

## Dipole Verification Plots

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d159**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.898$  S/m;  $\epsilon_r = 40.141$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(10.06, 10.06, 10.06); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-24; Ambient Temp: 20.9; Tissue Temp: 21.5

## **835 MHz System Verification**

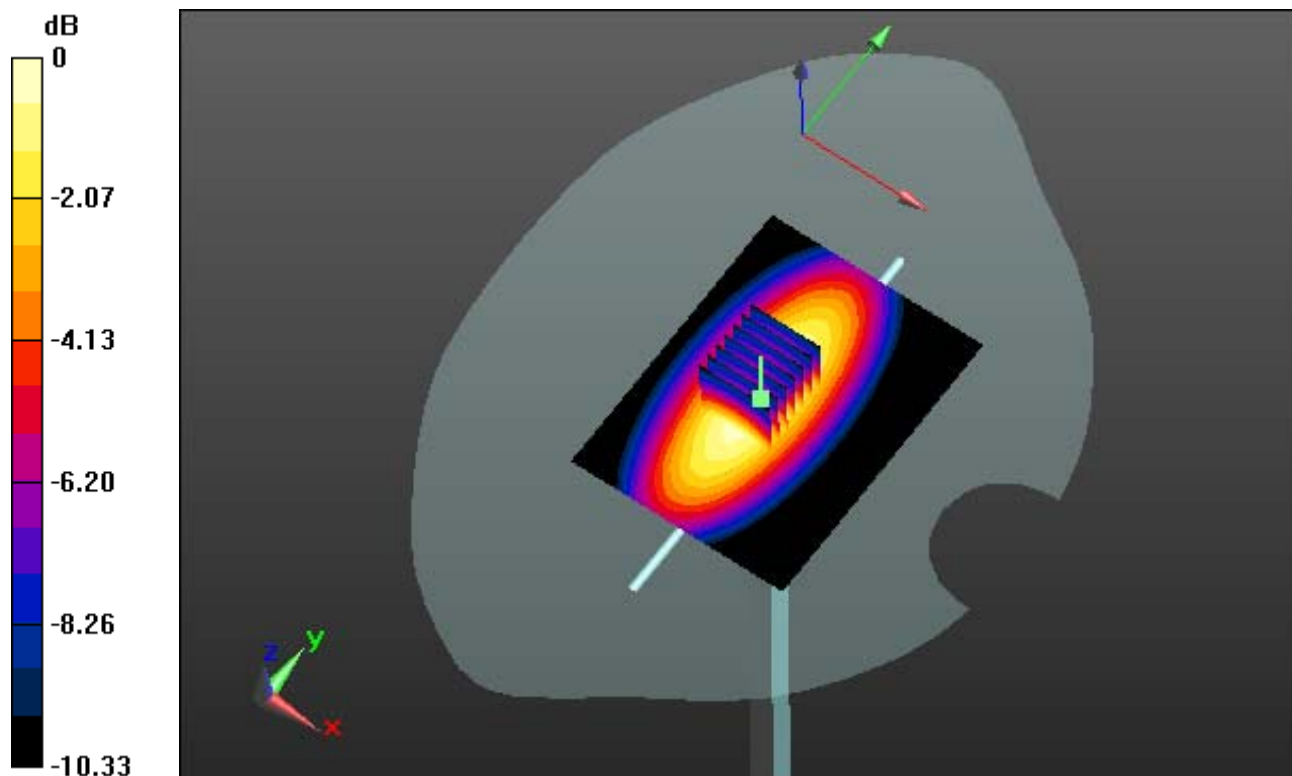
**Area Scan (61x81x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.32 W/kg

**SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.48 W/kg**



0 dB = 2.68 W/kg

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d159**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.898$  S/m;  $\epsilon_r = 40.141$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(10.06, 10.06, 10.06); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-24; Ambient Temp: 20.9; Tissue Temp: 21.5

