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Author Data Jean-Paul Hacquoil	Dates of Test Sep 23 – Oct 21, 2008	Test Report No RTS-1271-0810-07	FCC ID: L6ARCD20IN

APPENDIX A: SAR DISTRIBUTION COMPARISON FOR ACCURACY VERIFICATION

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Date/Time: 23/09/2008 9:48:39 AM

Test Laboratory: RTS

File Name:

[DipoleValidation_835MHz_Amb_Tem_23.5_Liq_Tem_23.1C_09_23_08.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: $f = 835 \text{ MHz}$; $\sigma = 0.867 \text{ mho/m}$; $\epsilon_r = 41.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- 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 (5x5x7) (5x5x7)/Cube 0: Measurement

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

Reference Value = 110.7 V/m; Power Drift = -0.045 dB

Peak SAR (extrapolated) = 12.9 W/kg

SAR(1 g) = 8.97 mW/g; SAR(10 g) = 5.91 mW/g

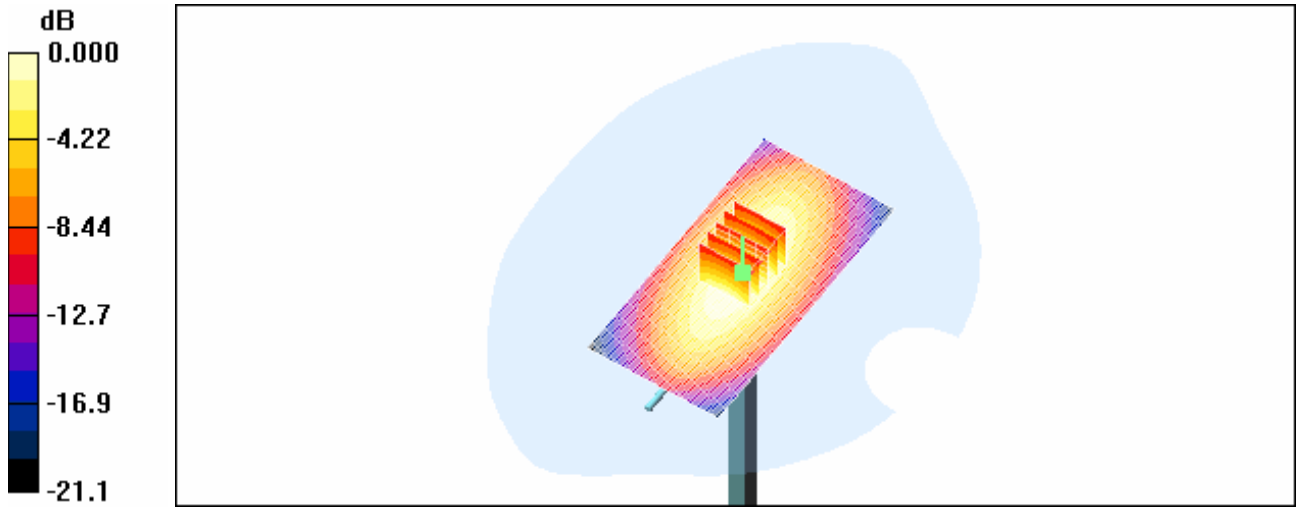
Maximum value of SAR (measured) = 9.68 mW/g

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

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 9.77 mW/g

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0 dB = 9.77mW/g

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Date/Time: 15/10/2008 12:16:54 PM

Test Laboratory: RTS

File Name:

[DipoleValidation_835MHz_Amb_Tem_23.3_Liq_Tem_23.1C_10_15_08.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: $f = 835 \text{ MHz}$; $\sigma = 0.86 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- 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 (5x5x7) (5x5x7)/Cube 0: Measurement

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

Reference Value = 110.7 V/m ; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 12.8 W/kg

