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Author Data Jean-Paul Hacquoil	Dates of Test April 01-07, April 30-May 07, May 20, 2009	Test Report No RTS-1615-0905-02	FCC ID: L6ARCG40GW

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

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Date/Time: 30/04/2009 11:32:38 PM

Test Laboratory: RTS

File Name: [DipoleValidation_835MHz_Amb_Tem_23.8_Liq_Tem_23.22C.da4](#)

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Program Name: System Performance Check at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.872 \text{ mho/m}$; $\epsilon_r = 40.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.06, 6.06, 6.06); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement

grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 111.8 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 13.7 W/kg

SAR(1 g) = 9.33 mW/g; SAR(10 g) = 6.12 mW/g

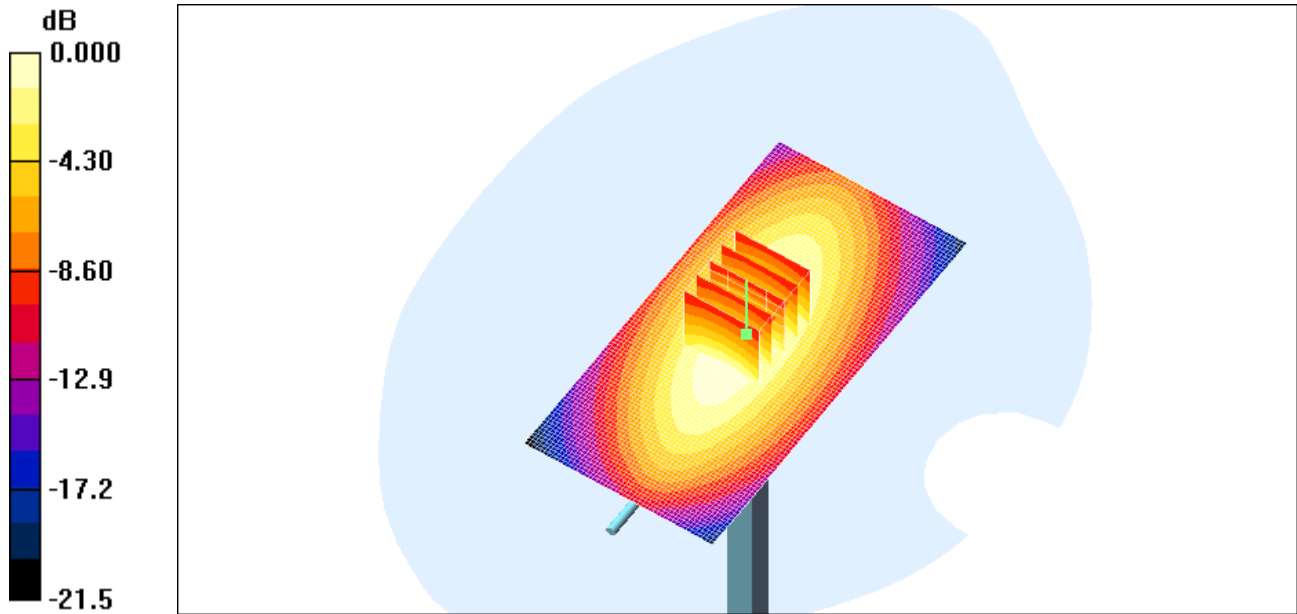
Maximum value of SAR (measured) = 10.1 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 10.1 mW/g

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0 dB = 10.1mW/g

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Date/Time: 04/05/2009 4:06:31 PM

Test Laboratory: RTS

File Name:

[DipoleValidation_835MHz_Amb_Tem_23.2_Liq_Tem_22.12C_05_04_09.da4](#)

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:446

Program Name: System Performance Check at 835 MHz

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.879 \text{ mho/m}$; $\epsilon_r = 40.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.06, 6.06, 6.06); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) (5x5x7)/Cube 0: Measurement

grid: $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 111.5 V/m ; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 14.0 W/kg

