

Date/Time: 11/18/2013 11:48:39 AM

Test Laboratory: Intertek

File Name: [2.4GHz Dipole Validation 11_18_13.da52:1](#)

2.4GHz Dipole Validation 11_18_13

DUT: Dipole 2450 MHz D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, CW; Communication System Band: D2450 (2450.0 MHz);
Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 2.03 \text{ S/m}$; $\epsilon_r = 50.39$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV3 - SN3516; ConvF(7.92, 7.92, 7.92); Calibrated: 12/10/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn358; Calibrated: 9/11/2012
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Area Scan (4x7x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (measured) = 11.5 W/kg

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

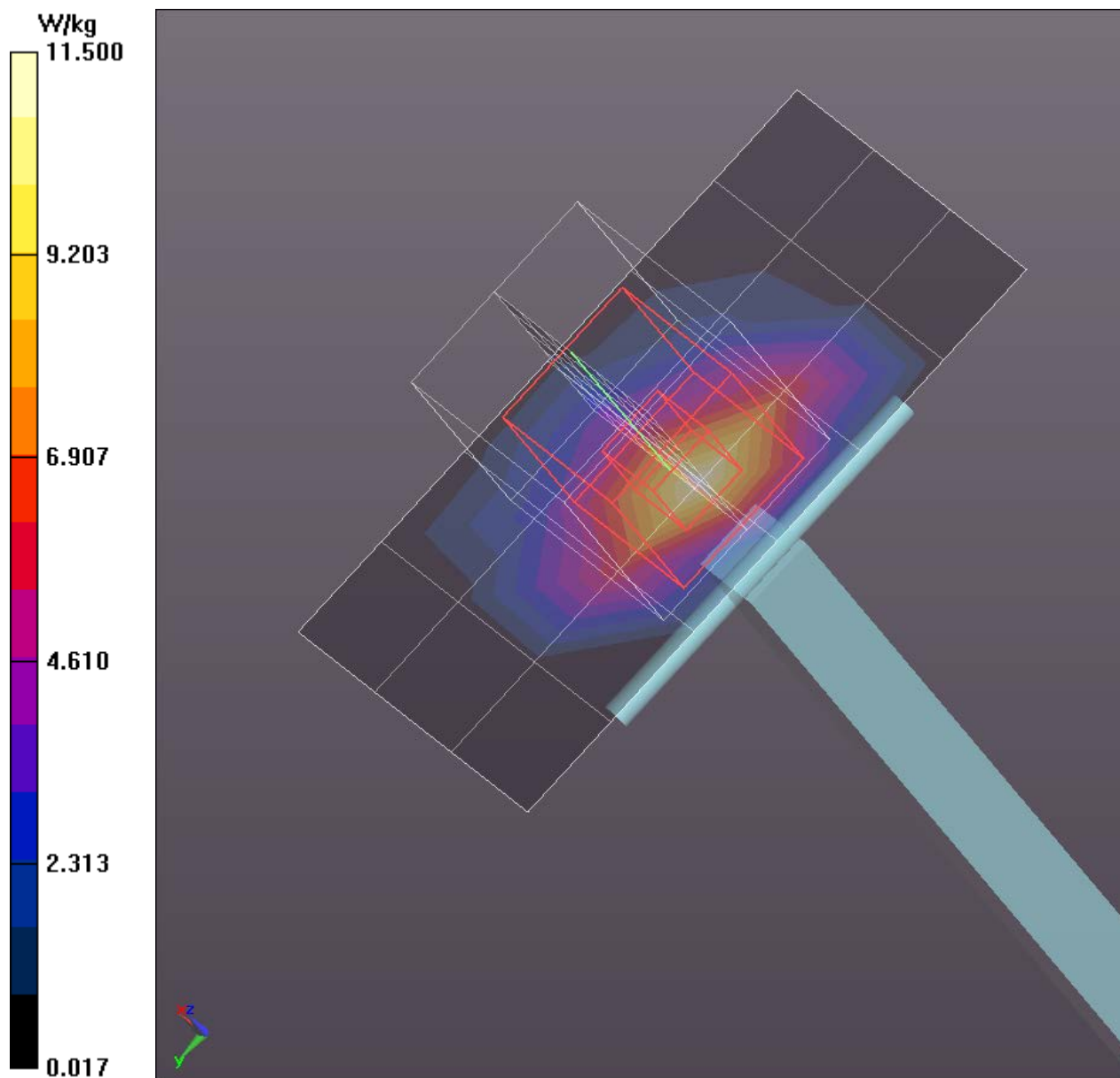
Reference Value = 78.236 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 104 W/kg

