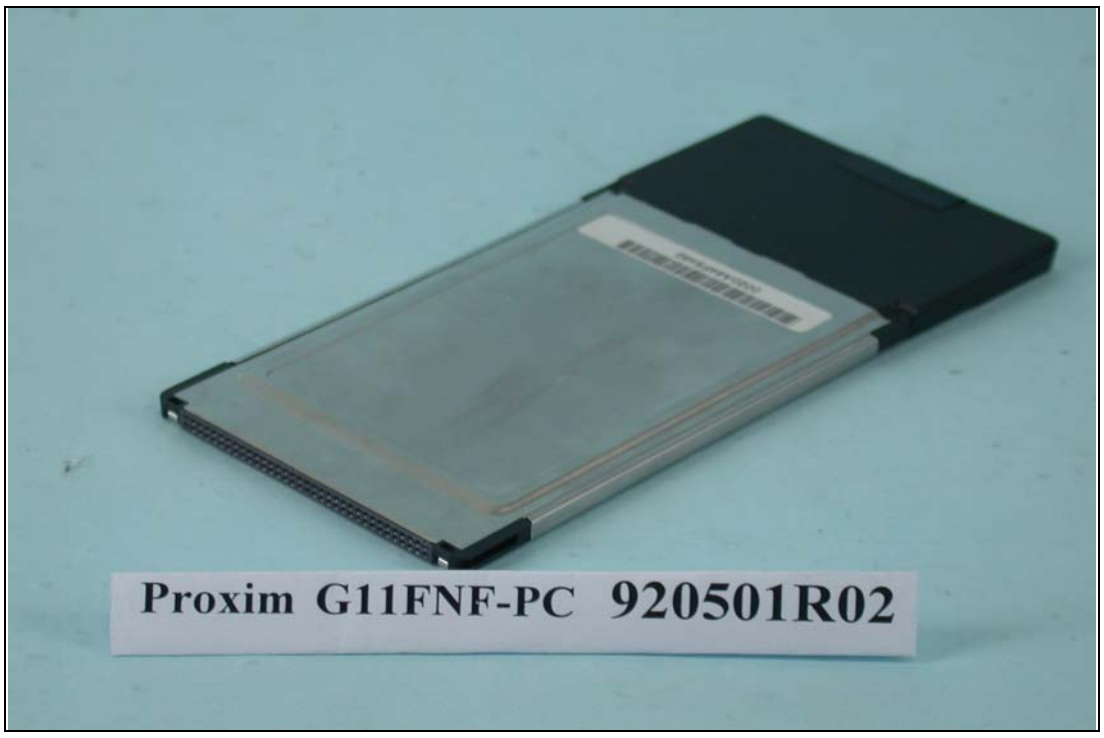
Mode 2



Mode 3

EUT Photo





Liquid Level Photo D=151mm

A2: TEST DATA

Date/Time: 05/13/03 23:00:10

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 1 channel 01 11.b

DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

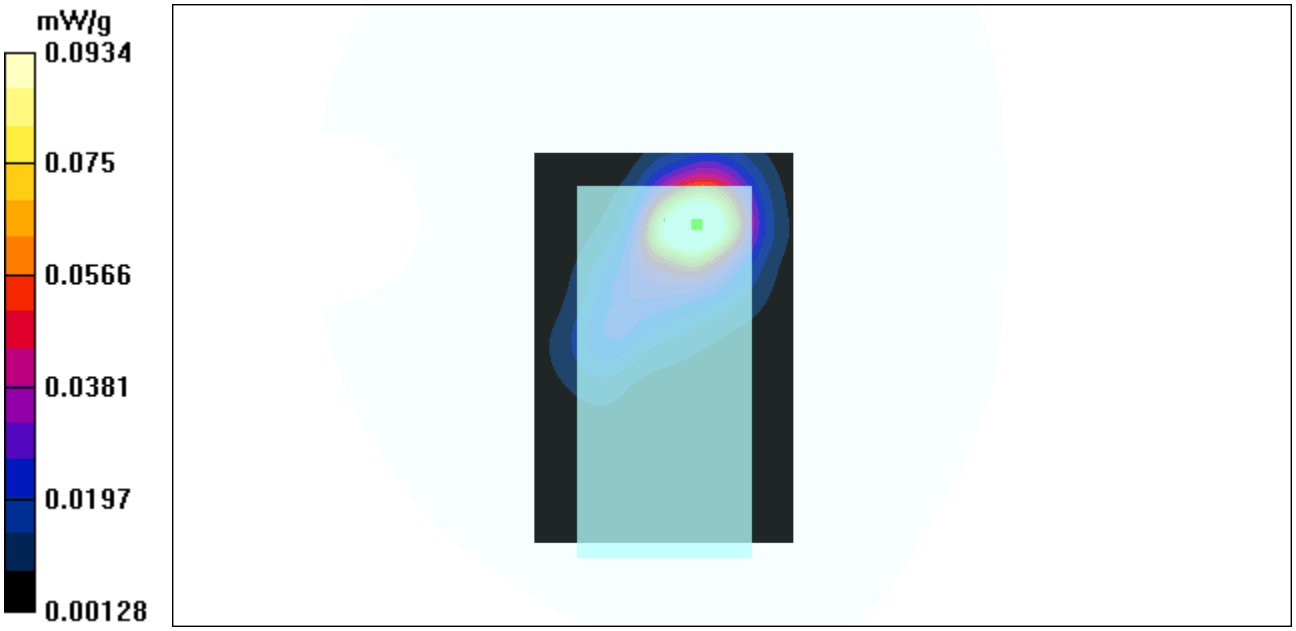
Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.8688 mho/m, ε_r = 52.17, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 11mm(The bottom of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x7x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (5x5x7): Measurement grid: dx=8mm, dy=8mm,dz=5mm

