

Test Laboratory: Compliance Certification Services

### System Performance Check - D835V2

DUT: Dipole; Type: D835V2; Serial: 4d002

Communication System: System Check Signal - CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.972 \text{ mho/m}$ ;  $\epsilon_r = 53.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(8.7, 8.7, 8.7); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.94 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

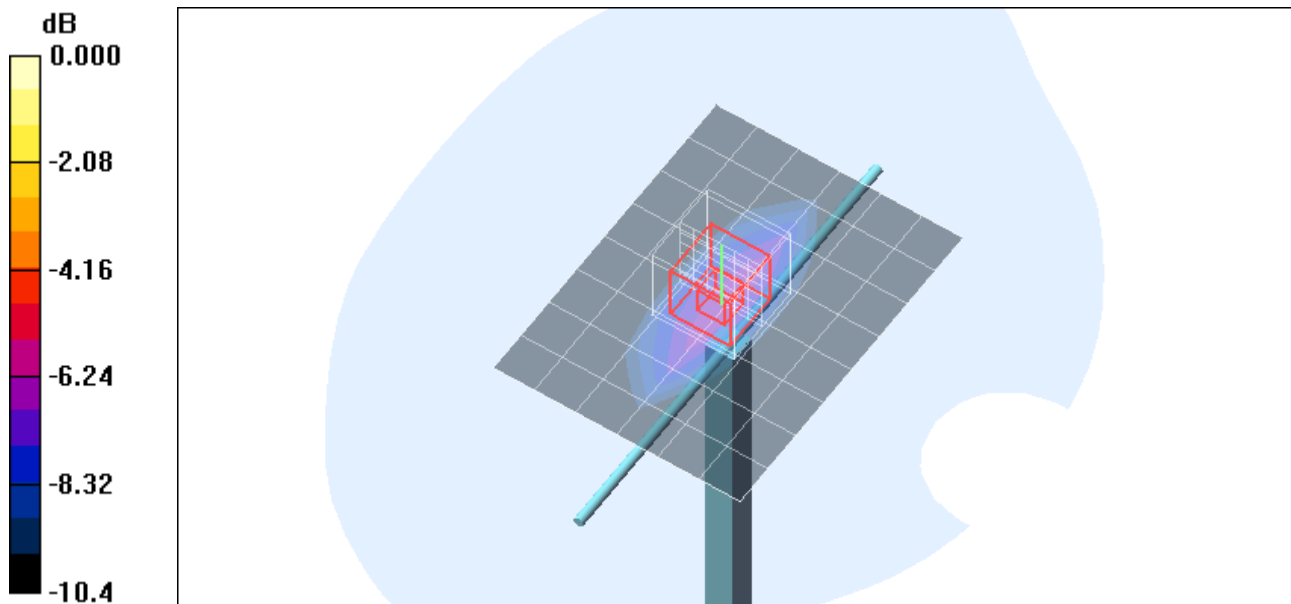
Reference Value = 55.3 V/m; Power Drift = 0.055 dB

Peak SAR (extrapolated) = 15.3 W/kg

**SAR(1 g) = 10.2 mW/g; SAR(10 g) = 6.68 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 11.9 mW/g



0 dB = 11.9mW/g

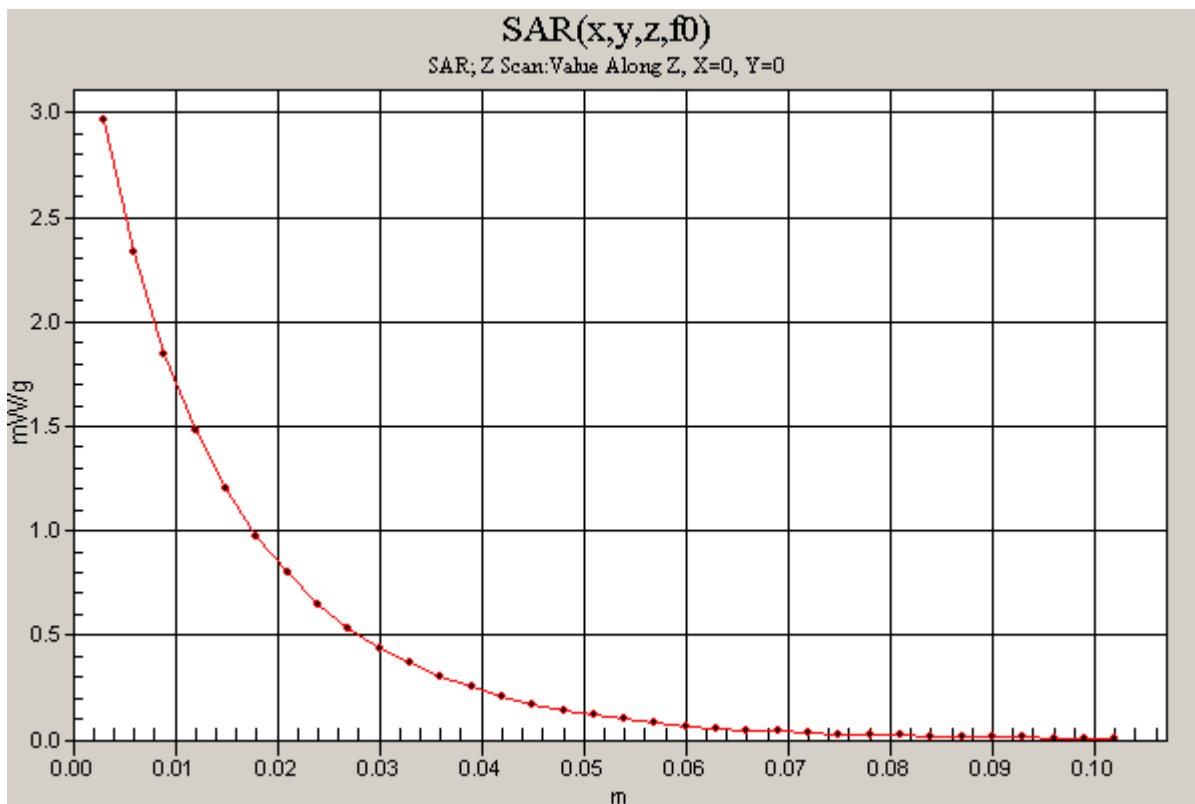
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### System Performance Check - D835V2

