

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;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(7.91, 7.91, 7.91); Calibrated: 4/23/2008
- 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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (measured) = 14.6 mW/g

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

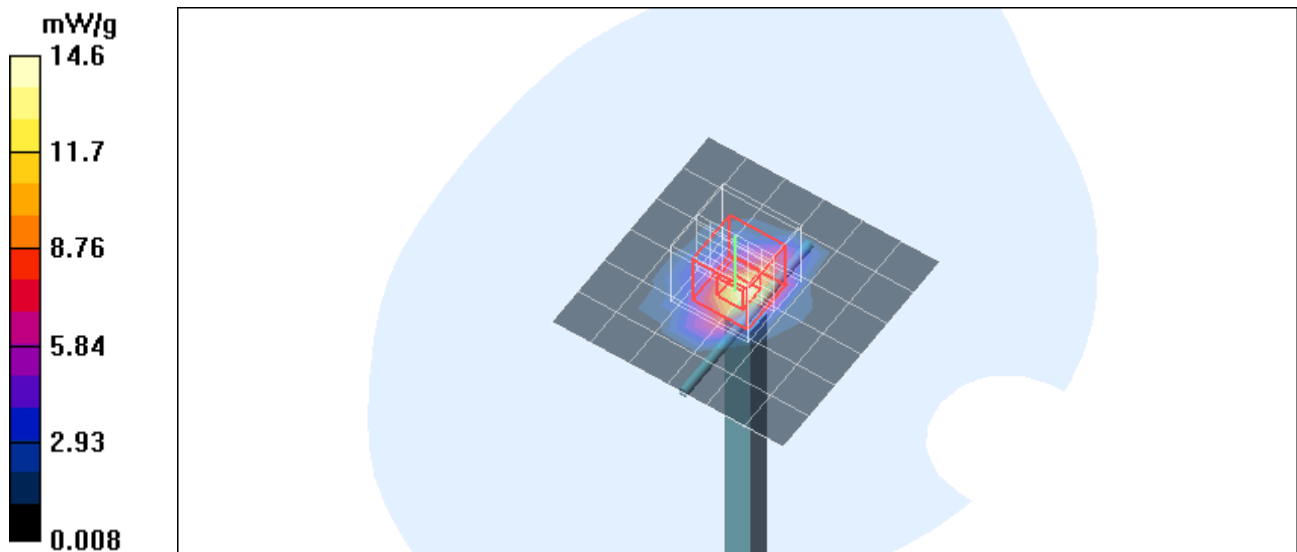
Reference Value = 87.3 V/m; Power Drift = 0.360 dB

Peak SAR (extrapolated) = 99.0 W/kg

**SAR(1 g) = 47.7 mW/g; SAR(10 g) = 21.8 mW/g**

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

Maximum value of SAR (measured) = 63.0 mW/g



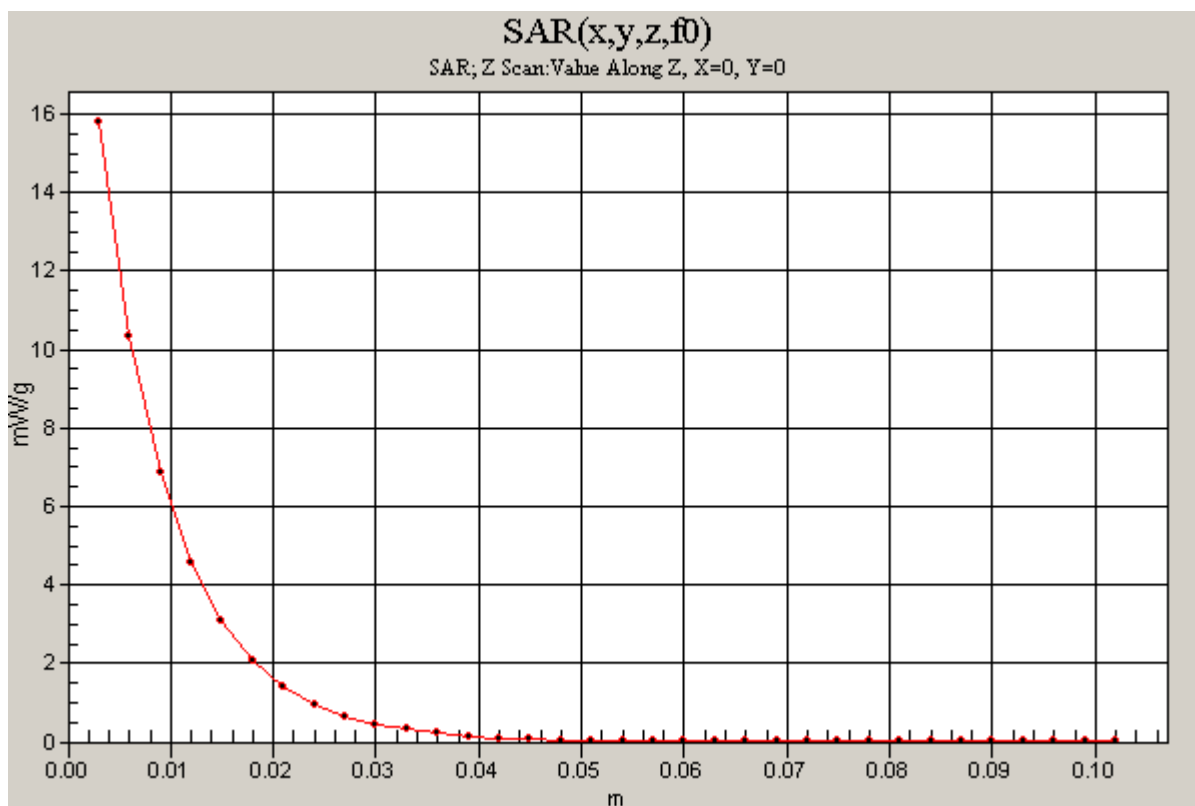
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## System Performance Check - D2450V2