SAR(1 g) = 8.9 mW/g ; SAR(10 g) = 5.87 mW/g

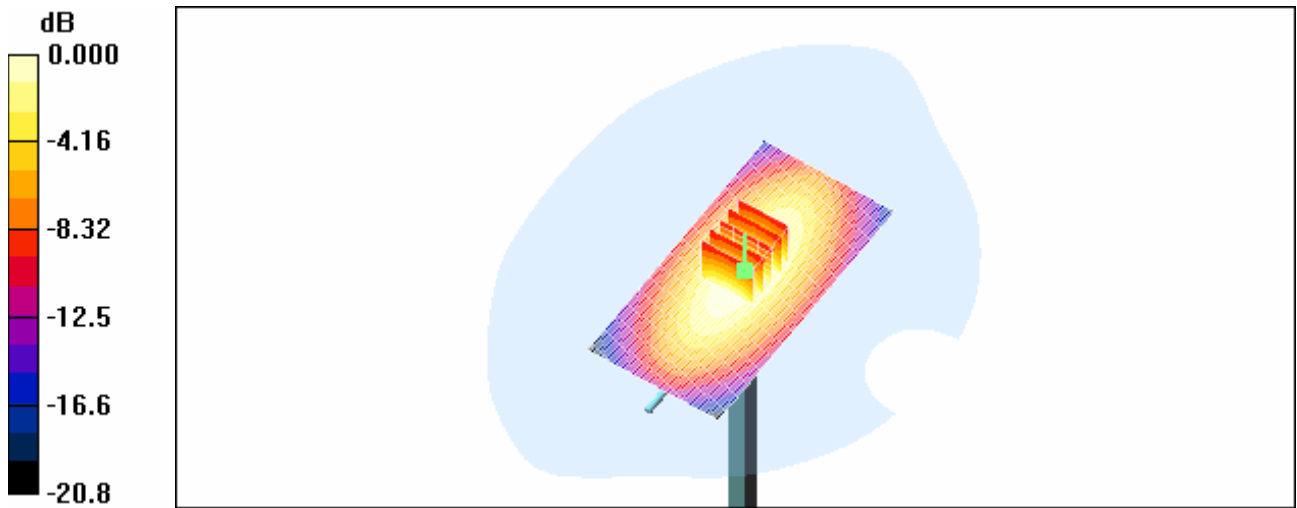
Maximum value of SAR (measured) = 9.65 mW/g

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

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 9.62 mW/g

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0 dB = 9.62mW/g

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Date/Time: 24/09/2008 11:37:03 AM

Test Laboratory: RTS

File Name: [DipoleValidation_900MHz_Amb_Tem_23.4_Liq_Tem_22.9C.da4](#)

DUT: Dipole 900 MHz; Type: D900V2; Serial: D900V2 - SN:133

Program Name: System Performance Check at 900 MHz

Communication System: CW; Frequency: 900 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 900 \text{ MHz}$; $\sigma = 0.934 \text{ mho/m}$; $\epsilon_r = 40$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(6.42, 6.42, 6.42); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- 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 (5x5x7) (5x5x7)/Cube 0: Measurement

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

Reference Value = 113.4 V/m; Power Drift = -0.139 dB

Peak SAR (extrapolated) = 14.4 W/kg

SAR(1 g) = 9.91 mW/g; SAR(10 g) = 6.43 mW/g

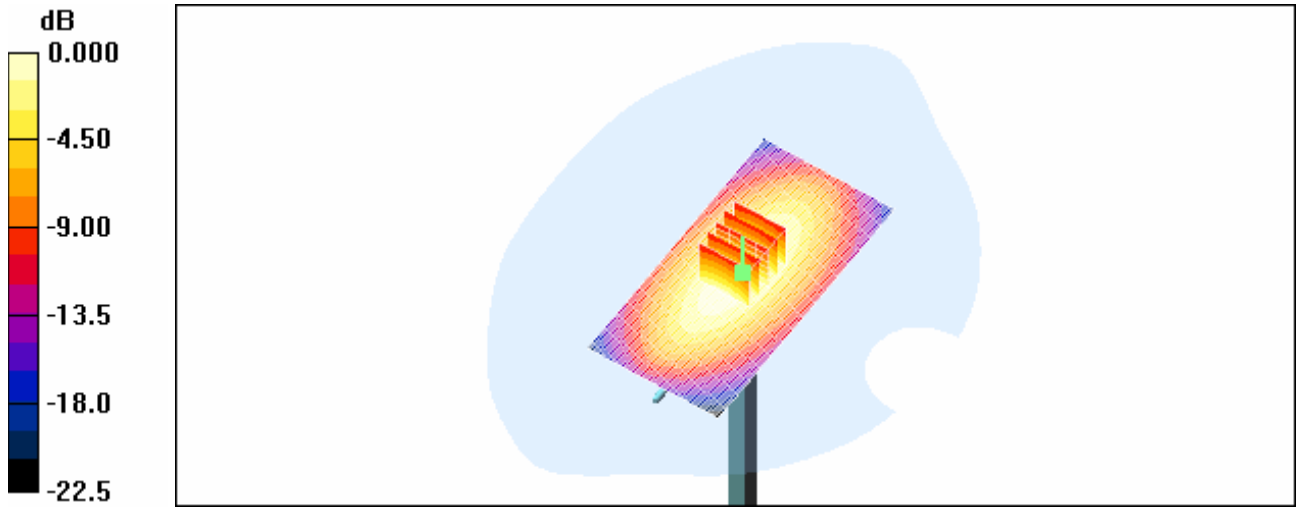
Maximum value of SAR (measured) = 10.7 mW/g