DUT: Dipole; Type: D835V2; Serial: 4d002

Communication System: System Check Signal - CW; Frequency: 835 MHz; Duty Cycle: 1:1

**d=15mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 2.97 mW/g



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## System Performance Check - D835V2

DUT: Dipole; Type: D835V2; Serial: 4d002

Communication System: System Check Signal - CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.951$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(8.7, 8.7, 8.7); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.86 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

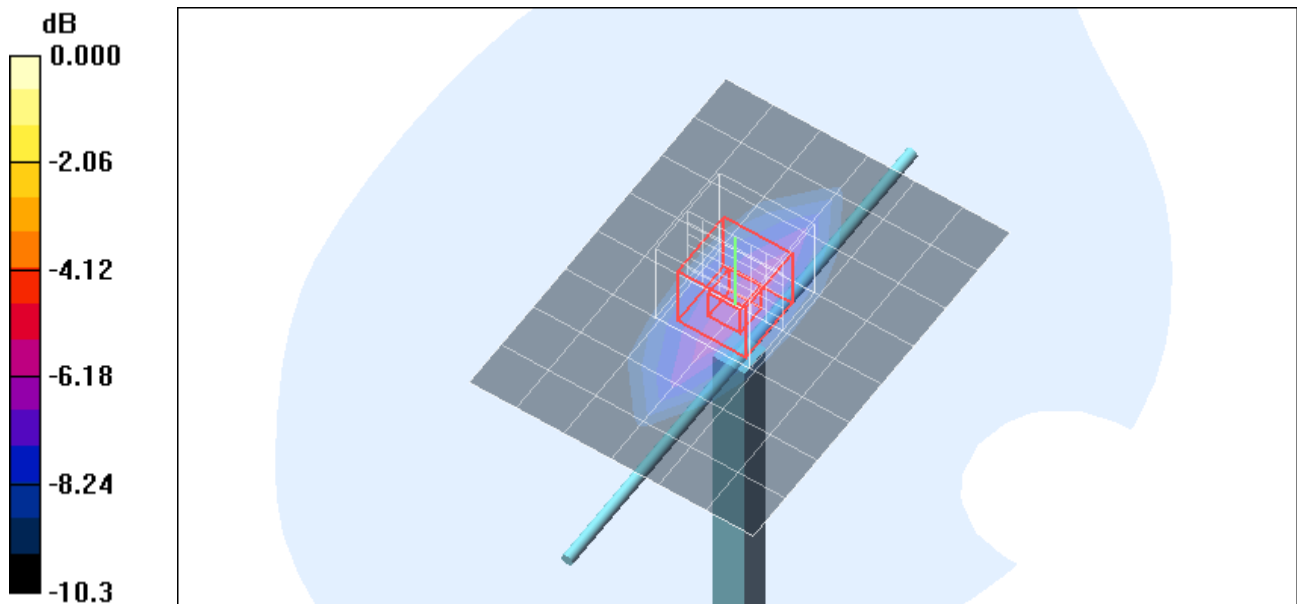
Reference Value = 55.2 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 14.7 W/kg

**SAR(1 g) = 9.82 mW/g; SAR(10 g) = 6.44 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 11.5 mW/g



0 dB = 11.5mW/g

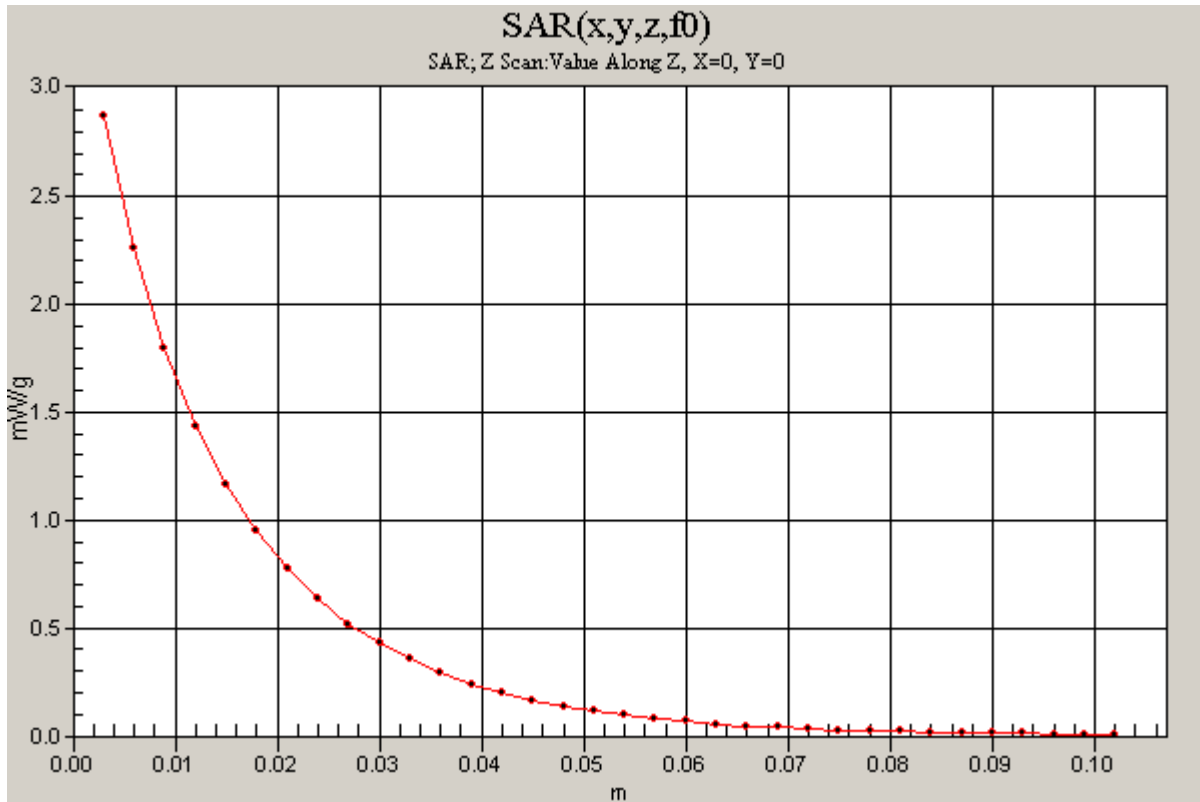
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### System Performance Check - D835V2