## **835 MHz System Verification**

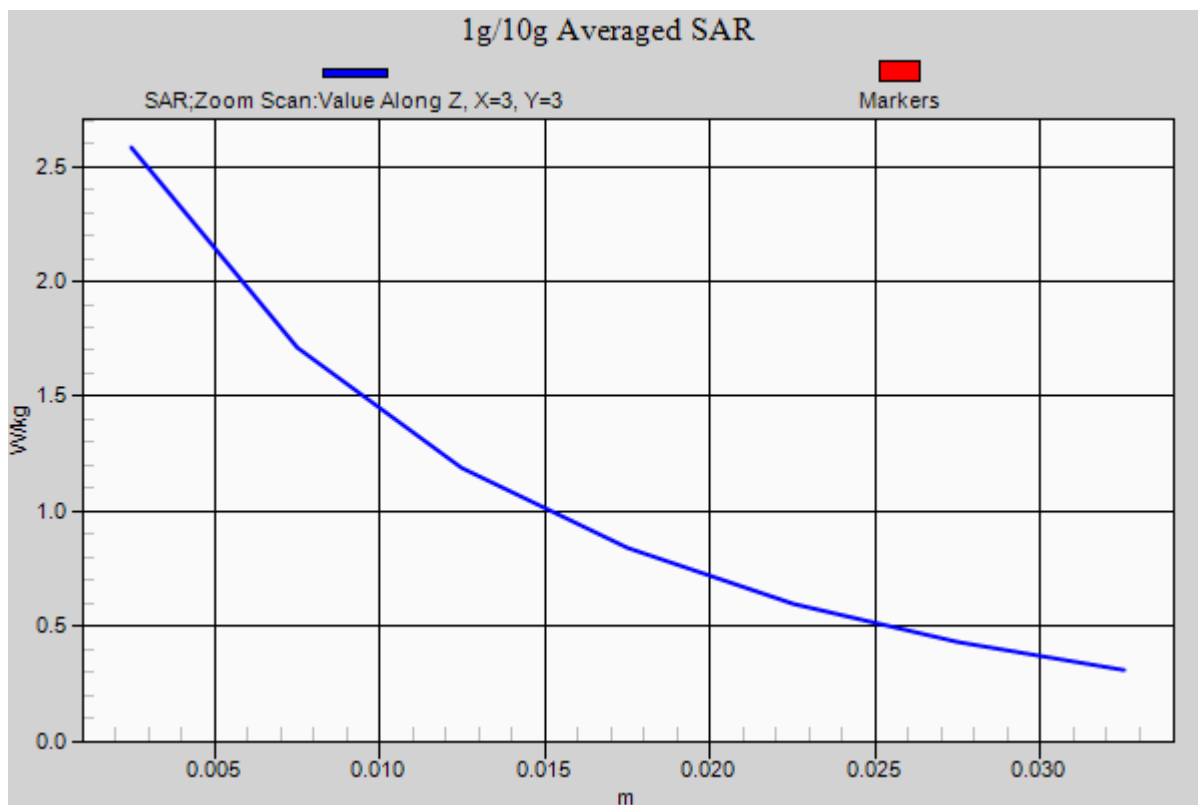
**Area Scan (61x81x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.32 W/kg

**SAR(1 g) = 2.23 W/kg; SAR(10 g) = 1.48 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d159**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.979$  S/m;  $\epsilon_r = 53.648$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(9.79, 9.79, 9.79); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-25; Ambient Temp: 20.6; Tissue Temp: 21.2