SAR(1 g) = 9.52 mW/g; SAR(10 g) = 6.25 mW/g

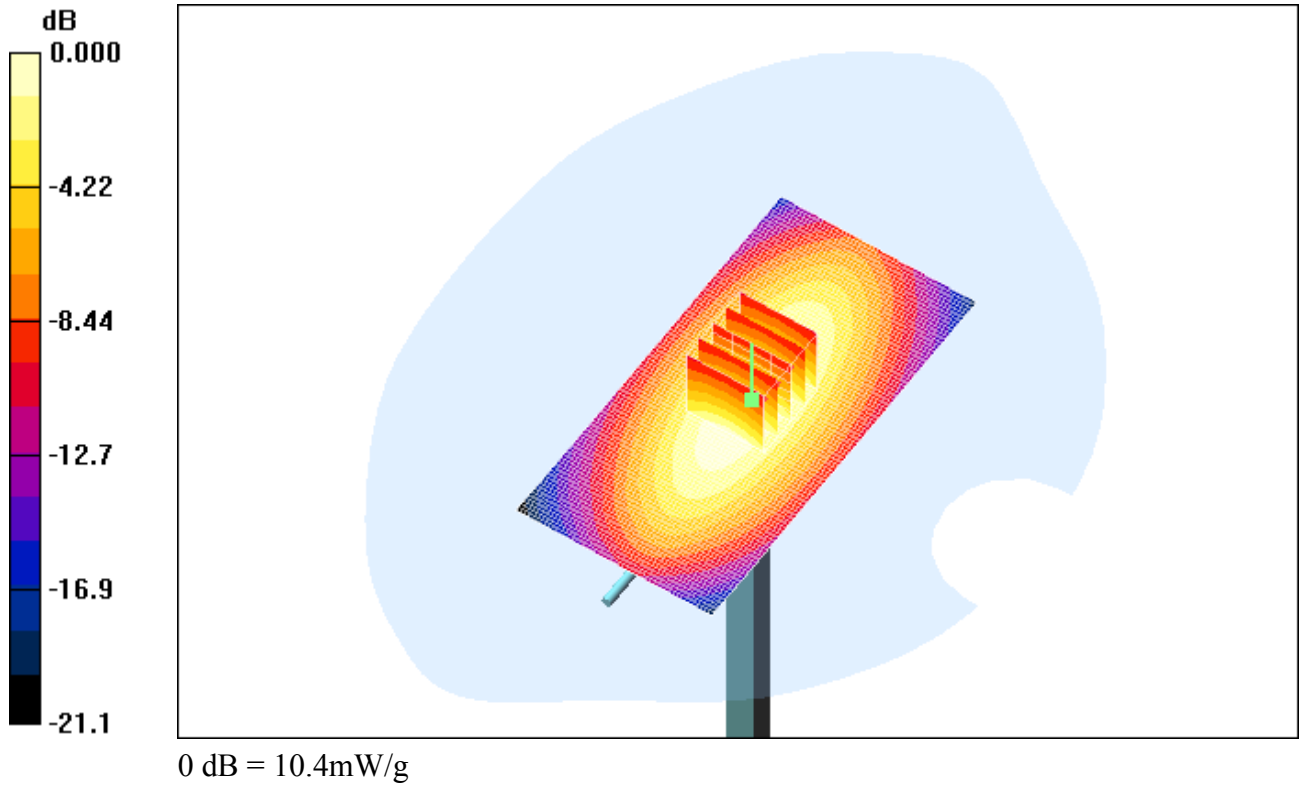
Maximum value of SAR (measured) = 10.3 mW/g

d=15mm, Pin=1000mW/Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$,

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 10.4 mW/g

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Date/Time: 06/05/2009 11:43:05 AM

Test Laboratory: RTS

File Name: [DipoleValidation_1900MHz_Amb_Tem_22.8_Liq_Tem_22.1_C.da4](#)

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:545
Program Name: System Performance Check at 1900 MHz

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.43 \text{ mho/m}$; $\epsilon_r = 38.3$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