DUT: Dipole; Type: D835V2; Serial: 4d002

Communication System: System Check Signal - CW; Frequency: 835 MHz; Duty Cycle: 1:1

**d=15mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 2.87 mW/g



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### System Performance Check - D835V2

DUT: Dipole; Type: D835V2; Serial: 4d002

Communication System: System Check Signal - CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.871 \text{ mho/m}$ ;  $\epsilon_r = 43.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(8.72, 8.72, 8.72); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=15mm, Pin=250mW/Area Scan (7x9x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.74 mW/g

**d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

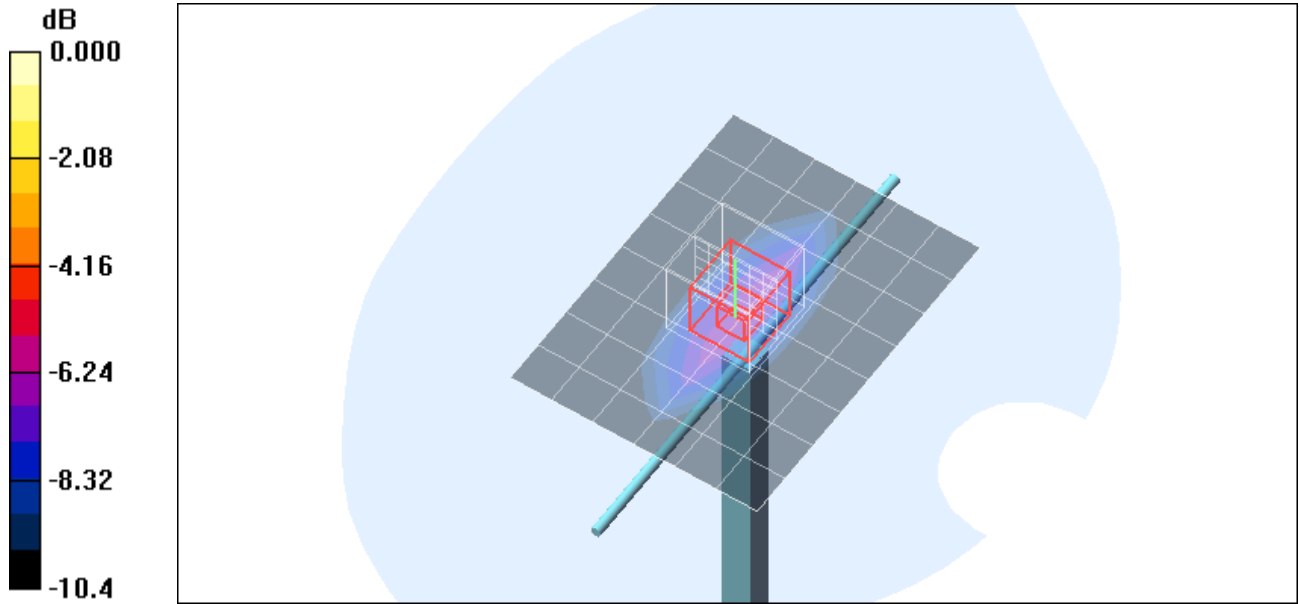
Reference Value = 56.2 V/m; Power Drift = -0.063 dB

Peak SAR (extrapolated) = 14.1 W/kg

**SAR(1 g) = 9.32 mW/g; SAR(10 g) = 6.11 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 10.9 mW/g



0 dB = 10.9mW/g

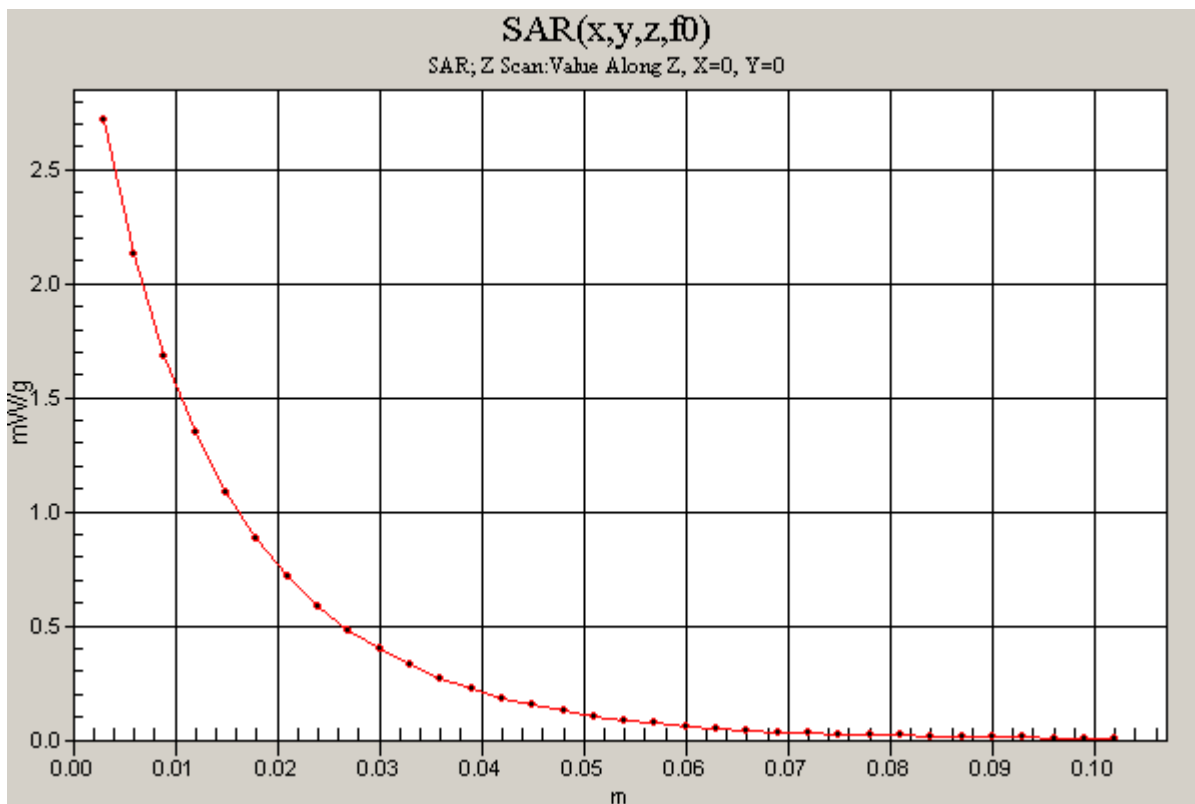
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### System Performance Check - D835V2