Peak SAR (extrapolated) = 0.289 W/kg
SAR(1 g) = 0.176 mW/g; SAR(10 g) = 0.0941 mW/g
Reference Value = 9.35 V/m
Power Drift = -0.2 dB
Maximum value of SAR = 0.212 mW/g



Date/Time: 05/13/03 21:07:26

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 1 channel 06 11.b

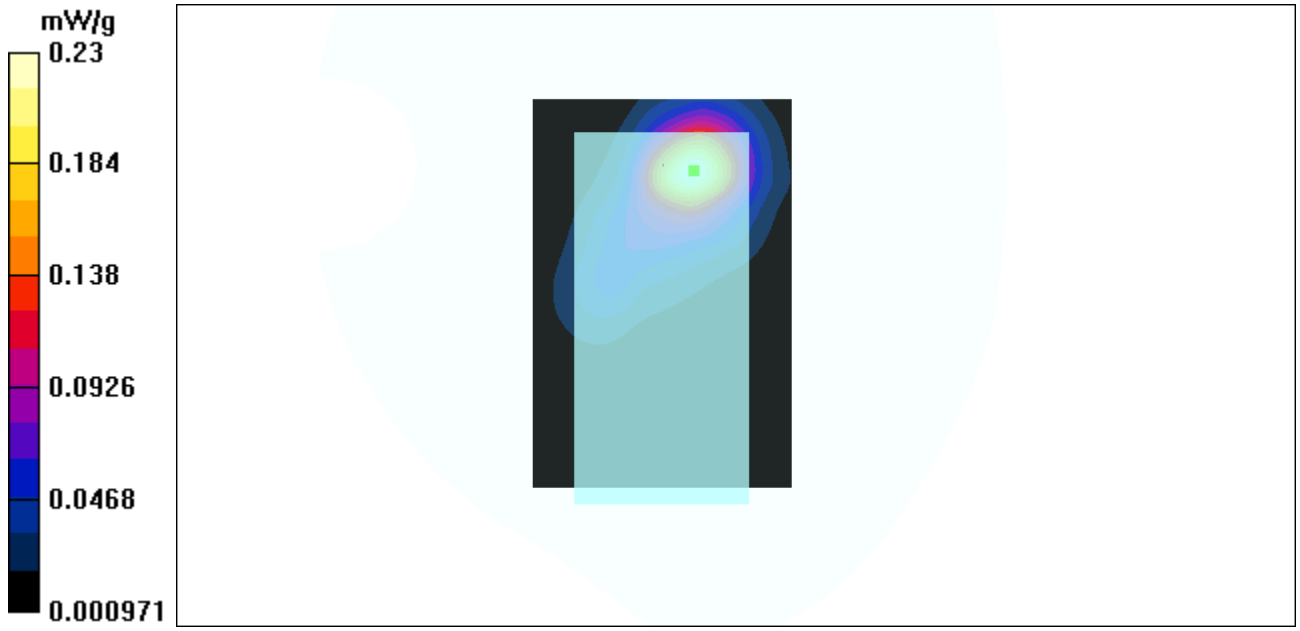
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.90403 mho/m, ε_r = 52.09, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 11mm(The bottom of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x7x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (5x5x7): Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 0.306 W/kg
SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.0963 mW/g
Reference Value = 9.43 V/m
Power Drift = -0.2 dB
Maximum value of SAR = 0.22 mW/g