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) = 15.8 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.21$  mho/m;  $\epsilon_r = 46.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(4.21, 4.21, 4.21); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**5.2 GHz d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 19.6 mW/g

**5.2 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

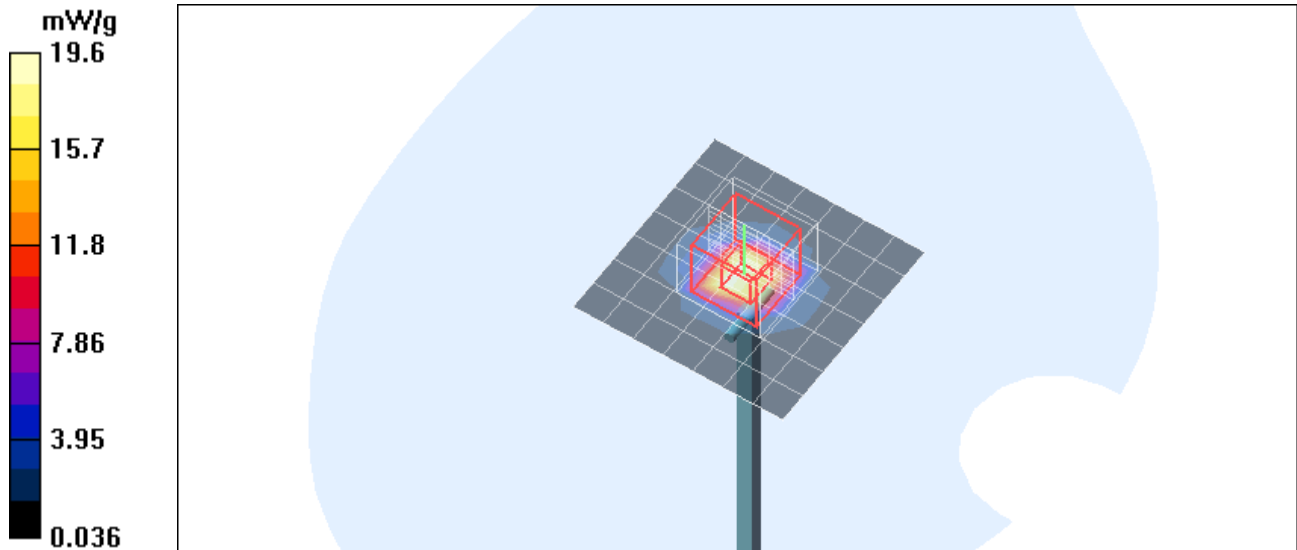
Reference Value = 79.6 V/m; Power Drift = -0.096 dB