DUT: Dipole; Type: D835V2; Serial: 4d002

Communication System: System Check Signal - CW; Frequency: 835 MHz; Duty Cycle: 1:1

**d=15mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 2.72 mW/g



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## System Performance Check - D1900V2

DUT: Dipole; Type: D1900V2; Serial: 5d043

Communication System: System Check Signal - CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(6.85, 6.85, 6.85); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.96 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

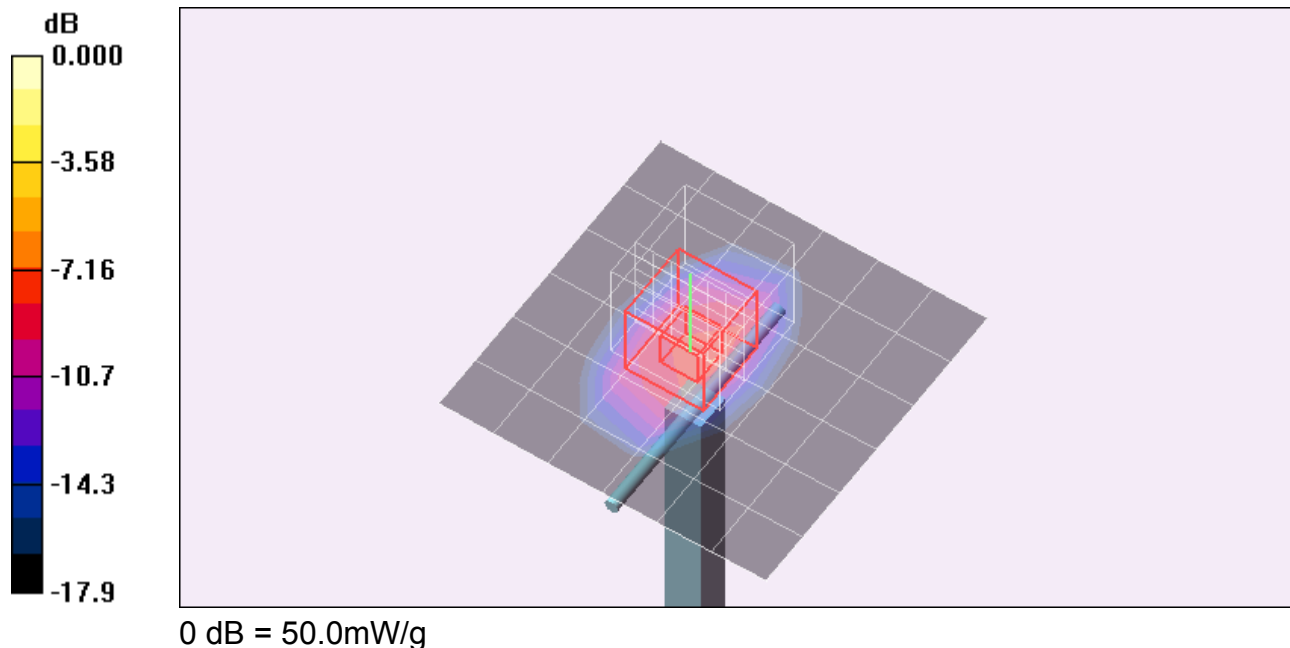
Reference Value = 90.5 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 71.8 W/kg

**SAR(1 g) = 39.4 mW/g; SAR(10 g) = 20.7 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 50.0 mW/g



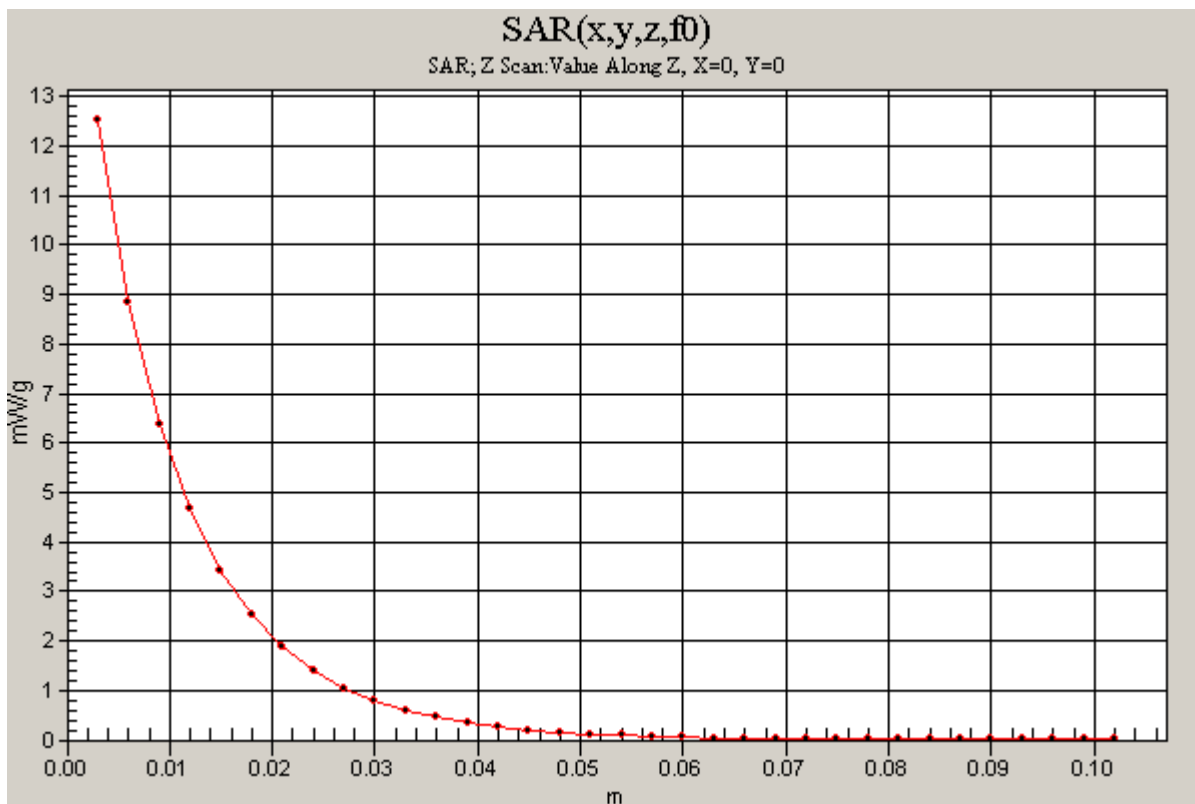
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### System Performance Check - D1900V2