Date/Time: 05/13/03 23:44:34

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 1 channel 11 11.b

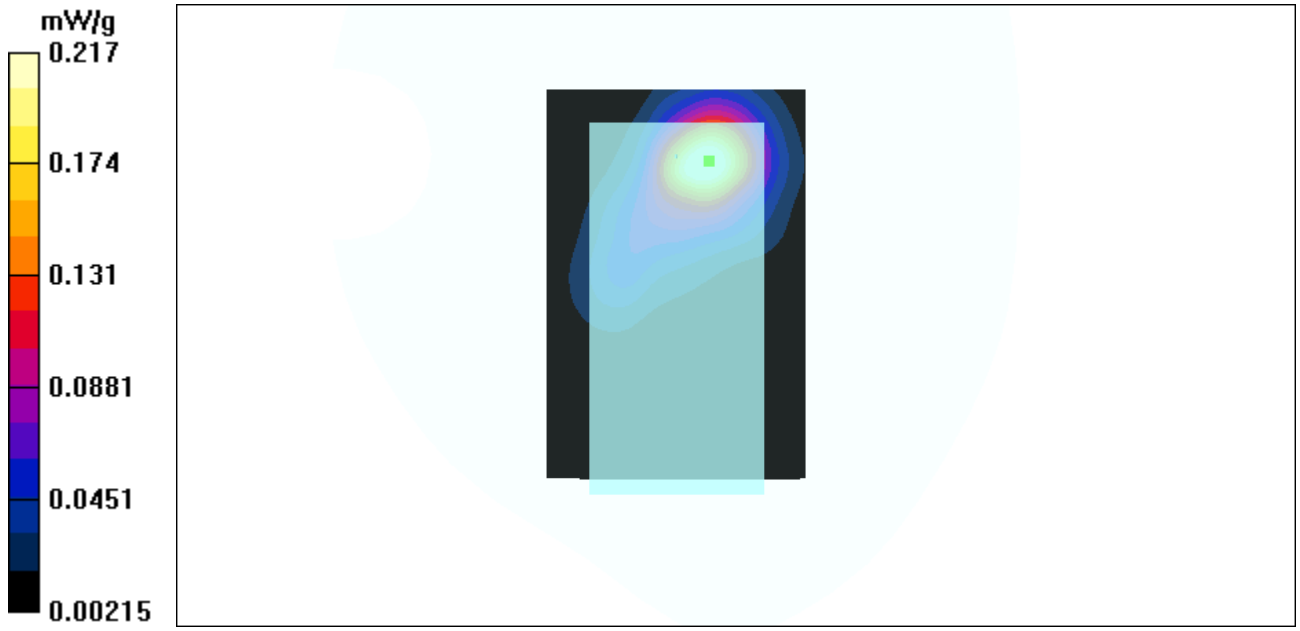
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.9365 mho/m, ε_r = 52.021, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 11mm(The bottom of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x7x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (5x5x7): Measurement grid: dx=8mm, dy=8mm, dz=5mm
Peak SAR (extrapolated) = 0.306 W/kg
SAR(1 g) = 0.185 mW/g; SAR(10 g) = 0.0968 mW/g
Reference Value = 9.36 V/m
Power Drift = -0.26 dB
Maximum value of SAR = 0.217 mW/g



