



Test Laboratory: Compliance Certification Services Inc.

## **System Performance Head Check-D850\_2011.06.23**

**DUT: Dipole 850 MHz D835V2; Type: D835V2; SN:4d114**

Communication System: CW; Frequency: 850 MHz

Medium parameters used:  $f = 850 \text{ MHz}$ ;  $\sigma = 0.91 \text{ mho/m}$ ;  $\epsilon_r = 42.05$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3755; ConvF(9.07, 9.07, 9.07); Calibrated: 1/20/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 1/11/2011
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**System Performance Check at Frequencies below 1 GHz/d=15mm, Pin=250 mW, dist=3.0mm (EX-Probe)/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 3.51mW/g

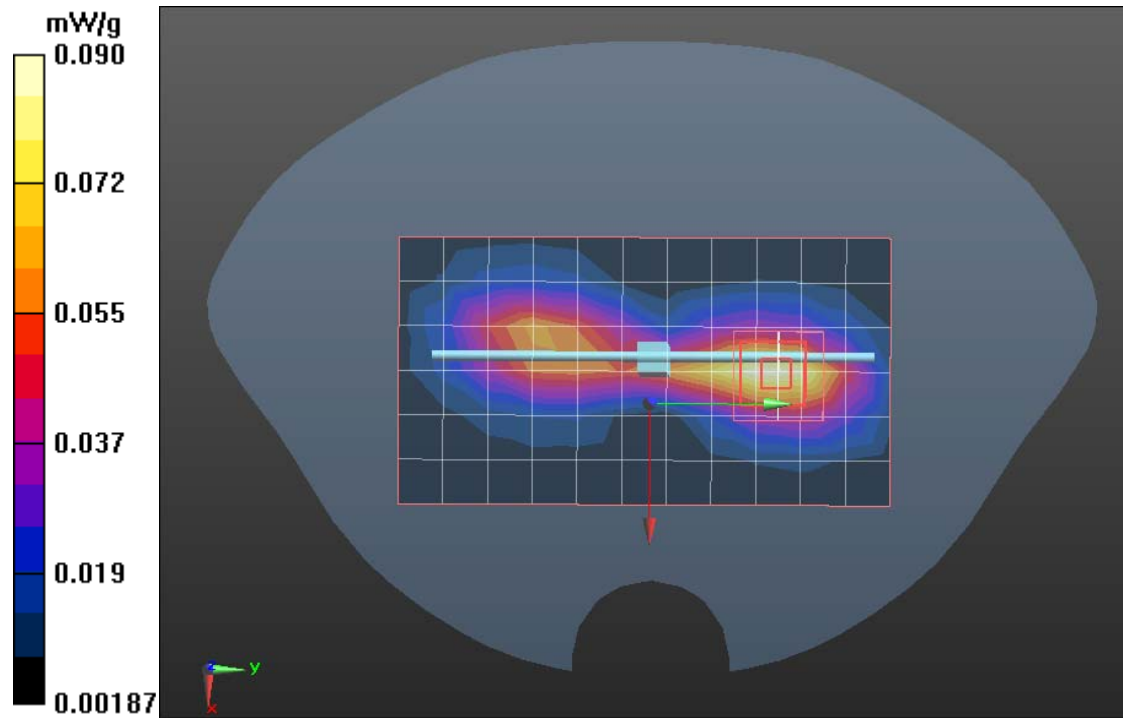
**System Performance Check at Frequencies below 1 GHz/d=15mm, Pin=250 mW, dist=3.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.77 V/m; Power Drift = 0.00052 dB

Peak SAR (extrapolated) = 3.35W/kg

**SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.57 mW/g**

Maximum value of SAR (measured) = 3.53 mW/g





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## **SystemPerformance Bobby Check-D850\_2011.06.23**

**DUT: Dipole 850 MHz D835V2; Type: D835V2; SN:4d114**

Communication System: CW; Frequency: 850 MHz

Medium parameters used:  $f = 850 \text{ MHz}$ ;  $\sigma = 0.99 \text{ mho/m}$ ;  $\epsilon_r = 55.69$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