DUT: Dipole; Type: D1900V2; Serial: 5d043

Communication System: System Check Signal - CW; Frequency: 1900 MHz; Duty Cycle: 1:1

**d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 12.5 mW/g





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## System Performance Check - D1900V2

DUT: Dipole; Type: D1900V2; Serial: 5d043

Communication System: System Check Signal - CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.4$  mho/m;  $\epsilon_r = 41.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.51, 7.51, 7.51); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

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

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

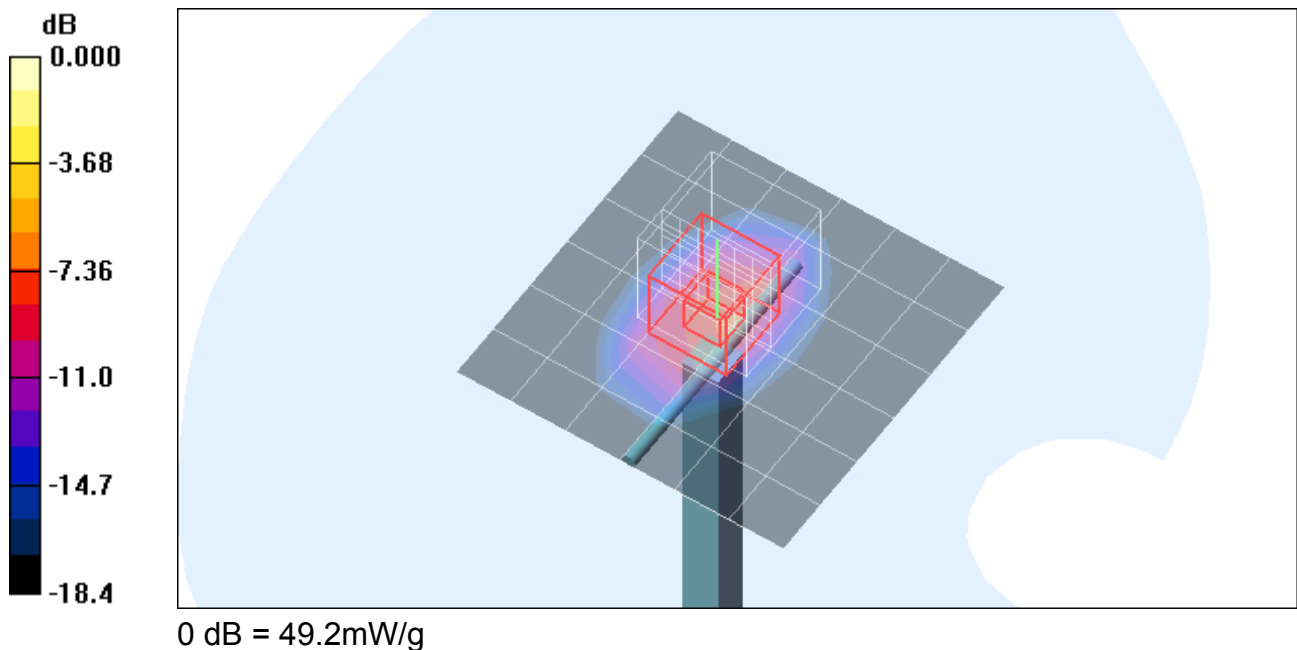
Reference Value = 94.4 V/m; Power Drift = -0.073 dB

Peak SAR (extrapolated) = 72.5 W/kg

**SAR(1 g) = 38.7 mW/g; SAR(10 g) = 20.1 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 49.2 mW/g



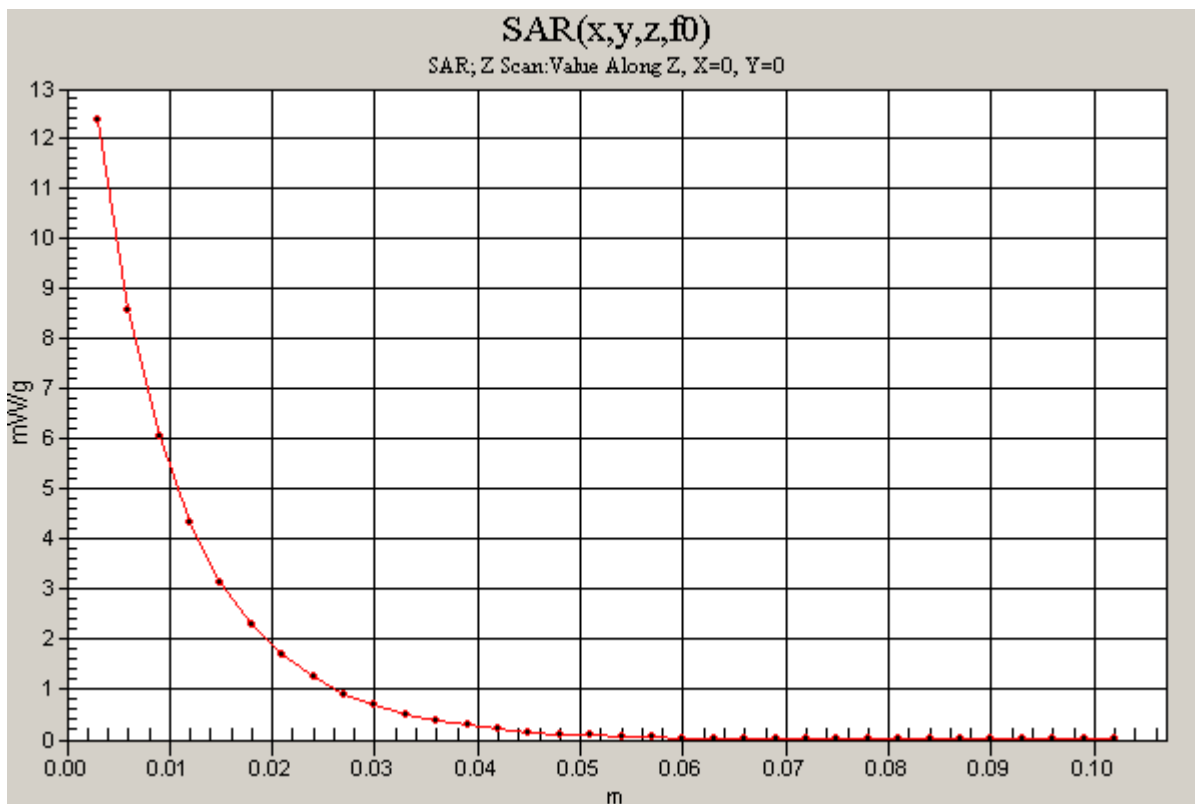
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### System Performance Check - D1900V2