## **835 MHz System Verification**

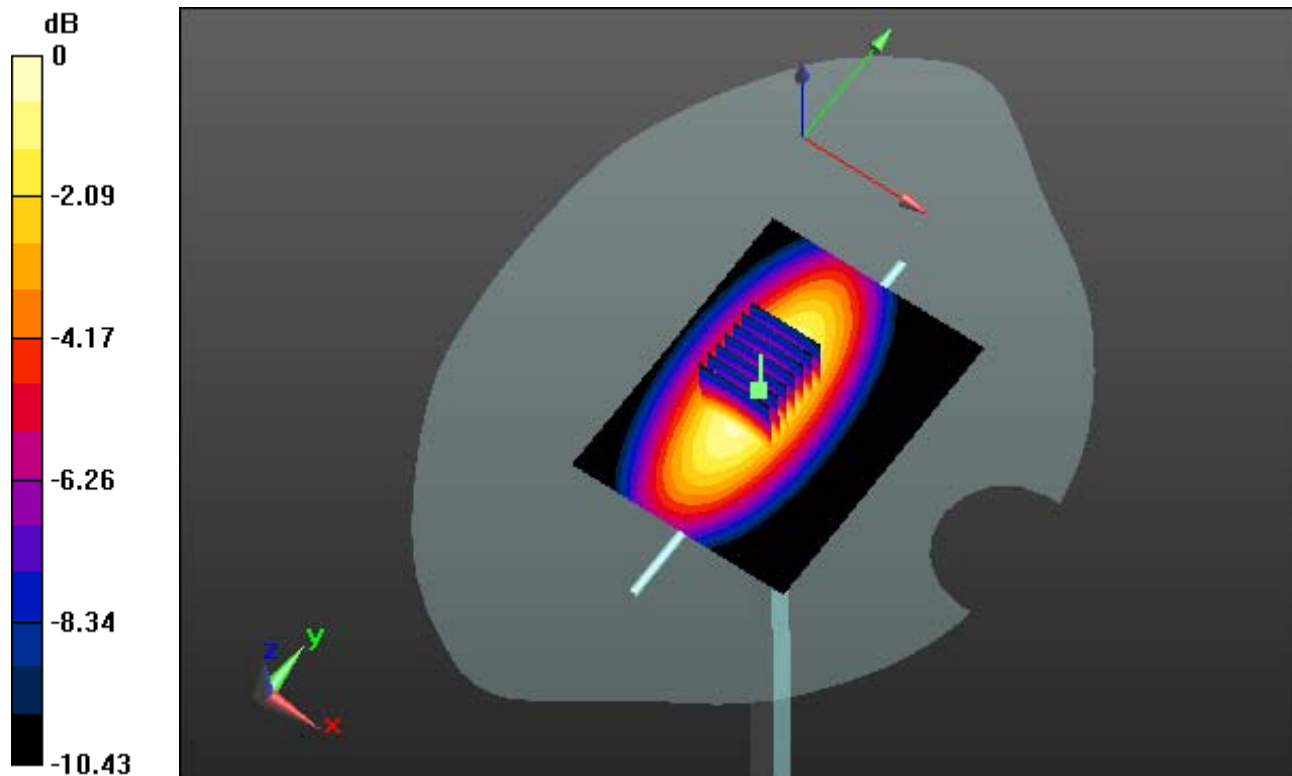
**Area Scan (61x81x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.35 W/kg

**SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.5 W/kg**



0 dB = 2.71 W/kg

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d159**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.979$  S/m;  $\epsilon_r = 53.648$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(9.79, 9.79, 9.79); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-25; Ambient Temp: 20.6; Tissue Temp: 21.2

## **835 MHz System Verification**

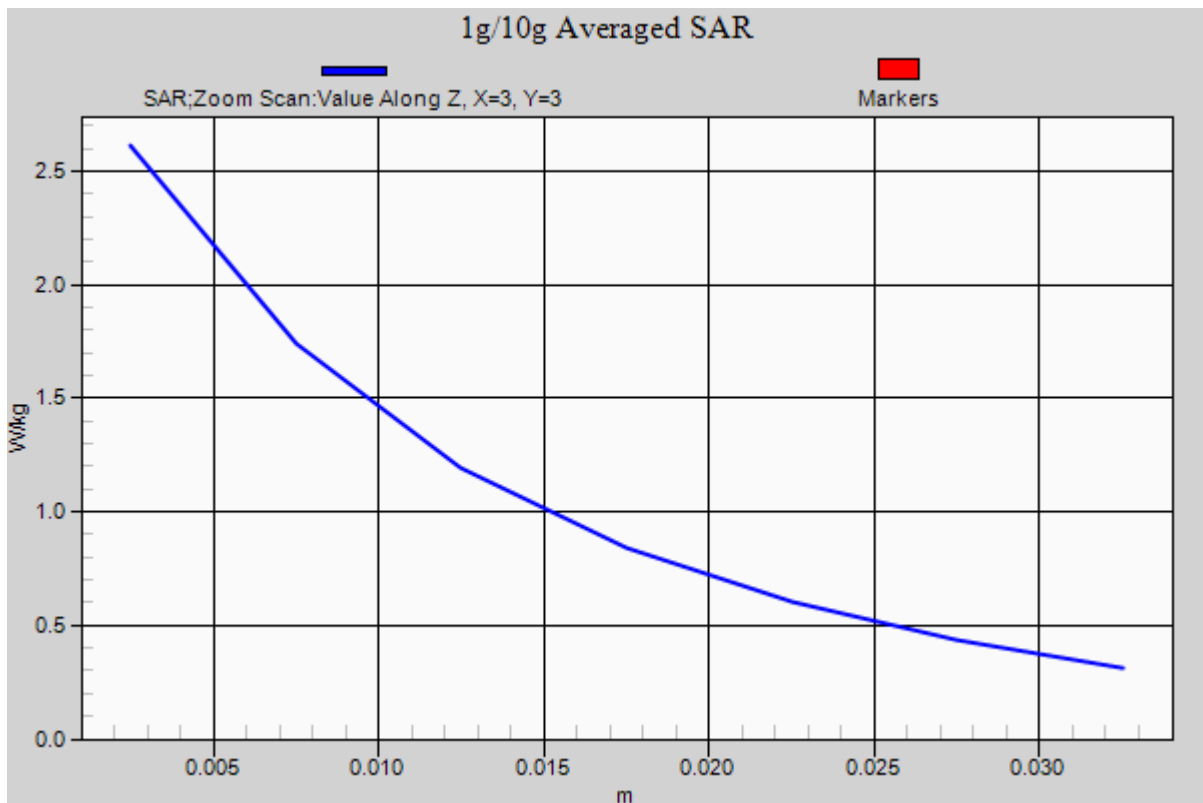
**Area Scan (61x81x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.03 dB