Peak SAR (extrapolated) = 276.9 W/kg

**SAR(1 g) = 69.1 mW/g; SAR(10 g) = 19.3 mW/g**

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

Maximum value of SAR (measured) = 120.6 mW/g



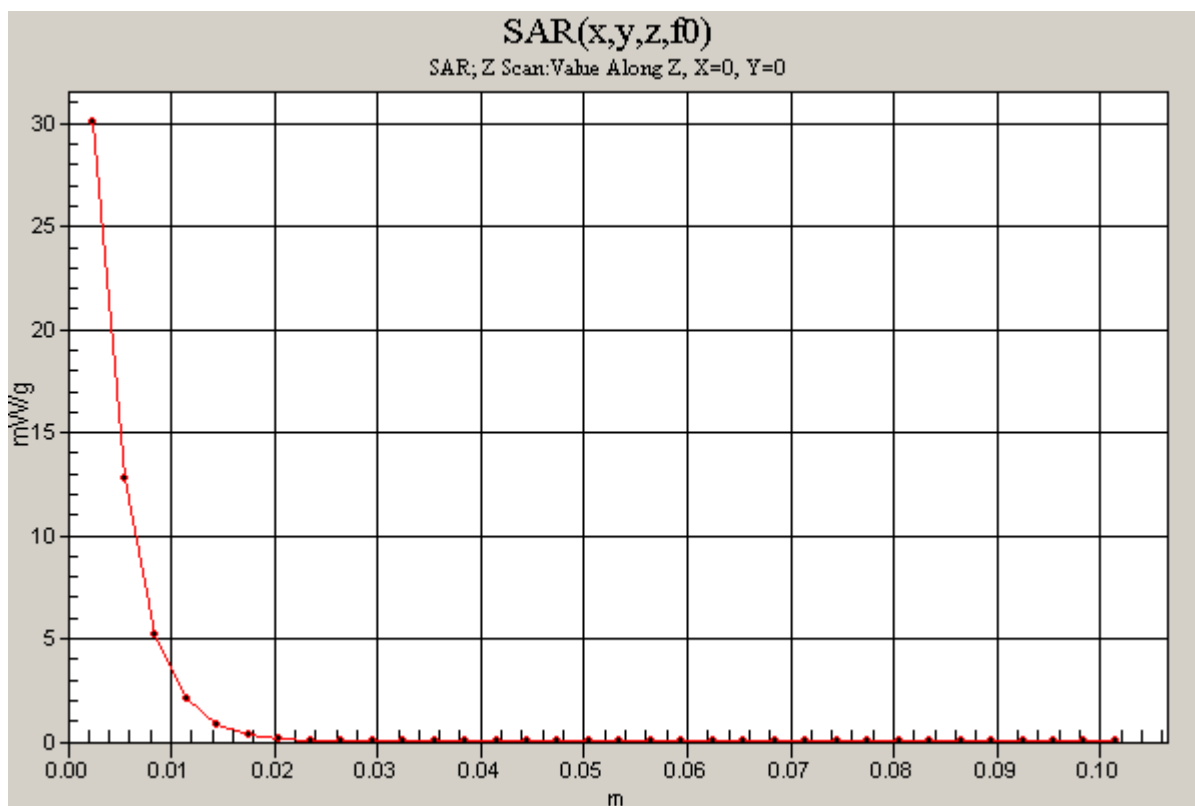
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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5200 MHz; Duty Cycle: 1:1

**5.2 GHz d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 30.1 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.74$  mho/m;  $\epsilon_r = 46$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(3.99, 3.99, 3.99); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**5.5 GHz d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 22.8 mW/g

**5.5 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

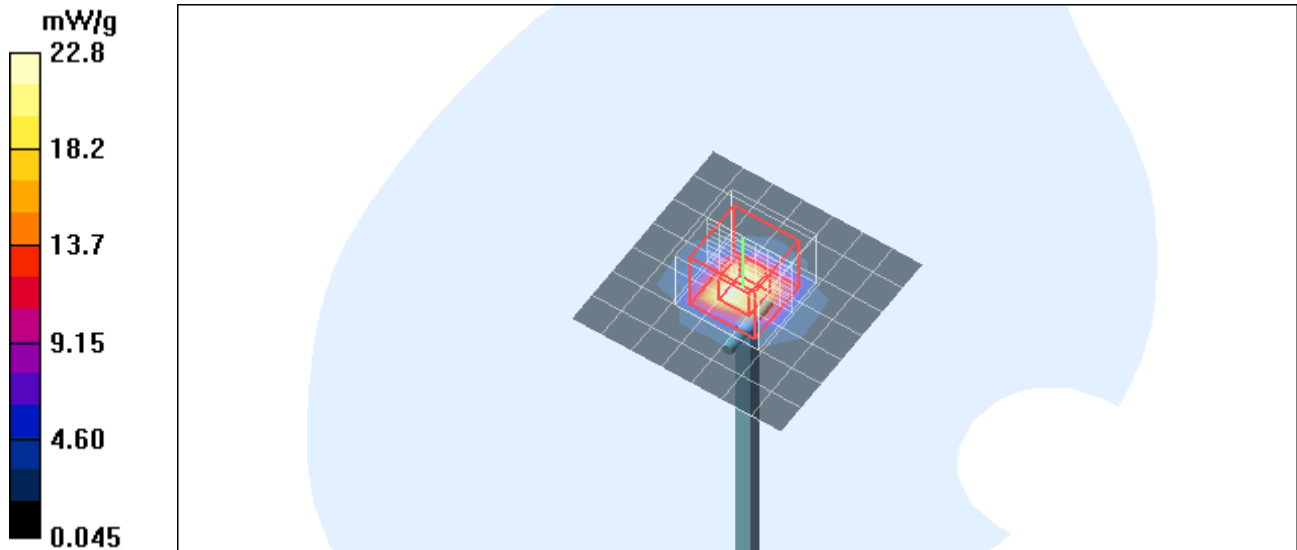
Reference Value = 82.6 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 344.2 W/kg