Date/Time: 05/13/03 19:35:28

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 2 channel 01 11.b

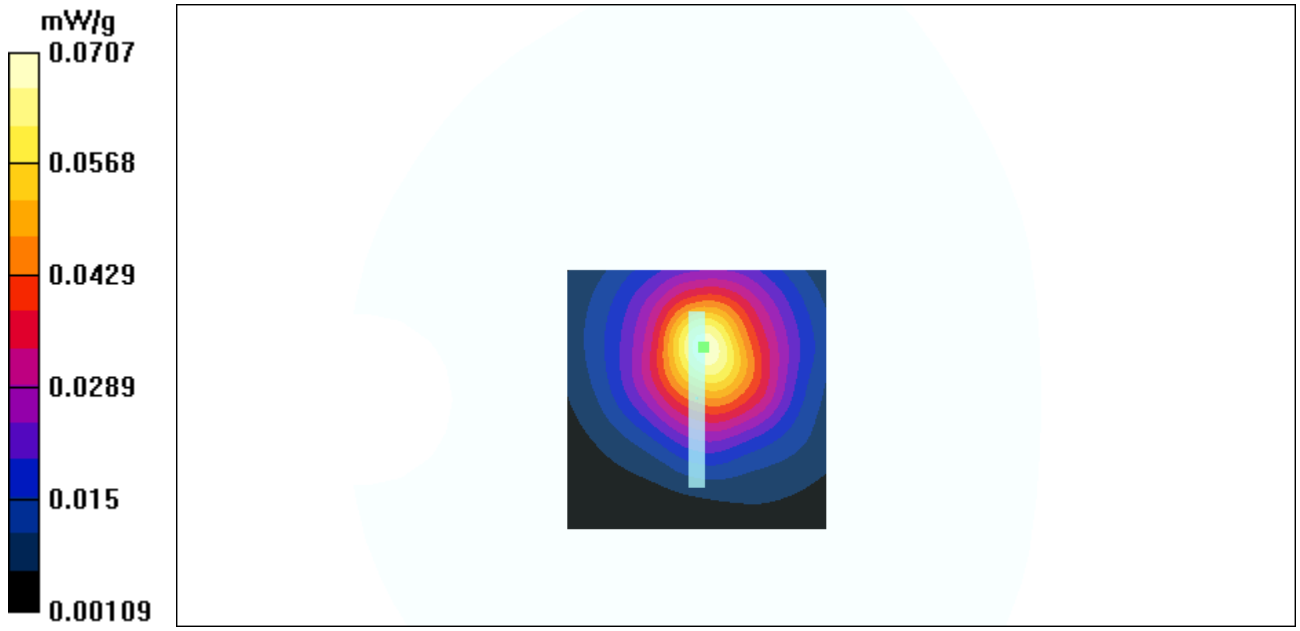
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.8688 mho/m, ε_r = 52.17, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 15mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (7x7x7): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.0932 W/kg
SAR(1 g) = 0.0599 mW/g; SAR(10 g) = 0.0341 mW/g
Reference Value = 5.25 V/m
Power Drift = -0.2 dB
Maximum value of SAR = 0.0707 mW/g



Date/Time: 05/13/03 19:56:12

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 2 channel 06 11.b

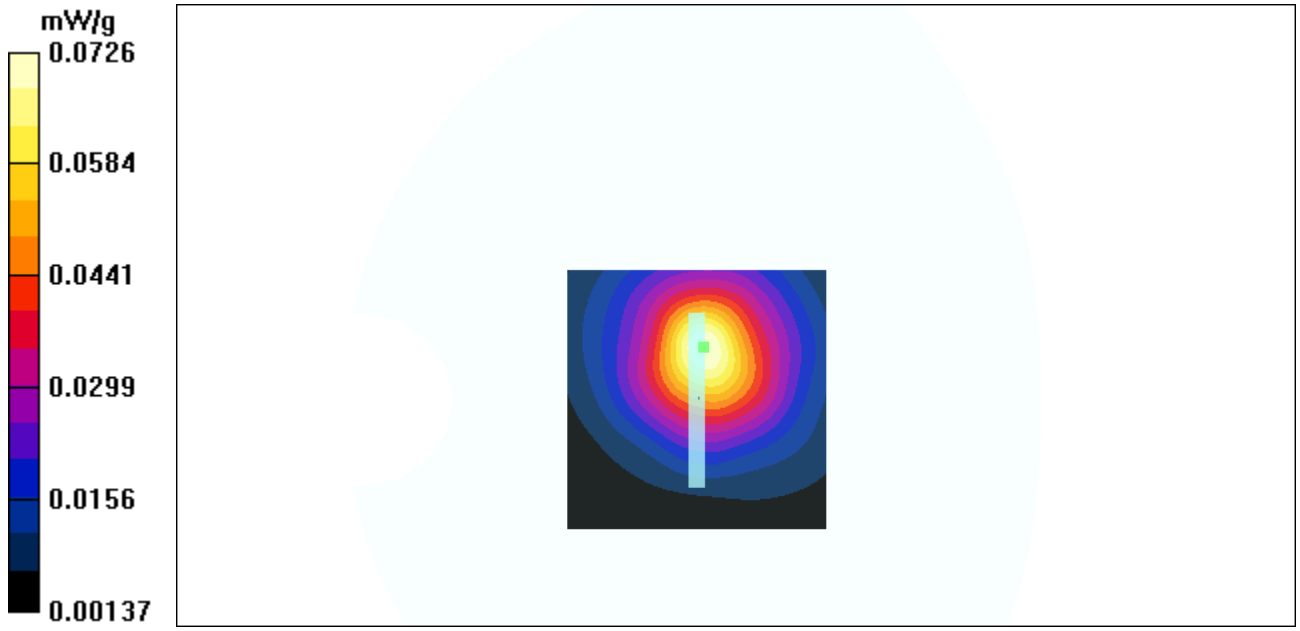
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.90403 mho/m, ε_r = 52.09, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 15mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (7x7x7): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.102 W/kg
SAR(1 g) = 0.0636 mW/g; SAR(10 g) = 0.0357 mW/g
Reference Value = 5.42 V/m
Power Drift = -0.3 dB
Maximum value of SAR = 0.0726 mW/g