DUT: Dipole; Type: D1900V2; Serial: 5d043

Communication System: System Check Signal - CW; Frequency: 1900 MHz; Duty Cycle: 1:1

**d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 12.4 mW/g



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## System Performance Check - D2450V2

DUT: Dipole ; Type: D2450V2; Serial: 748

Communication System: System Check Signal - CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.88$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(6.81, 6.81, 6.81); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 18.4 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

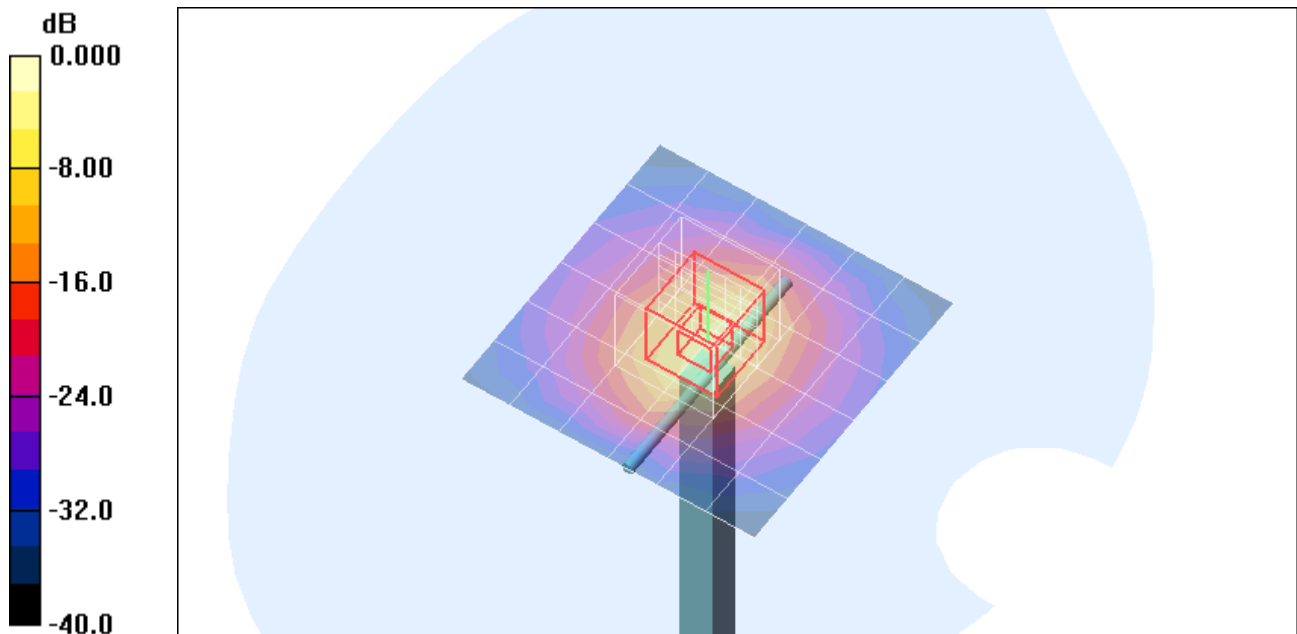
Reference Value = 99.5 V/m; Power Drift = -0.160 dB