**SAR(1 g) = 79.7 mW/g; SAR(10 g) = 22.1 mW/g**

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

Maximum value of SAR (measured) = 139.3 mW/g



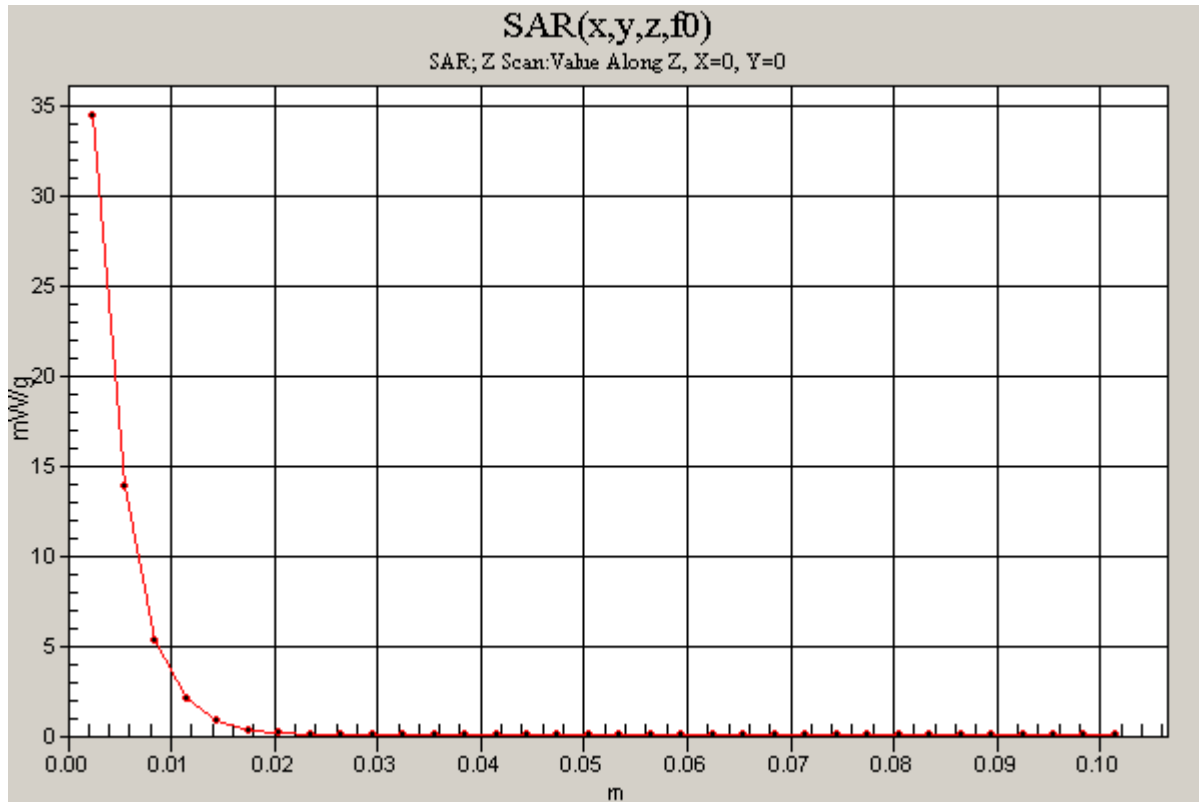
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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5500 MHz; Duty Cycle: 1:1

**5.5 GHz d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 34.4 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.01$  mho/m;  $\epsilon_r = 45$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(3.7, 3.7, 3.7); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**5.8 GHz d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 20.6 mW/g

**5.8 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

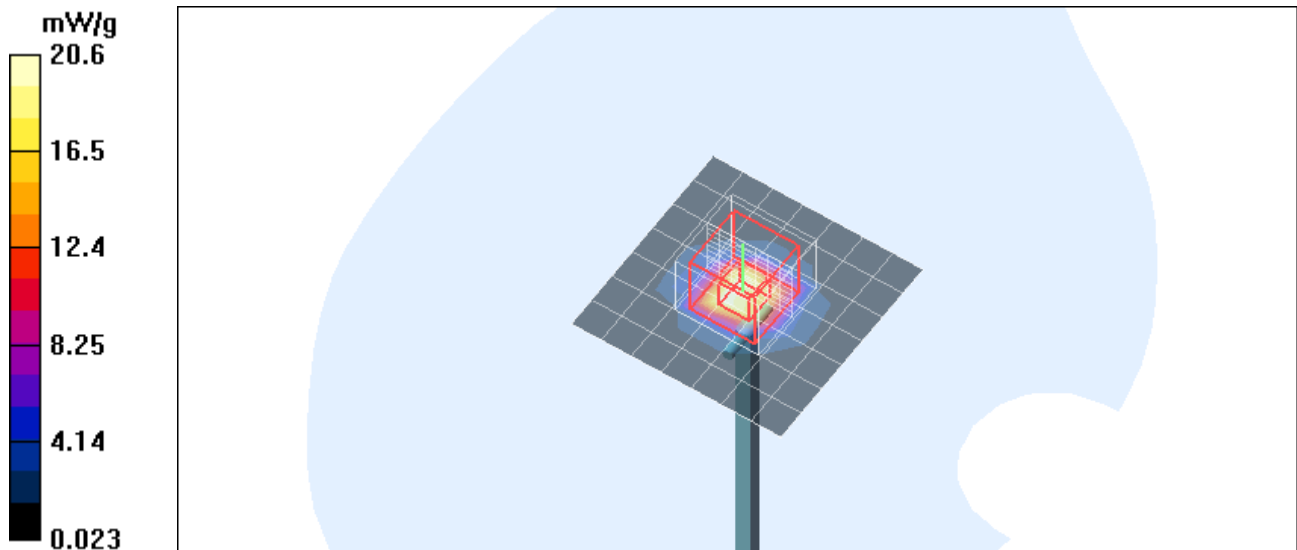
Reference Value = 77.0 V/m; Power Drift = 0.069 dB