Peak SAR (extrapolated) = 3.35 W/kg

**SAR(1 g) = 2.24 W/kg; SAR(10 g) = 1.5 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d159**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.952$  S/m;  $\epsilon_r = 54.088$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(9.79, 9.79, 9.79); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-02-10; Ambient Temp: 20.7; Tissue Temp: 21.2

## **835 MHz System Verification**

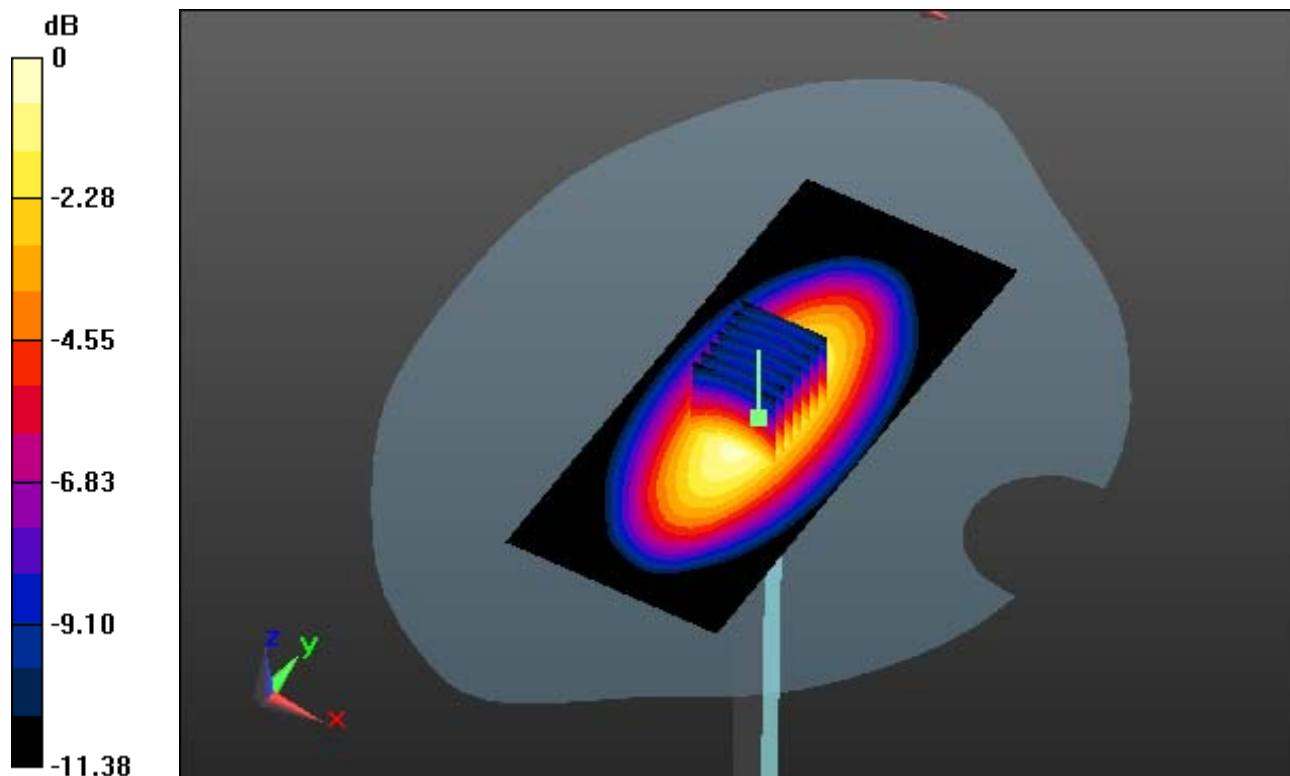
**Area Scan (51x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.80 W/kg