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

$dy=15\text{mm}$

Maximum value of SAR (interpolated) = 10.8 mW/g

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0 dB = 10.8mW/g

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Date/Time: 29/09/2008 3:38:38 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_24.1_Liq_Tem_23.1_C.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; $\sigma = 1.94$ mho/m; $\epsilon_r = 37.3$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

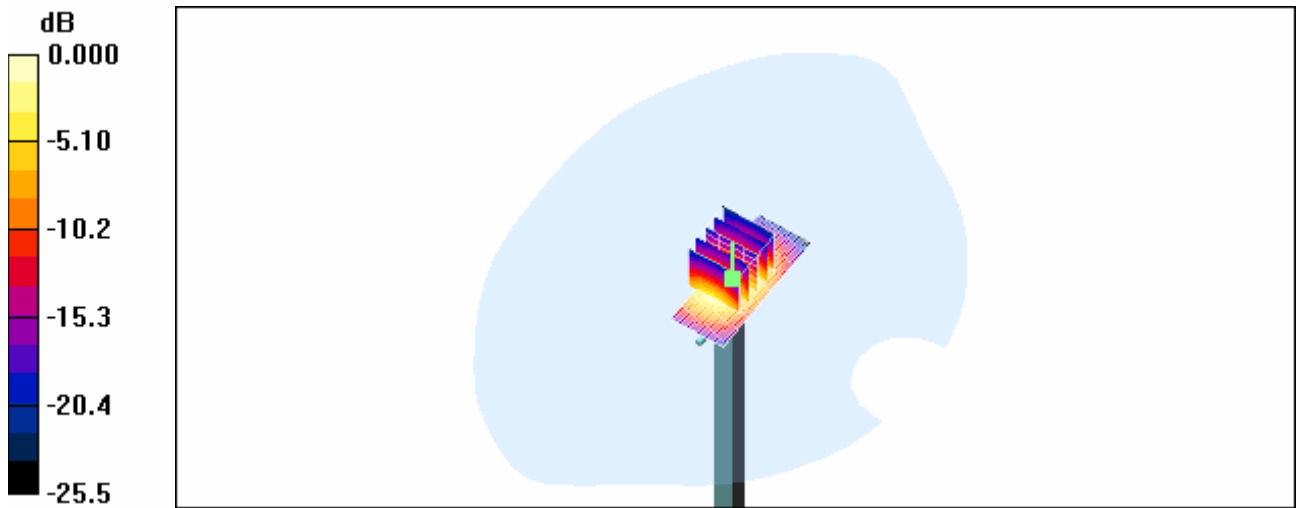
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- 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 (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 191.3 V/m; Power Drift = -0.002 dB
Peak SAR (extrapolated) = 132.1 W/kg
SAR(1 g) = 58.3 mW/g; SAR(10 g) = 26.6 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) = 67.4 mW/g

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0 dB = 67.4mW/g

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Date/Time: 06/10/2008 10:03:21 AM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_22.6_Liq_Tem_22.1_C.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; $\sigma = 1.96$ mho/m; $\epsilon_r = 37.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