Peak SAR (extrapolated) = 321.5 W/kg

**SAR(1 g) = 72.7 mW/g; SAR(10 g) = 20.3 mW/g**

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

Maximum value of SAR (measured) = 129.8 mW/g



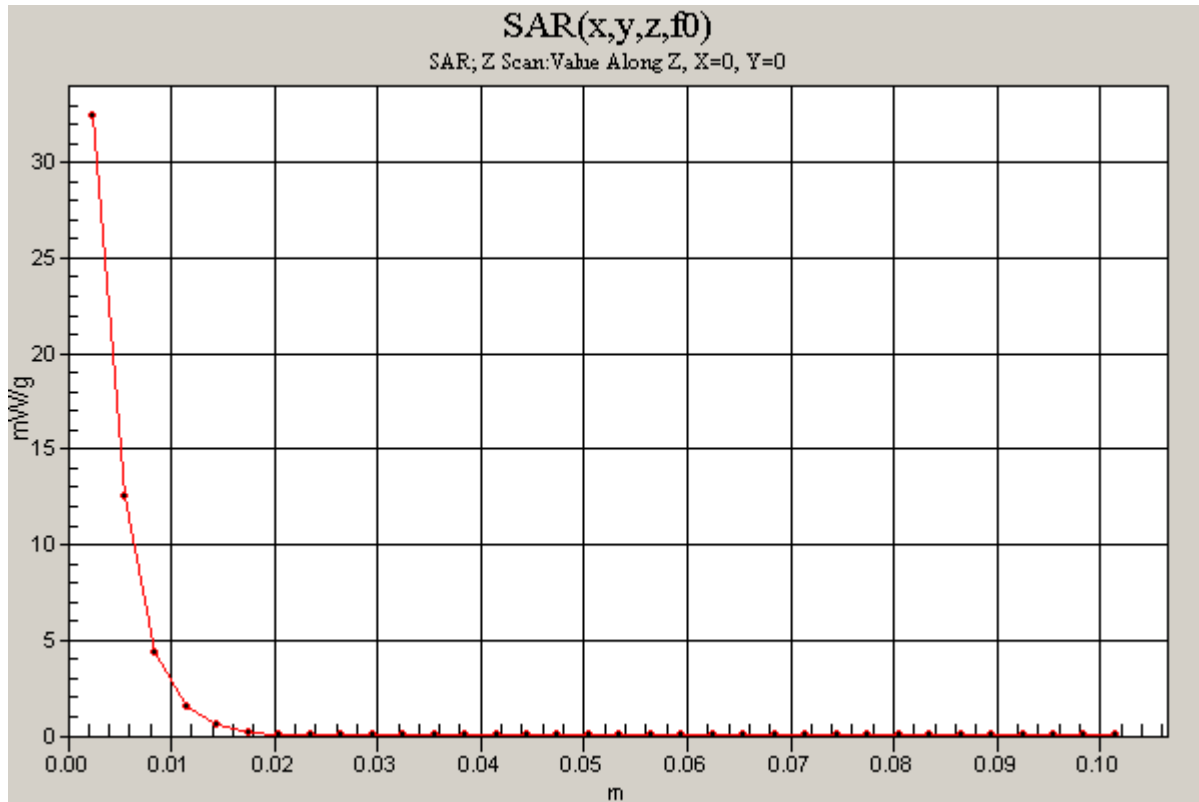
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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5800 MHz; Duty Cycle: 1:1

**5.8 GHz d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 32.4 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5200 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5200$  MHz;  $\sigma = 5.44$  mho/m;  $\epsilon_r = 45.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(4.21, 4.21, 4.21); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**5.2 GHz d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 24.3 mW/g