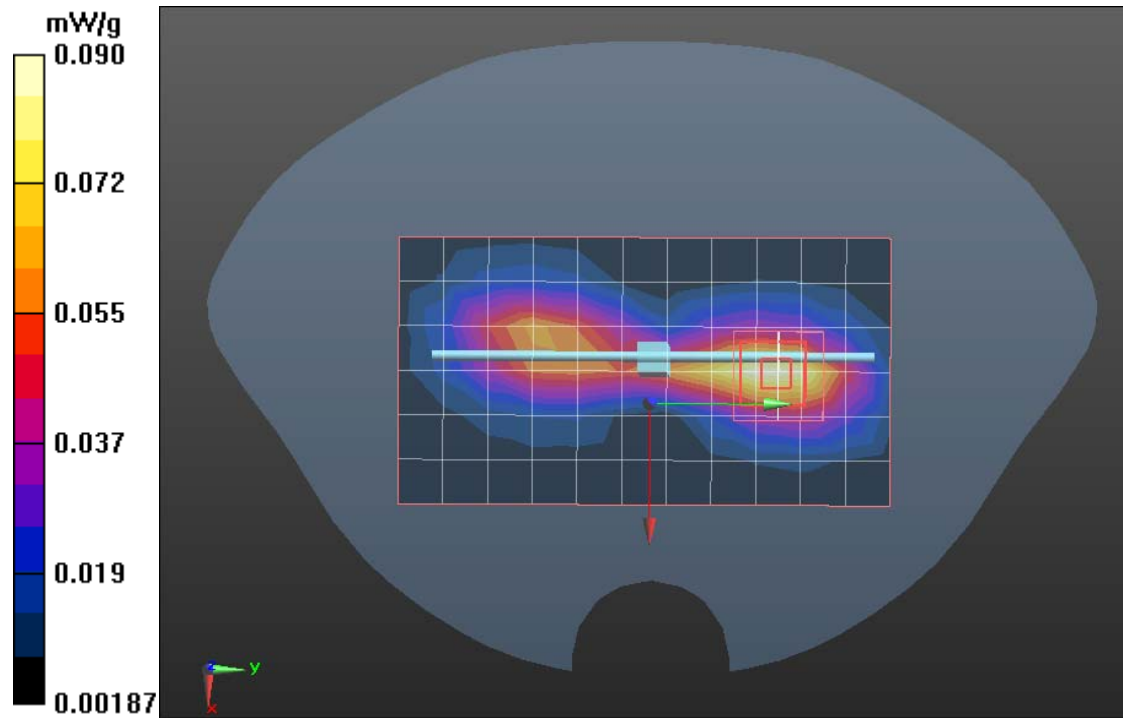
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3755; ConvF(9.07, 9.07, 9.07); Calibrated: 1/20/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 1/11/2011
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**System Performance Check at Frequencies below 1 GHz/d=15mm, Pin=250 mW, dist=3.0mm (EX-Probe)/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm  
Maximum value of SAR (measured) = 3.50mW/g

**System Performance Check at Frequencies below 1 GHz/d=15mm, Pin=250 mW, dist=3.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 58.74 V/m; Power Drift = 0.0021 dB  
Peak SAR (extrapolated) = 3.37 W/kg  
**SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.68 mW/g**  
Maximum value of SAR (measured) = 3.47 mW/g





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## **SystemPerformance Head Check-D1900\_2011.06.23**

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d136**

Communication System: CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 40.39$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3755; ConvF(8.17, 8.17, 8.17); Calibrated: 1/20/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 1/11/2011
- Phantom: SAM1; Type: SAM; Serial: 1609
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe) 2/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.139 mW/g

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe) 2/Zoom Scan (7x7x7)**

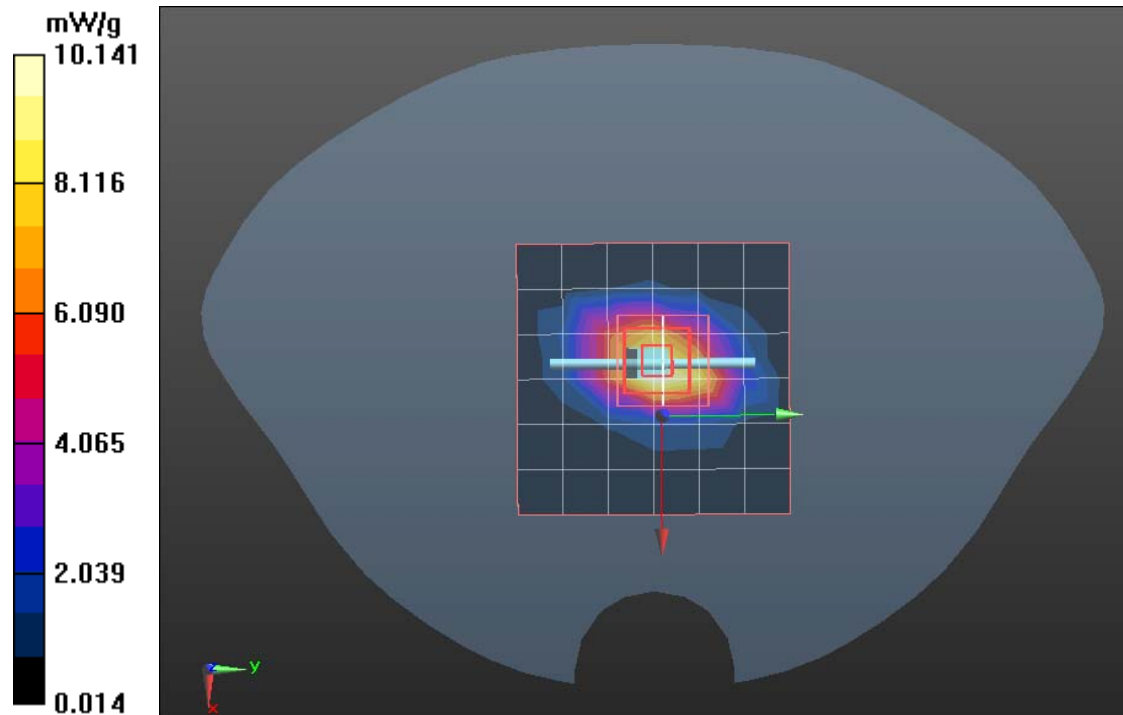
**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 104.61 V/m; Power Drift = 0.0032 dB