Date/Time: 05/13/03 20:17:02

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 2 channel 11 11.b

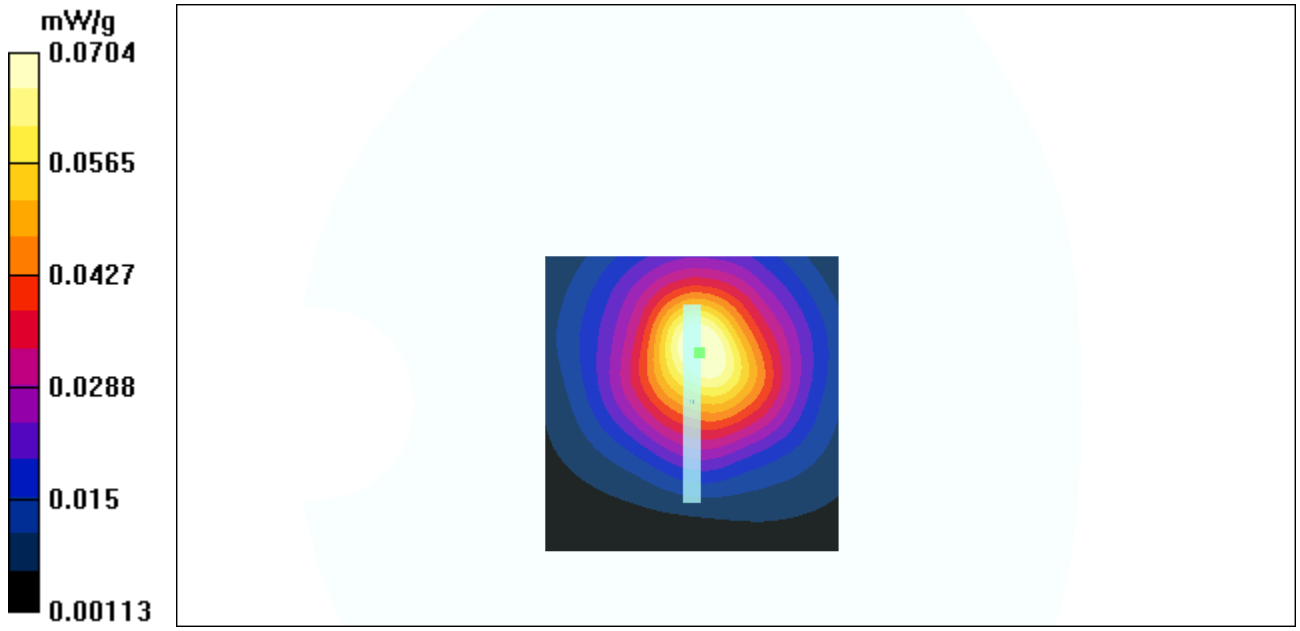
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.9365 mho/m, ε_r = 52.021, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 15mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.0963 W/kg
SAR(1 g) = 0.0617 mW/g; SAR(10 g) = 0.0358 mW/g
Reference Value = 5.44 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.0704 mW/g