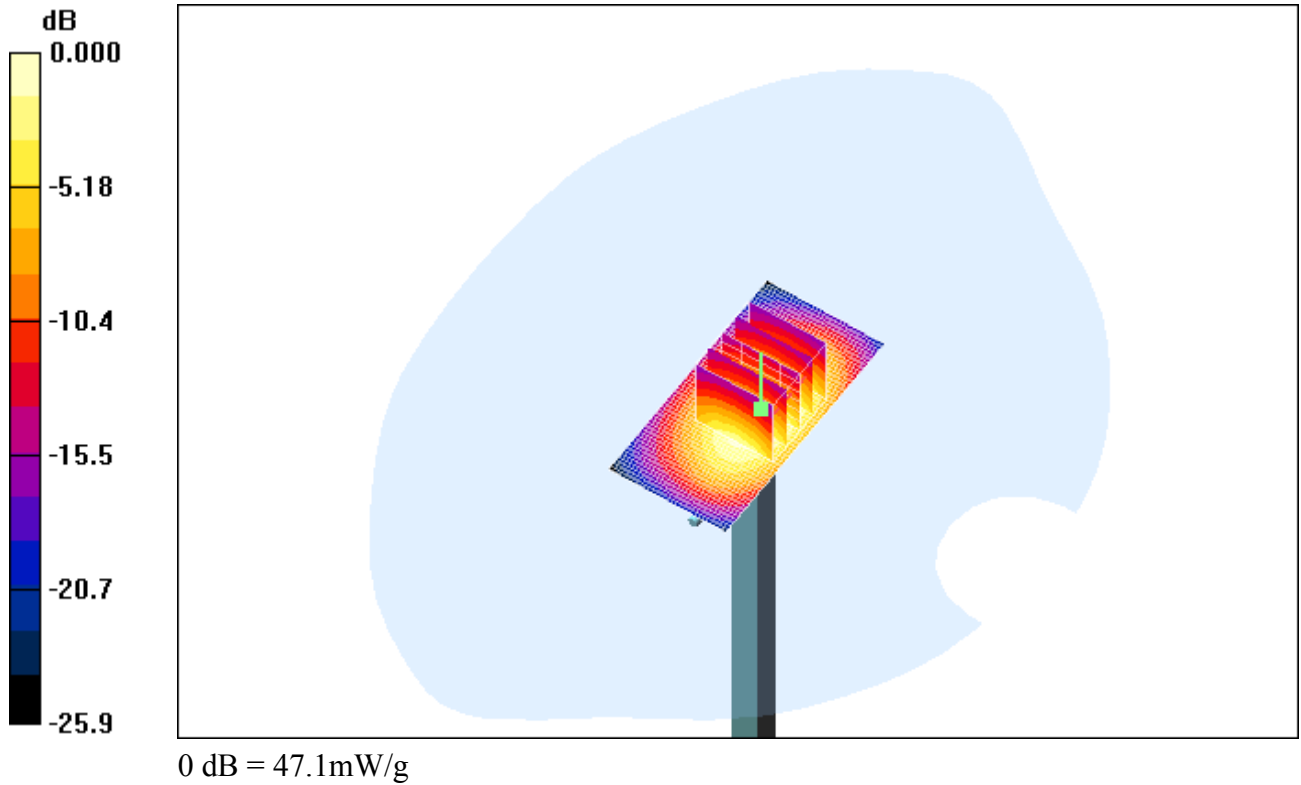
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(5.14, 5.14, 5.14); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 186.9 V/m; Power Drift = 0.091 dB
Peak SAR (extrapolated) = 71.1 W/kg
SAR(1 g) = 41.3 mW/g; SAR(10 g) = 21.7 mW/g
Maximum value of SAR (measured) = 46.9 mW/g

d=15mm, Pin=1000mW/Area Scan (31x61x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 47.1 mW/g

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Date/Time: 01/04/2009 6:38:39 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_23.4_Liq_Tem_23.0C.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx
Program Name: System Performance Check at 2450 MHz

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.82$ mho/m; $\epsilon_r = 37.9$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