Peak SAR (extrapolated) = 119.0 W/kg

**SAR(1 g) = 54.9 mW/g; SAR(10 g) = 25 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 72.8 mW/g



0 dB = 72.8mW/g

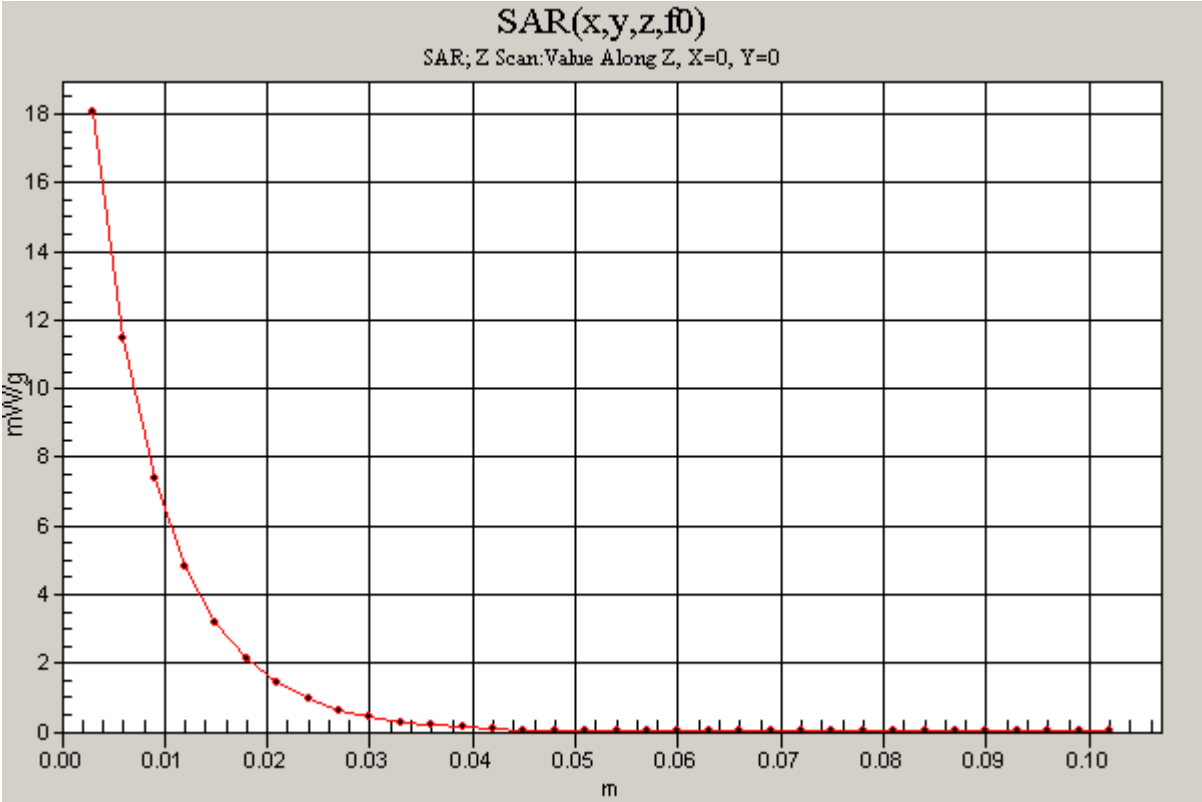
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### System Performance Check - D2450V2

DUT: Dipole ; Type: D2450V2; Serial: 748

Communication System: System Check Signal - CW; Frequency: 2450 MHz;Duty Cycle: 1:1

**d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 18.1 mW/g



Test Laboratory: Compliance Certification Services

## System Performance Check - D2450V2

DUT: Dipole ; Type: D2450V2; Serial: 748

Communication System: System Check Signal - CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.9$  mho/m;  $\epsilon_r = 52$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(6.48, 6.48, 6.48); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 17.4 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

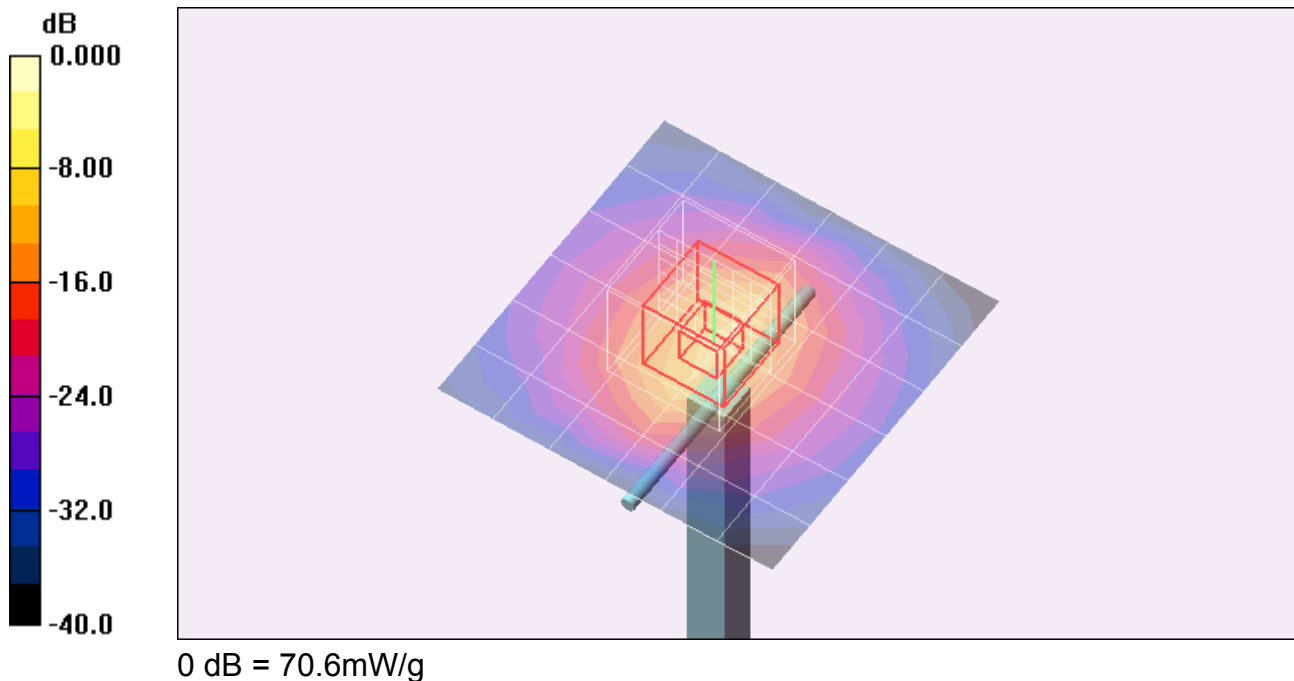
Reference Value = 96.7 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 108.5 W/kg