Date/Time: 05/13/03 21:49:42

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 3 channel 01 11.b

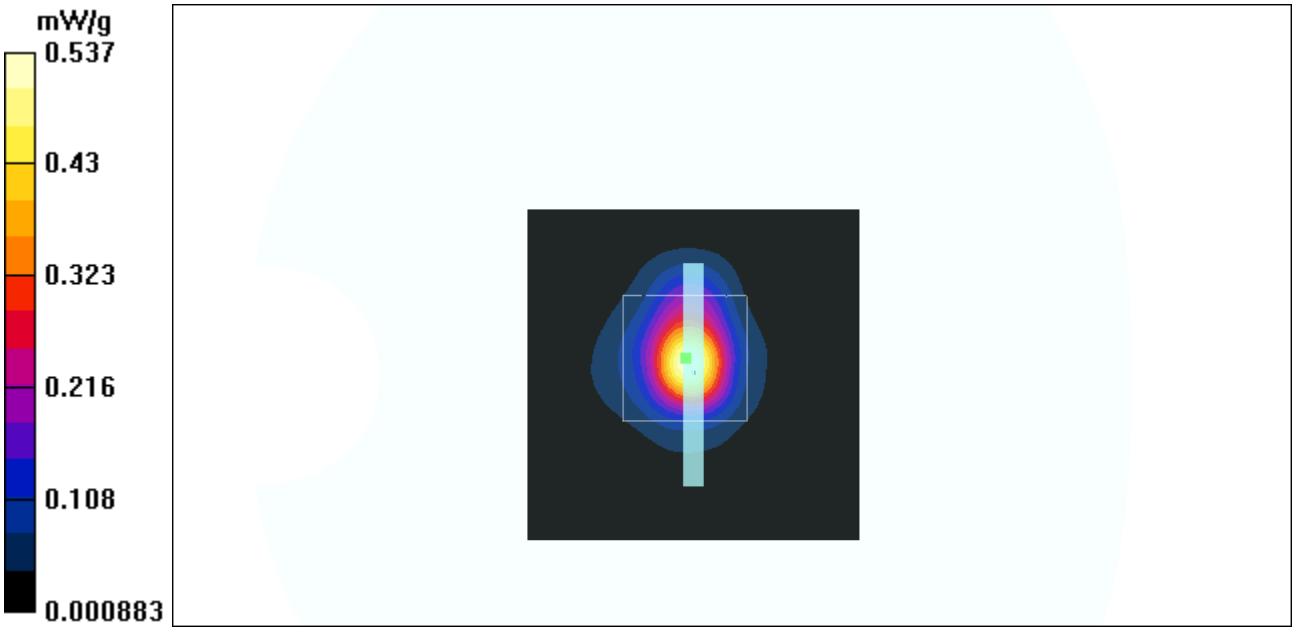
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2412 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.8688 mho/m, ε_r = 52.17, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.986 W/kg
SAR(1 g) = 0.549 mW/g; SAR(10 g) = 0.234 mW/g
Reference Value = 17.8 V/m
Power Drift = -0.3 dB
Maximum value of SAR = 0.659 mW/g



Date/Time: 05/13/03 21:03:28

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 3 channel 06 11.b

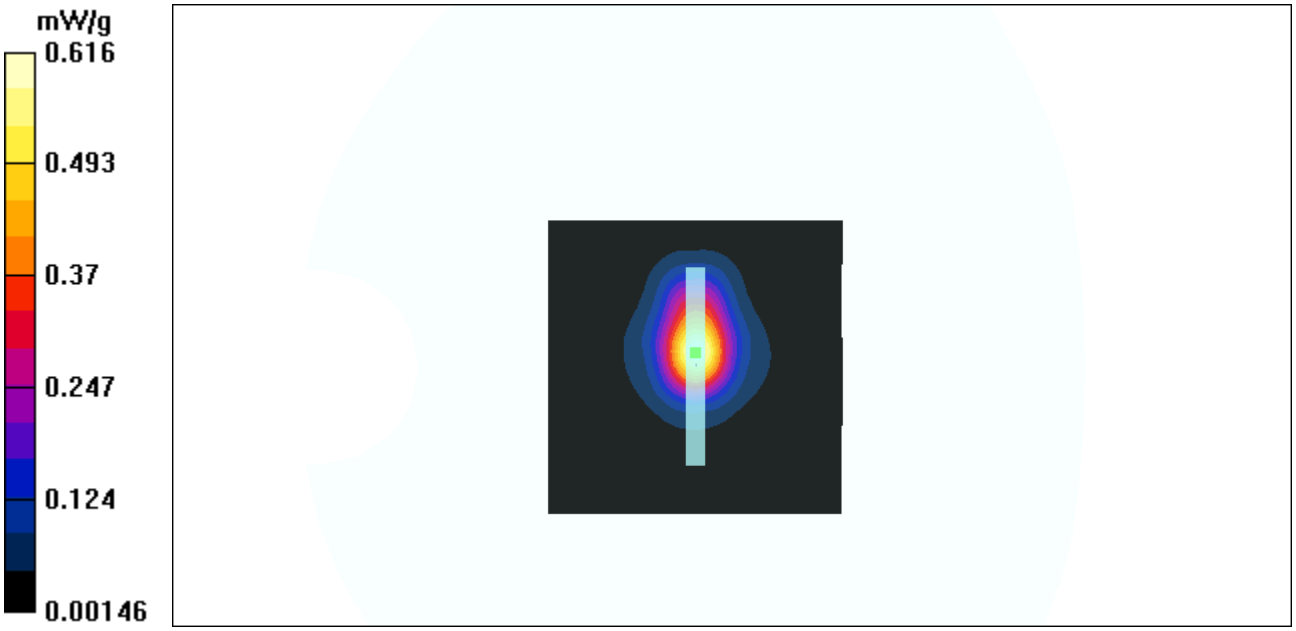
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2437 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.90403 mho/m, ε_r = 52.09, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.04 W/kg
SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.252 mW/g
Reference Value = 17.9 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.732 mW/g