**5.2 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

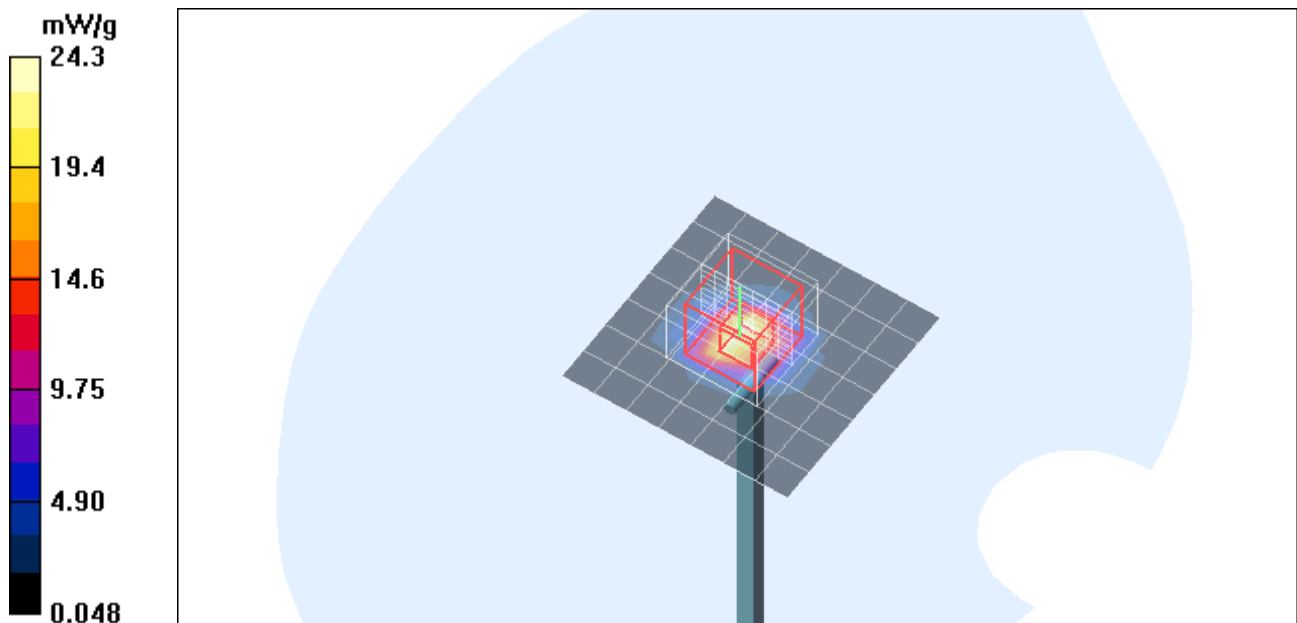
Reference Value = 79.8 V/m; Power Drift = 0.188 dB

Peak SAR (extrapolated) = 305.4 W/kg

**SAR(1 g) = 74.5 mW/g; SAR(10 g) = 20.9 mW/g**

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

Maximum value of SAR (measured) = 132.2 mW/g



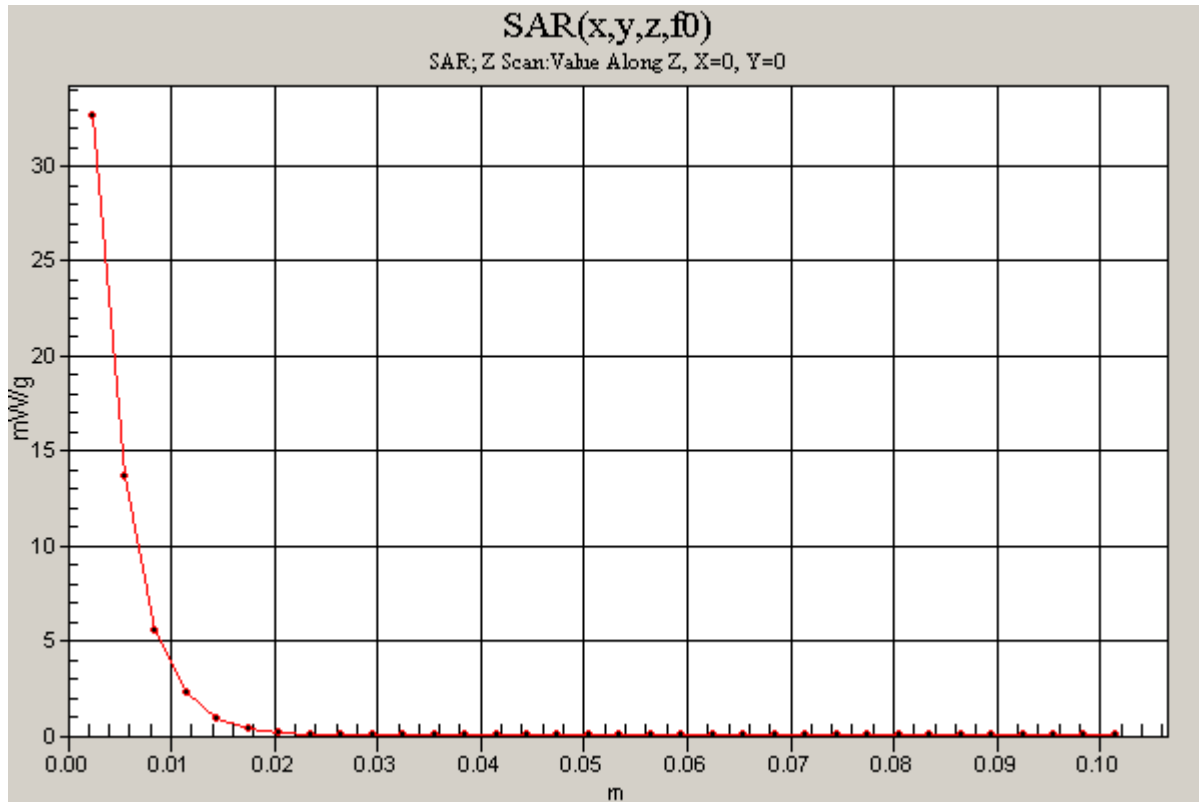
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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5200 MHz; Duty Cycle: 1:1

**5.2 GHz d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 32.6 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5500 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5500$  MHz;  $\sigma = 5.67$  mho/m;  $\epsilon_r = 44.7$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(3.99, 3.99, 3.99); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**5.5 GHz d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 26.2 mW/g