SAR(1 g) = 51.2 W/kg; SAR(10 g) = 23.8 W/kg

Normalized to target power = 1 W and actual power = 0.16028 W

Maximum value of SAR (measured) = 58.6 W/kg



Test Laboratory: Intertek

File Name: [2.4GHz Dipole Validation 11_20_13.da52:1](#)

2.4GHz Dipole Validation 11_20_13

DUT: Dipole 2450 MHz D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, CW; Communication System Band: D2450 (2450.0 MHz);
Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 2.03 \text{ S/m}$; $\epsilon_r = 50.39$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV3 - SN3516; ConvF(7.92, 7.92, 7.92); Calibrated: 12/10/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn358; Calibrated: 9/11/2012
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Area Scan (4x7x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (measured) = 11.1 W/kg

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

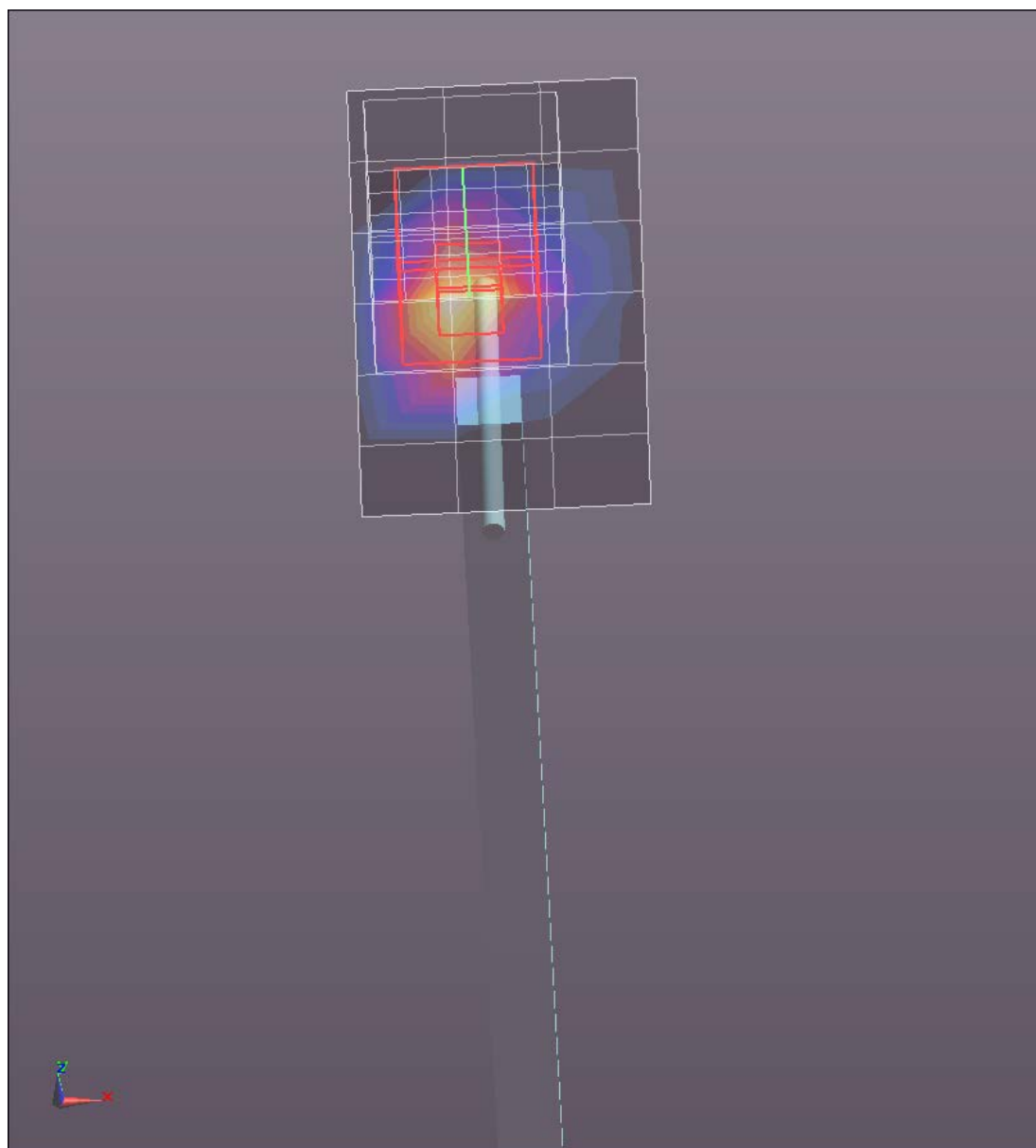
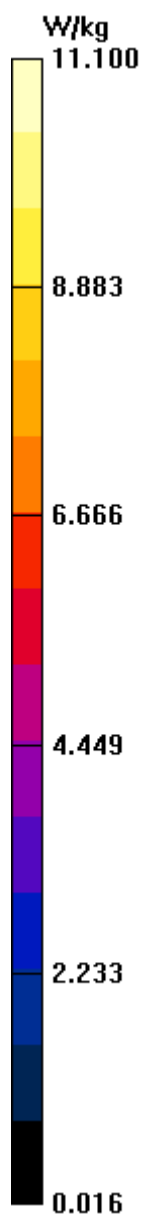
Reference Value = 77.244 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 100 W/kg