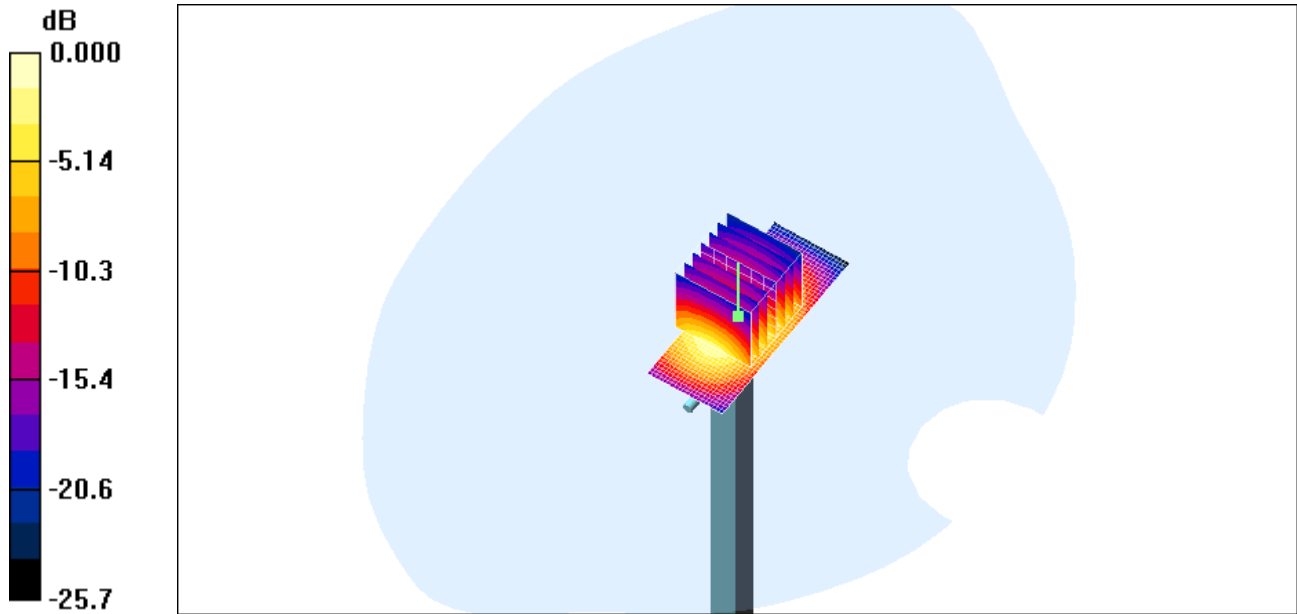
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.54, 4.54, 4.54); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 195.1 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 125.8 W/kg
SAR(1 g) = 56.8 mW/g; SAR(10 g) = 26.3 mW/g
Maximum value of SAR (measured) = 63.1 mW/g

d=15mm, Pin=1000mW/Area Scan (21x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 65.2 mW/g

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0 dB = 65.2mW/g

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Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_23.4_Liq_Tem_22.6C.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx
Program Name: System Performance Check at 2450 MHz

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.86$ mho/m; $\epsilon_r = 37.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

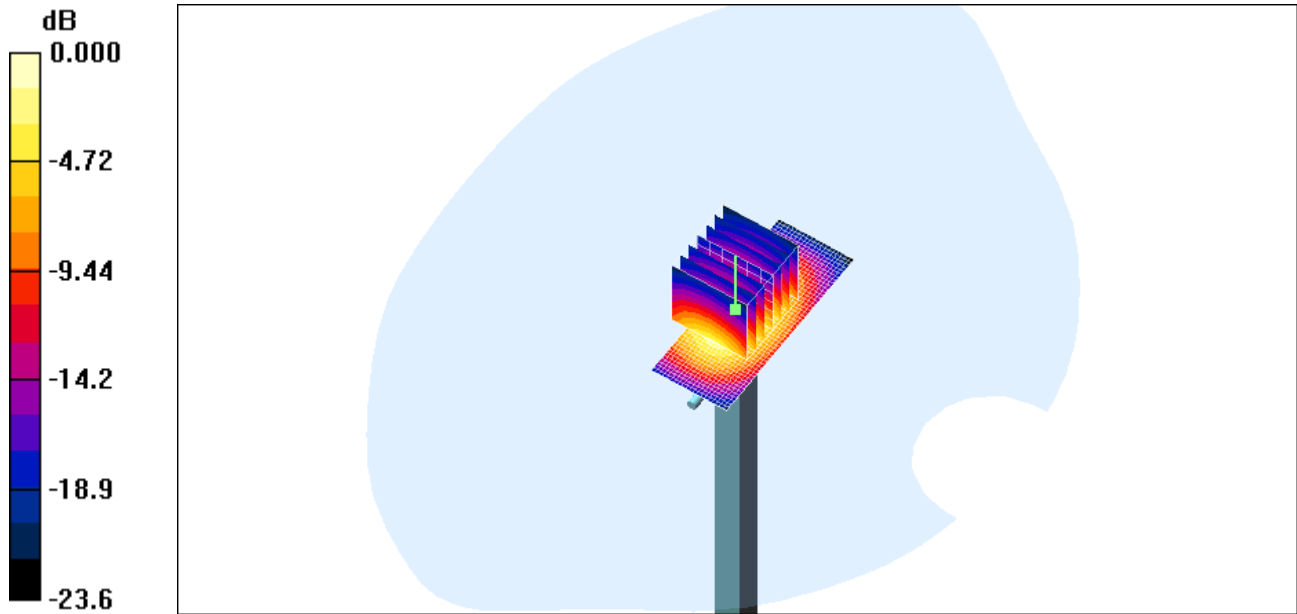
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.54, 4.54, 4.54); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn473; Calibrated: 09/01/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 196.5 V/m; Power Drift = -0.004 dB
Peak SAR (extrapolated) = 128.3 W/kg
SAR(1 g) = 57.3 mW/g; SAR(10 g) = 26.4 mW/g
Maximum value of SAR (measured) = 64.5 mW/g