Peak SAR (extrapolated) = 16.549 W/kg

**SAR(1 g) = 10.40 mW/g; SAR(10 g) = 5.39 mW/g**

Maximum value of SAR (measured) = 10.919 mW/g





Test Laboratory: Compliance Certification Services Inc.

## **System Performance Bobby Check-D1900\_2011.06.23**

**DUT: Dipole 1900 MHz D1900V2; Type: D1900V2; Serial: D1900V2 - SN:5d136**

Communication System: CW; Frequency: 1900 MHz

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 53.96$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3755; ConvF(8.17, 8.17, 8.17); Calibrated: 1/20/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 1/11/2011
- Phantom: SAM1; Type: SAM; Serial: 1609
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe) 2/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.204 mW/g

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe) 2/Zoom Scan (7x7x7)**

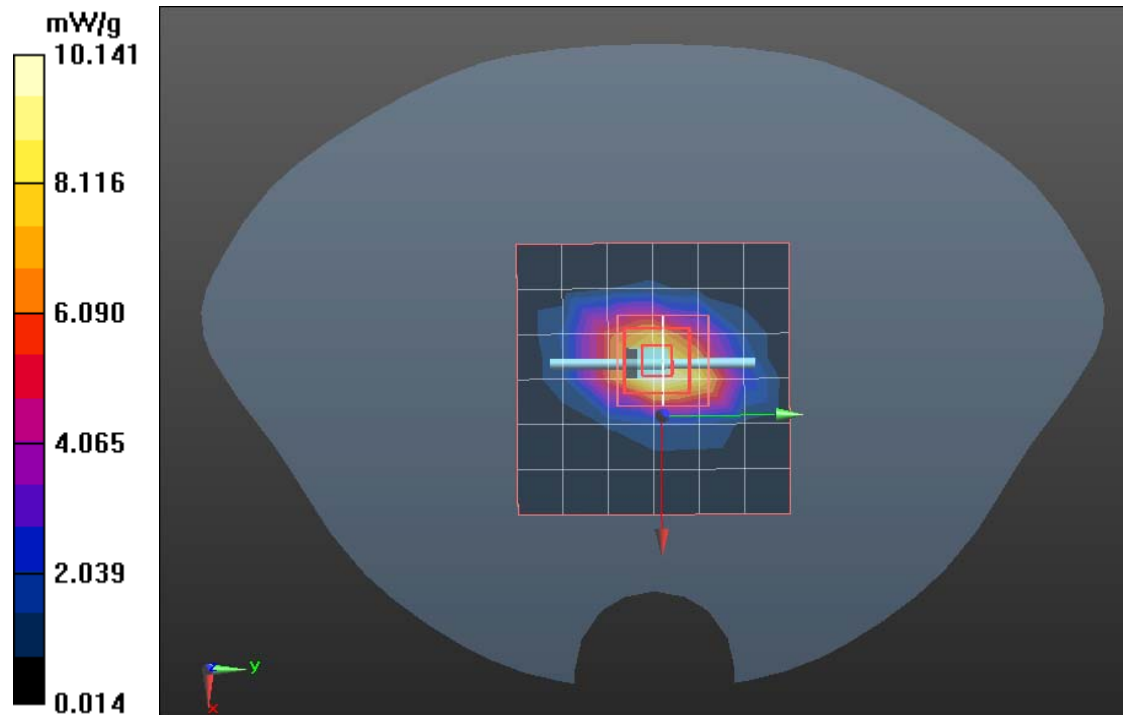
**(7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 104.3 V/m; Power Drift = 0.0001 dB