SAR(1 g) = 50.1 W/kg; SAR(10 g) = 23.5 W/kg

Normalized to target power = 1 W and actual power = 0.1599 W

Maximum value of SAR (measured) = 57.3 W/kg



Date/Time: 12/28/2013 9:51:51 AM

Test Laboratory: Intertek

File Name: [2.4GHz Dipole Validation 12-28-2013.da52:1](#)

2.4GHz Dipole Validation 12-28-2013

Procedure Notes:

DUT: Dipole 2450 MHz D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, CW; Communication System Band: D2450 (2450.0 MHz);
Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 50.39$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV3 - SN3516; ConvF(8.05, 8.05, 8.05); Calibrated: 12/13/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn358; Calibrated: 9/11/2012
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Area Scan (4x7x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.5 W/kg

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

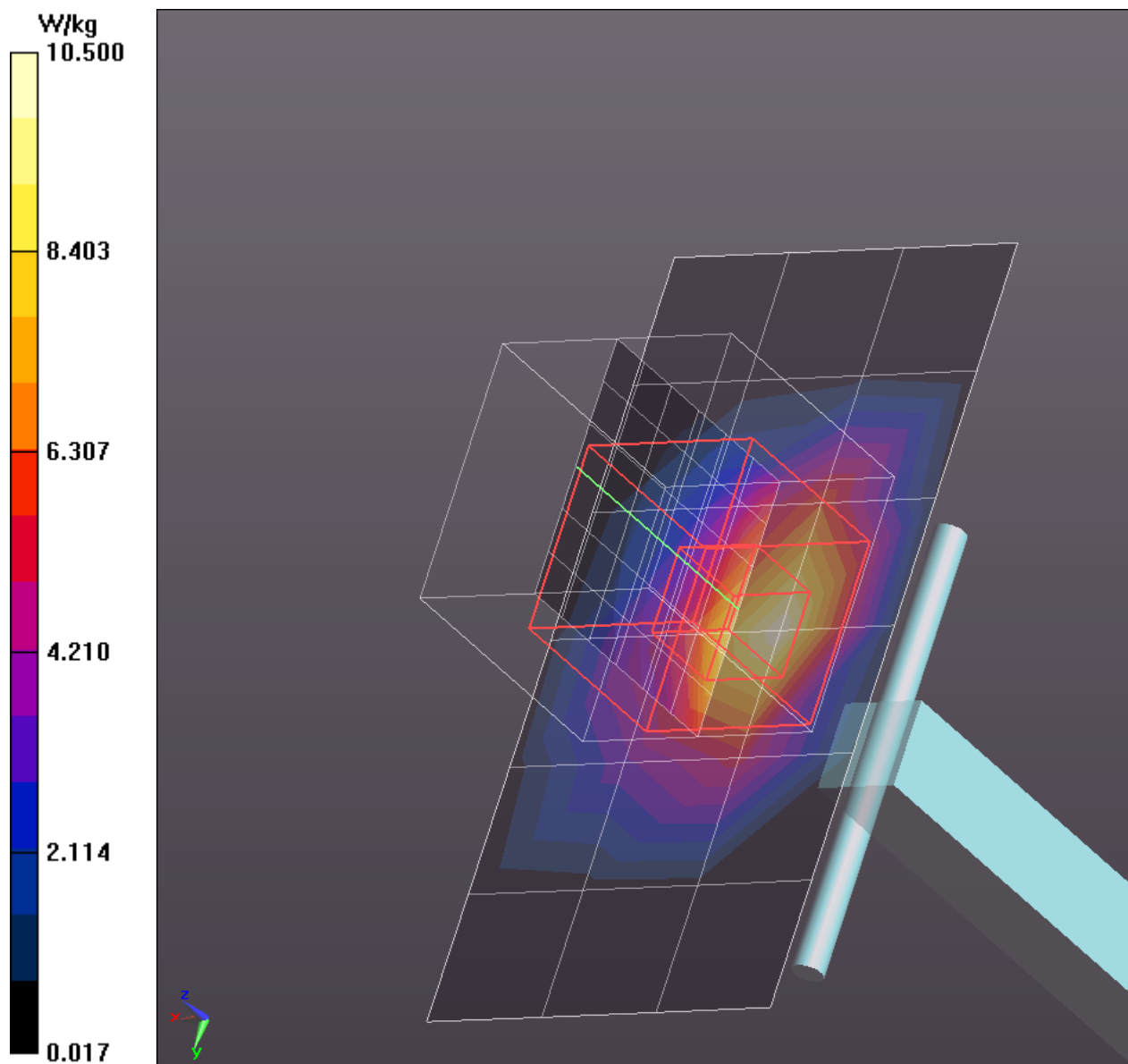
Reference Value = 80.821 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 108 W/kg

SAR(1 g) = 51.9 W/kg; SAR(10 g) = 23.8 W/kg

Normalized to target power = 1 W and actual power = 0.1631 W

Maximum value of SAR (measured) = 59.6 W/kg



Date/Time: 12/31/2013 9:25:03 AM

Test Laboratory: Intertek

File Name: [2.4GHz Dipole Validation 12-31-2013.da52:1](#)

2.4GHz Dipole Validation 12-31-2013

Procedure Notes:

DUT: Dipole 2450 MHz D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, CW; Communication System Band: D2450 (2450.0 MHz);
Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 50.39$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY5 Configuration:

- Probe: EX3DV3 - SN3516; ConvF(8.05, 8.05, 8.05); Calibrated: 12/13/2013;
- Sensor-Surface: 2mm (Mechanical Surface Detection), Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn358; Calibrated: 9/11/2012
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:xxxx
- DASY52 52.8.7(1137); SEMCAD X 14.6.10(7164)

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Area Scan (4x7x1): Measurement grid:
dx=15mm, dy=15mm

Maximum value of SAR (measured) = 10.8 W/kg

System Performance Check at Frequencies above 1 GHz/d=10mm,

Pin=160.28mW, dist=2.0mm (EX-Probe)/Zoom Scan (7x7x7) (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 80.471 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 108 W/kg

SAR(1 g) = 51.7 W/kg; SAR(10 g) = 23.7 W/kg

Normalized to target power = 1 W and actual power = 0.1631 W

Maximum value of SAR (measured) = 59.3 W/kg