Date/Time: 05/13/03 21:22:58

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 3 channel 11 11.b

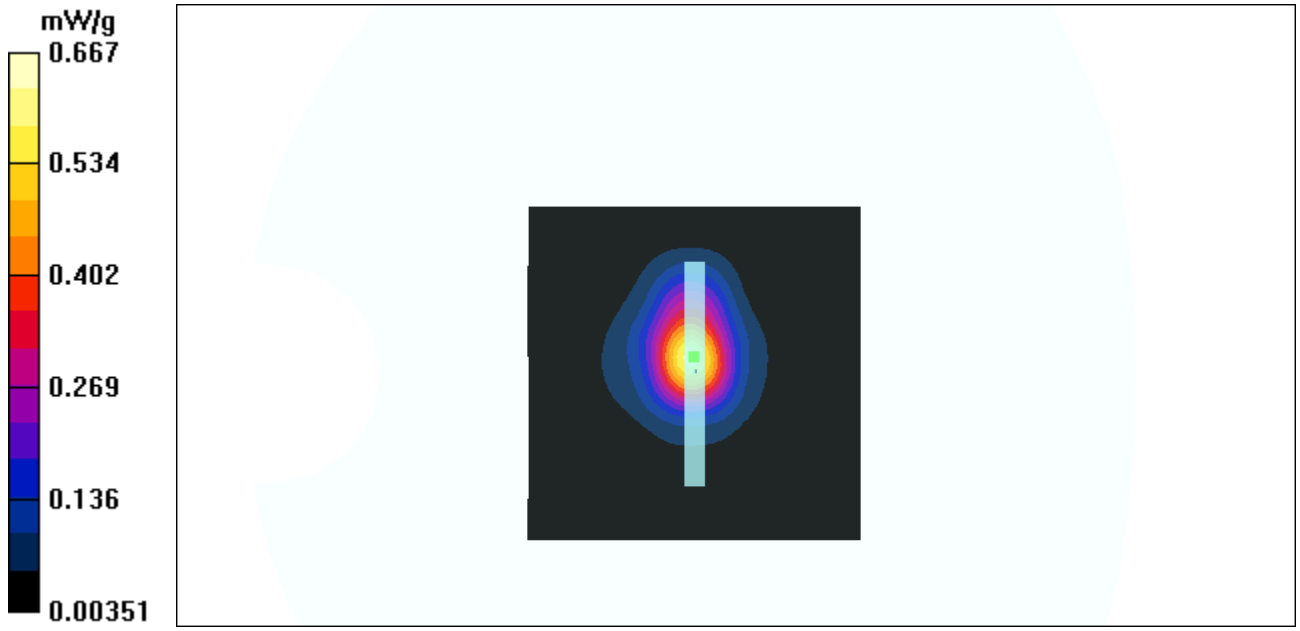
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.9365 mho/m, ε_r = 52.021, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna ; Air temp. : 23.5 degrees ; Liquid temp. : 22.3 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Area Scan (5x5x1): Measurement grid: dx=20mm, dy=20mm
System testing procedure/Zoon Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 0.973 W/kg
SAR(1 g) = 0.588 mW/g; SAR(10 g) = 0.257 mW/g
Reference Value = 18.1 V/m
Power Drift = -0.2 dB
Maximum value of SAR = 0.667 mW/g