**5.5 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

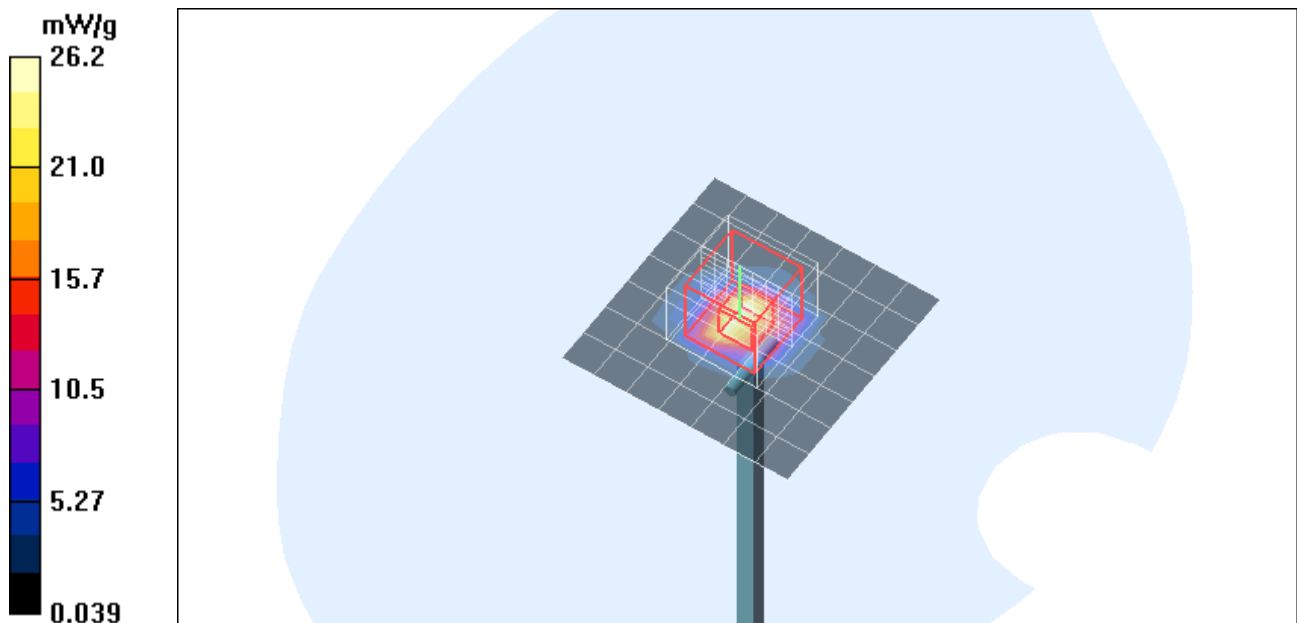
Reference Value = 80.9 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 351.9 W/kg

**SAR(1 g) = 78.3 mW/g; SAR(10 g) = 21.7 mW/g**

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

Maximum value of SAR (measured) = 137.0 mW/g



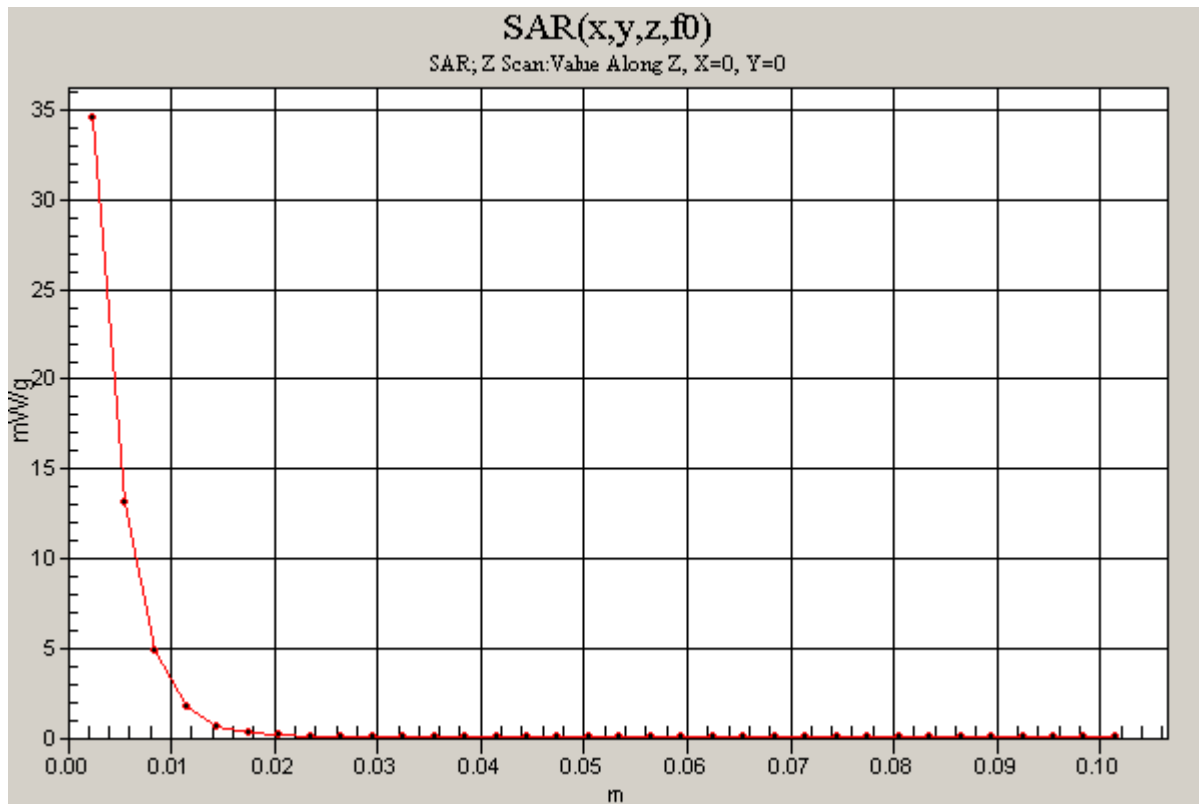
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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5500 MHz; Duty Cycle: 1:1