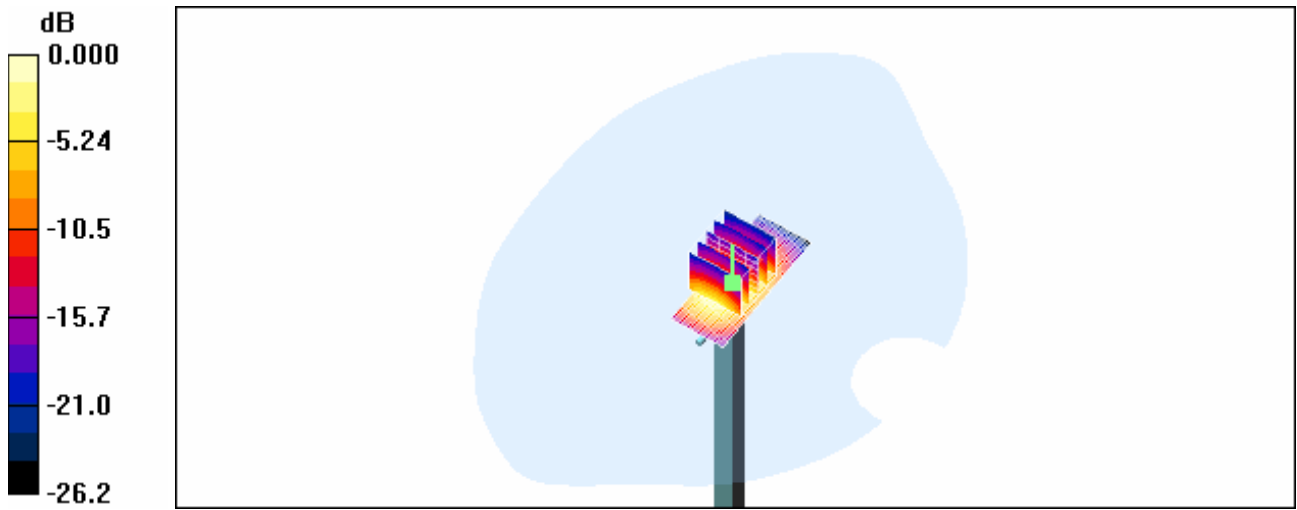
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- 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 (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 186.2 V/m; Power Drift = -0.009 dB
Peak SAR (extrapolated) = 130.8 W/kg
SAR(1 g) = 57.1 mW/g; SAR(10 g) = 25.9 mW/g
Maximum value of SAR (measured) = 63.4 mW/g

d=15mm, Pin=1000mW/Area Scan (21x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 64.7 mW/g

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0 dB = 64.7mW/g

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Date/Time: 21/10/2008 1:00:27 PM

Test Laboratory: RTS

File Name: [DipoleValidation_2450MHz_Amb_Tem_23.8_Liq_Tem_23.5_C.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; $\sigma = 1.94$ mho/m; $\epsilon_r = 37.4$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

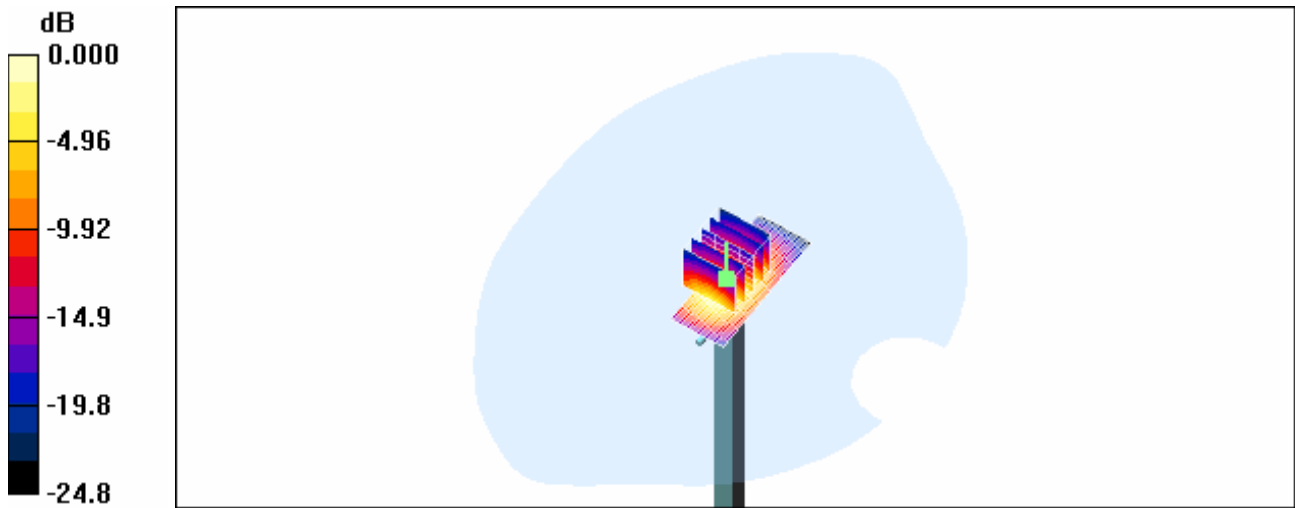
DASY4 Configuration:

- Probe: ET3DV6 - SN1642; ConvF(4.52, 4.52, 4.52); Calibrated: 18/01/2008
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn472; Calibrated: 05/03/2008
- 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 (5x5x7) 2 (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 188.8 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 127.3 W/kg
SAR(1 g) = 56.2 mW/g; SAR(10 g) = 25.7 mW/g
Maximum value of SAR (measured) = 62.2 mW/g

d=15mm, Pin=1000mW/Area Scan (21x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 63.7 mW/g

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0 dB = 63.7mW/g