Date/Time: 05/13/03 21:22:58

Test Laboratory: Advance Data Technology

G11FNF-PC Mode 3 channel 11 11.b

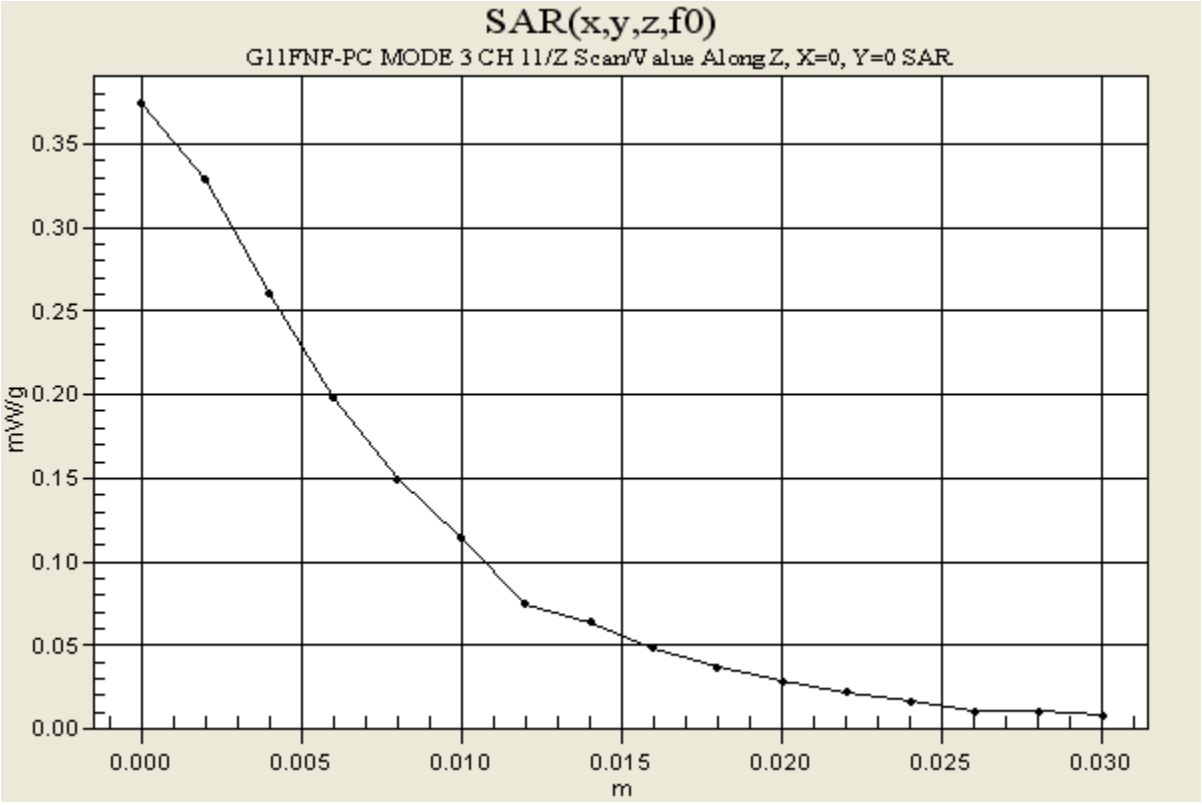
DUT: 802.11b/g Cardbus ; Type: G11FNF-PC

Communication System: 802.11b ; Frequency: 2462 MHz; Duty Cycle: 1:1; Modulation type: CCK
Medium: MSL2450 (σ = 1.9365 mho/m, ε_r = 52.021, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 0mm(The tip of the EUT to the Phantom)

Antenna type : Internal Printed Antenna; Air temp. : 23.5 degrees ; Liquid temp. : 22.1 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)
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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

System testing procedure/Z Scan (1x1x16): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 18.1 V/m
Maximum value of SAR = 0.374 mW/g



A3: VALIDATION TEST DATA

Date/Time: 05/13/03 14:15:20

Test Laboratory: Advance Data Technology

System Validation Check-MSL2450MHz 2003-05-13

DUT: Dipole 2450 MHz ; Type: D2450V2

Communication System: CW ; Frequency: 2450 MHz; Duty Cycle: 1:1; Modulation type: CW
Medium: MSL2450 (σ = 1.92051 mho/m, ε_r = 52.06, ρ = 1000 kg/m^3) ; Liquid level : 151mm
Phantom section: Flat Section ; Separation distance : 10mm(The feetpoint of the dipole to the Phantom)

Air tempreature : 23.5 degrees ; Liquid temperature : 22.3 degrees

DASY4 Configuration:
- Probe: ET3DV6 - SN1687; ConvF(4.4, 4.4, 4.4); Calibrated: 2002/9/28
- Sensor-Surface: 4mm (Mechanical 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 47; Postprocessing SW: SEMCAD, V1.6 Build 115

d=10mm, Pin=250mW/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
d=10mm, Pin=250mW/Zoom Scan (7x7x7): Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 4.27 W/kg
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.17 mW/g
Reference Value = 38.9 V/m
Power Drift = -0.2 dB
Maximum value of SAR = 2.65 mW/g