**5.5 GHz d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 34.6 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 5800$  MHz;  $\sigma = 6.25$  mho/m;  $\epsilon_r = 44.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 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: EX3DV3 - SN3531; ConvF(3.7, 3.7, 3.7); Calibrated: 4/23/2008
- Sensor-Surface: 2.5mm (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 71; Postprocessing SW: SEMCAD, V1.8 Build 184

**5.8 GHz d=10mm, Pin=250mW/Area Scan (8x8x1):** Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 25.0 mW/g

**5.8 GHz d=10mm, Pin=250mW/Zoom Scan (8x8x10)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

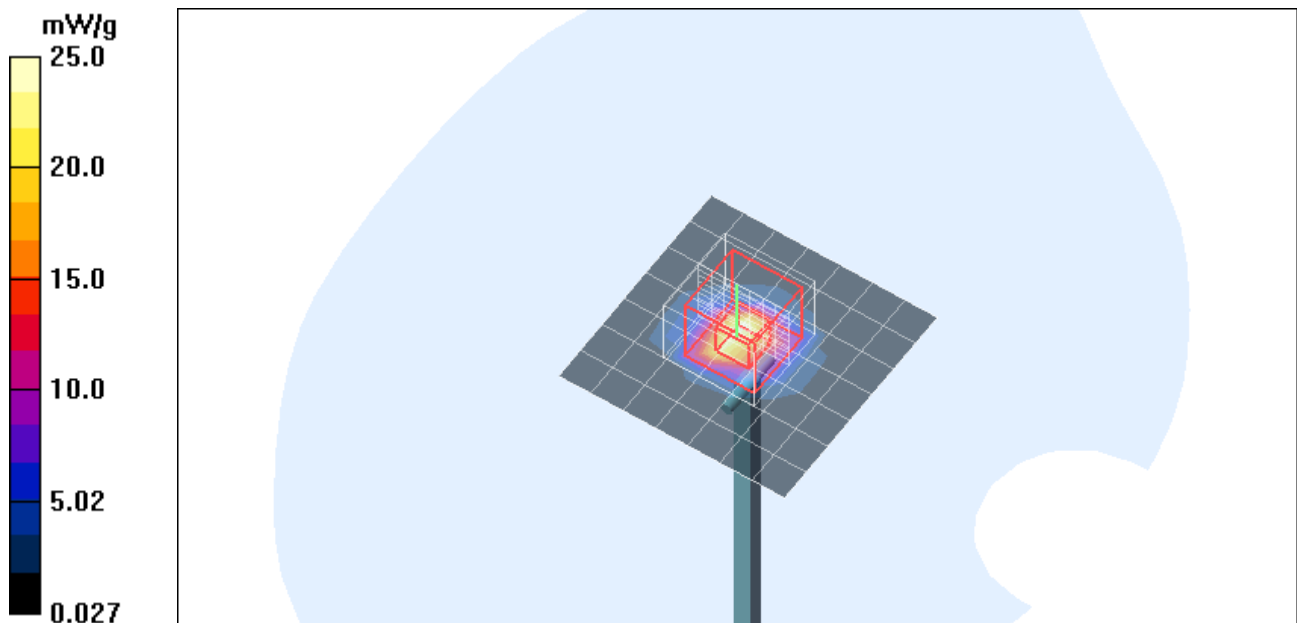
Reference Value = 74.8 V/m; Power Drift = 0.254 dB

Peak SAR (extrapolated) = 347.0 W/kg

**SAR(1 g) = 74.7 mW/g; SAR(10 g) = 20.8 mW/g**

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

Maximum value of SAR (measured) = 132.7 mW/g



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## System Performance Check - D5GHzV2

DUT: Dipole 5200-5800MHz; Type: D5GHzV2; Serial: 1003

Communication System: System Check Signal - CW; Frequency: 5800 MHz; Duty Cycle: 1:1

**5.8 GHz d=10mm, Pin=250mW/Z Scan (1x1x34):** Measurement grid: dx=20mm, dy=20mm, dz=3mm  
Maximum value of SAR (measured) = 33.3 mW/g