**SAR(1 g) = 53.7 mW/g; SAR(10 g) = 25.1 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 70.6 mW/g



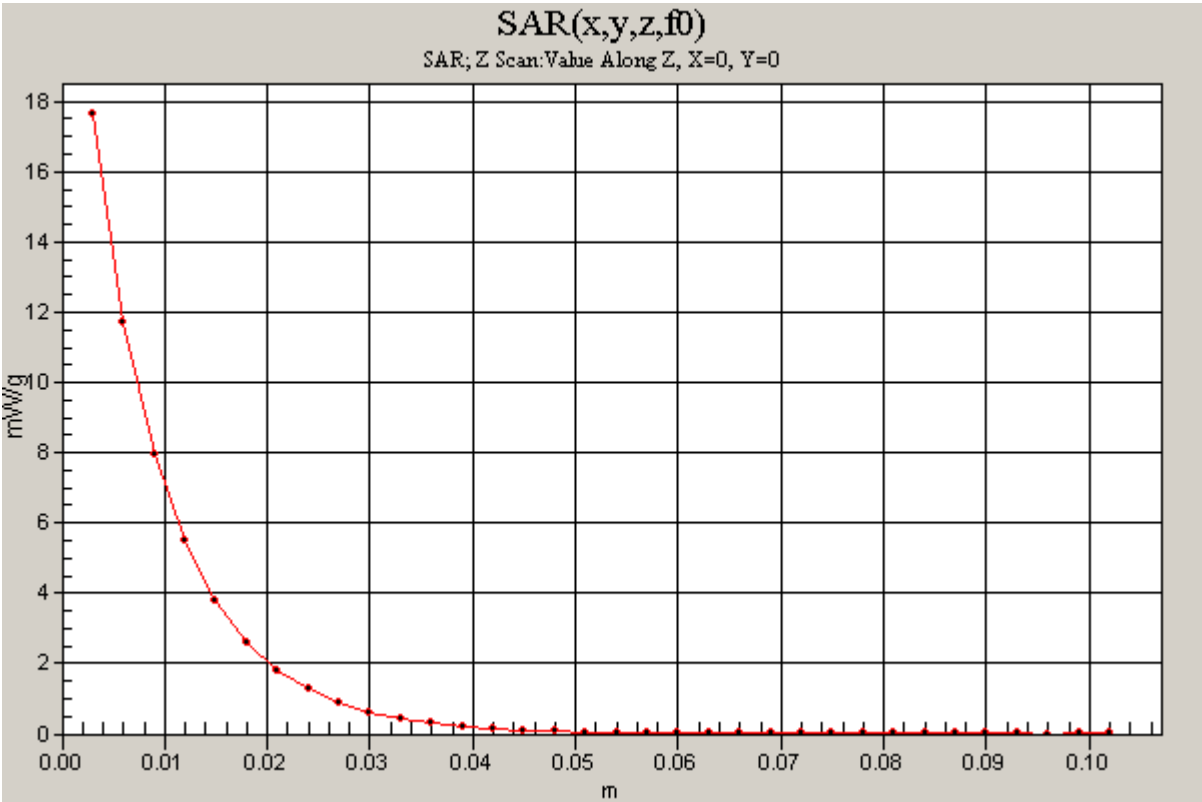
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### System Performance Check - D2450V2

DUT: Dipole ; Type: D2450V2; Serial: 748

Communication System: System Check Signal - CW; Frequency: 2450 MHz;Duty Cycle: 1:1

**d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 17.6 mW/g



Test Laboratory: Compliance Certification Services

### System Performance Check - D1900V2

DUT: Dipole; Type: D1900V2; Serial: 5d043

Communication System: System Check Signal - CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900 \text{ MHz}$ ;  $\sigma = 1.42 \text{ mho/m}$ ;  $\epsilon_r = 40.7$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(7.51, 7.51, 7.51); Calibrated: 3/23/2009
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: SAM 2 (Twin); Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

**d=10mm, Pin=250mW/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 9.40 mW/g

**d=10mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

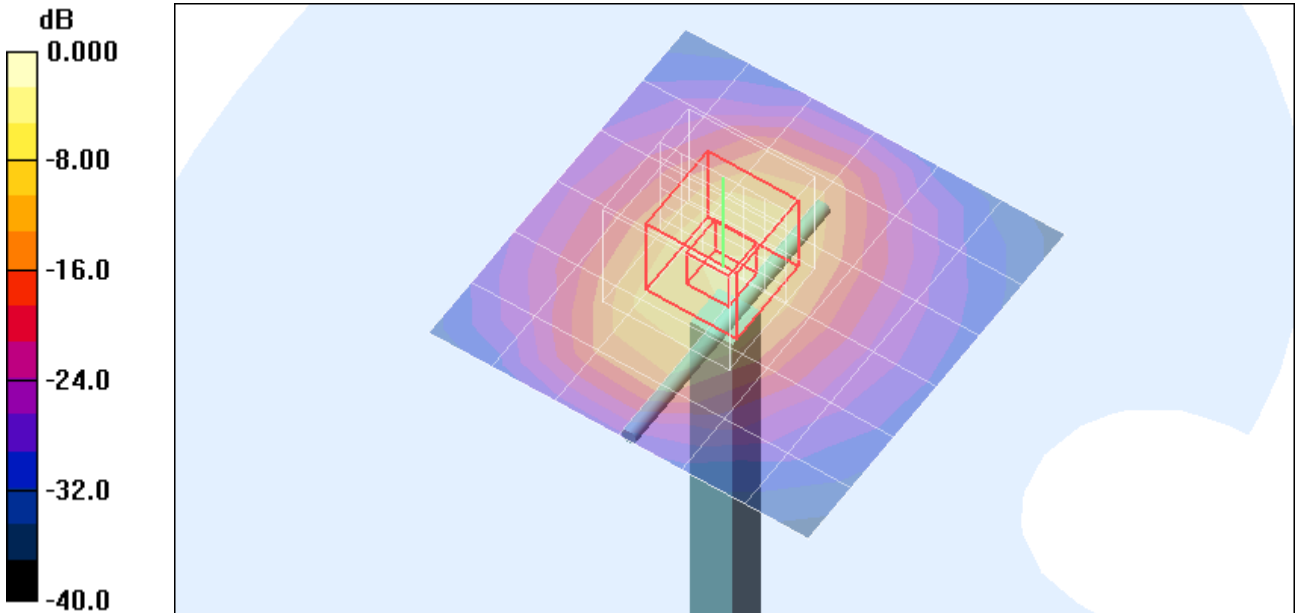
Reference Value = 92.4 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 71.9 W/kg

**SAR(1 g) = 38.3 mW/g; SAR(10 g) = 19.9 mW/g**

Normalized to target power = 1 W and actual power = 0.25 W

Maximum value of SAR (measured) = 48.7 mW/g



0 dB = 48.7mW/g

Test Laboratory: Compliance Certification Services

### System Performance Check - D1900V2

DUT: Dipole; Type: D1900V2; Serial: 5d043

Communication System: System Check Signal - CW; Frequency: 1900 MHz;Duty Cycle: 1:1

**d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 12.2 mW/g