Peak SAR (extrapolated) = 16.529 W/kg

**SAR(1 g) = 10.33 mW/g; SAR(10 g) = 5.32 mW/g**

Maximum value of SAR (measured) = 10.953 mW/g







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## **SystemPerformanceHeadCheck-D2450\_2011.06.23**

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; SN:817**

Communication System: CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.83$  mho/m;  $\epsilon_r = 39.38$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

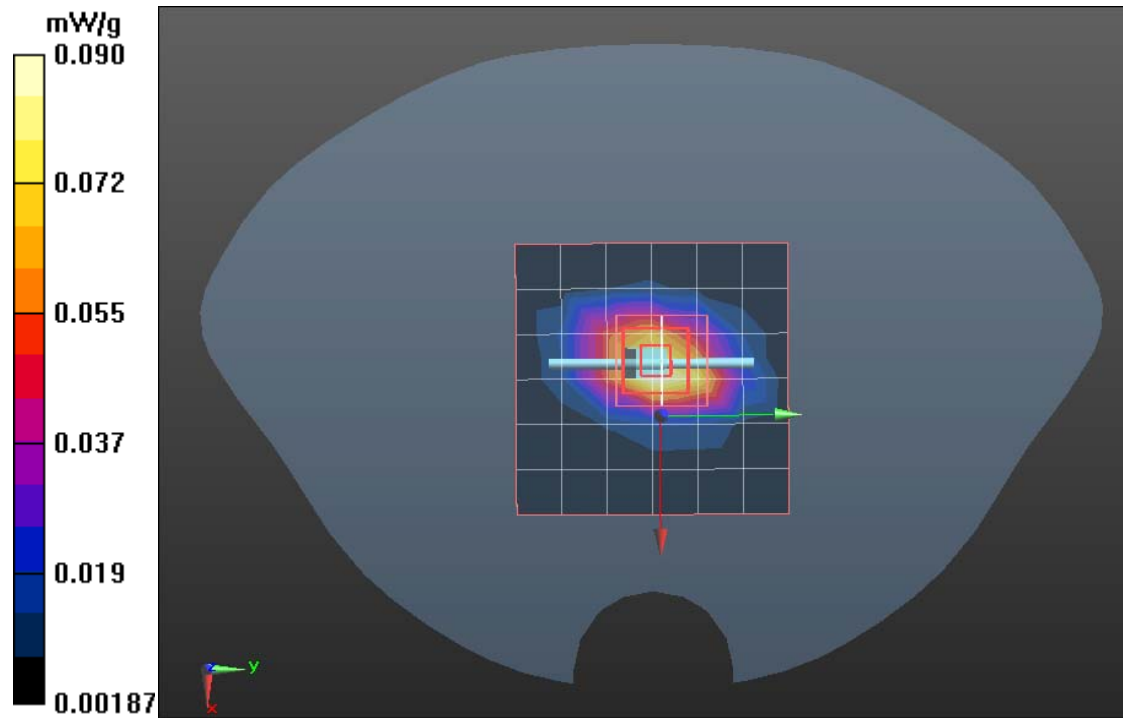
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3755; ConvF(9.07, 9.07, 9.07); Calibrated: 1/20/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 1/11/2011
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe)/Area Scan (7x12x1):** Measurement grid: dx=15mm, dy=15mm

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Reference Value = 103.55 V/m; Power Drift = 0.003 dB  
Peak SAR (extrapolated) = 27.671 W/kg  
**SAR(1 g) = 13.69 mW/g; SAR(10 g) = 6.38 mW/g**  
Maximum value of SAR (measured) = 17.409 mW/g





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## **System Performance Bobby Check-D2450\_2011.06.23**

**DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; SN:817**

Communication System: CW; Frequency: 2450 MHz

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.96$  mho/m;  $\epsilon_r = 52.79$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY5 Configuration:

- Probe: EX3DV4 - SN3755; ConvF(8.17, 8.17, 8.17); Calibrated: 1/20/2011
- Sensor-Surface: 3mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 1/11/2011
- Phantom: SAM1; Type: SAM; Serial: 1609
- Measurement SW: DASY52, Version 52.6 (1); SEMCAD X Version 14.4.2 (2595)

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe) 2/Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm

**System Performance Check at Frequencies above 1 GHz/d=10mm, Pin=250 mW, dist=3.0mm (EX-Probe) 2/Zoom Scan (7x7x7) (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 96.831V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 27.853W/kg

**SAR(1 g) = 13.37mW/g; SAR(10 g) = 6.19mW/g**

Maximum value of SAR (measured) = 17.413mW/g