d=15mm, Pin=1000mW/Area Scan (21x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 66.7 mW/g

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0 dB = 66.7mW/g

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Date/Time: 20/05/2009 7:46:00 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_22.2_Liq_Tem_21.7C.da4](#)

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:xxx
Program Name: System Performance Check at 2450 MHz

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 2450$ MHz; $\sigma = 1.85$ mho/m; $\epsilon_r = 37.5$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

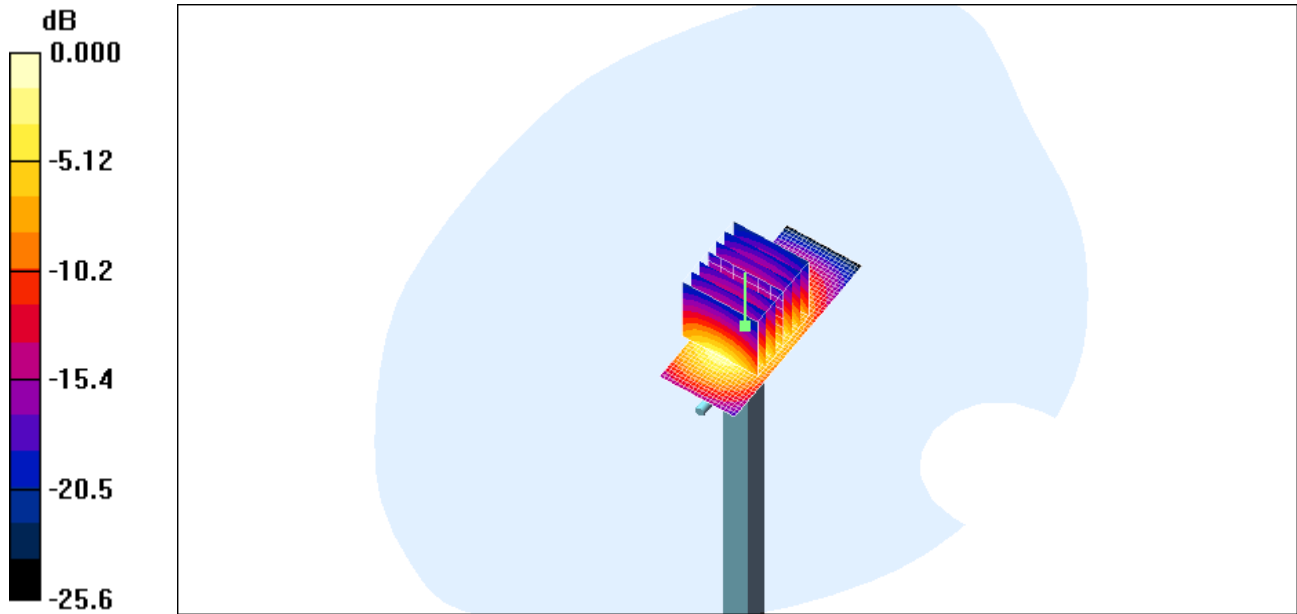
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.54, 4.54, 4.54); Calibrated: 12/01/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 03/03/2009
- Phantom: SAM 1; Type: SAM 4.0; Serial: 1076
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

d=15mm, Pin=1000mW/Zoom Scan (7x7x7) (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 190.9 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 128.8 W/kg
SAR(1 g) = 56.9 mW/g; SAR(10 g) = 26.1 mW/g
Maximum value of SAR (measured) = 64.1 mW/g

d=15mm, Pin=1000mW/Area Scan (21x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 64.5 mW/g

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0 dB = 64.5mW/g