**SAR(1 g) = 2.47 W/kg; SAR(10 g) = 1.59 W/kg**



0 dB = 3.17 W/kg

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:4d159**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.952$  S/m;  $\epsilon_r = 54.088$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(9.79, 9.79, 9.79); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-02-10; Ambient Temp: 20.7; Tissue Temp: 21.2

## **835 MHz System Verification**

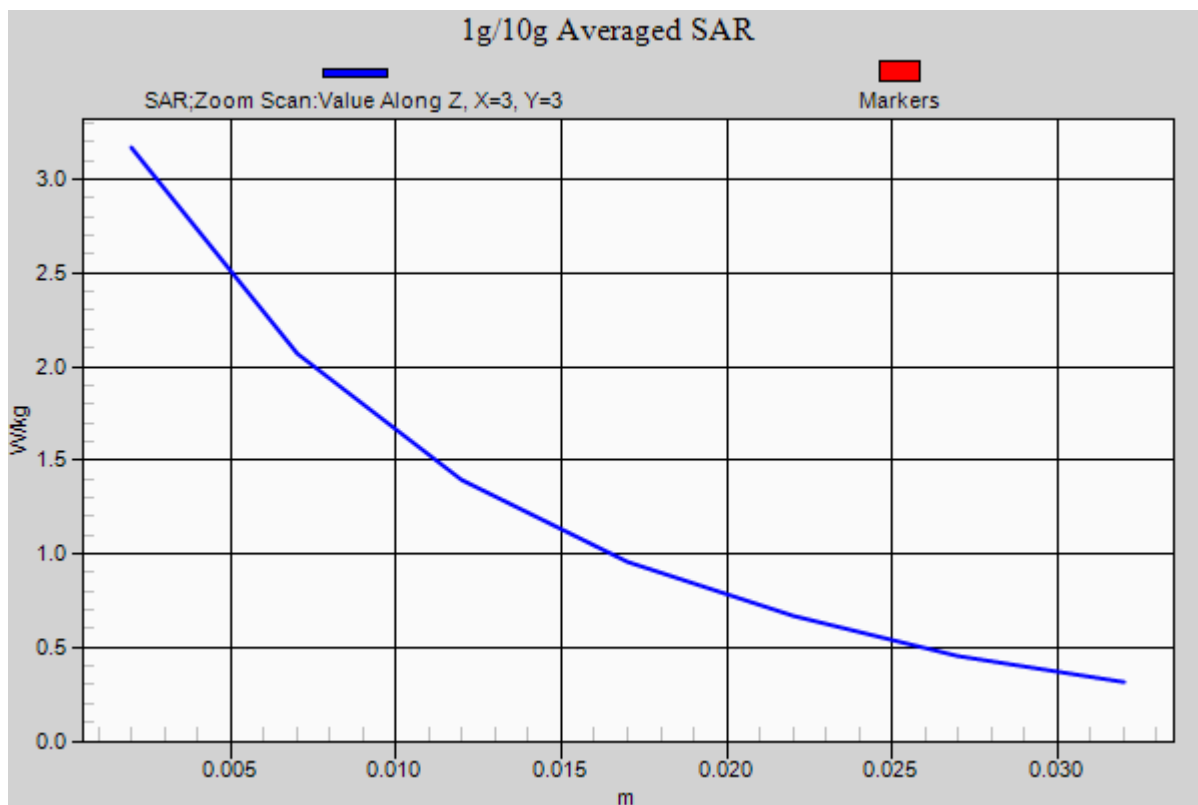
**Area Scan (51x121x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = -0.04 dB

Peak SAR (extrapolated) = 3.80 W/kg

**SAR(1 g) = 2.47 W/kg; SAR(10 g) = 1.59 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.436$  S/m;  $\epsilon_r = 39.118$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(8.25, 8.25, 8.25); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-22; Ambient Temp: 21.0; Tissue Temp: 21.6

## **1900 MHz System Verification**

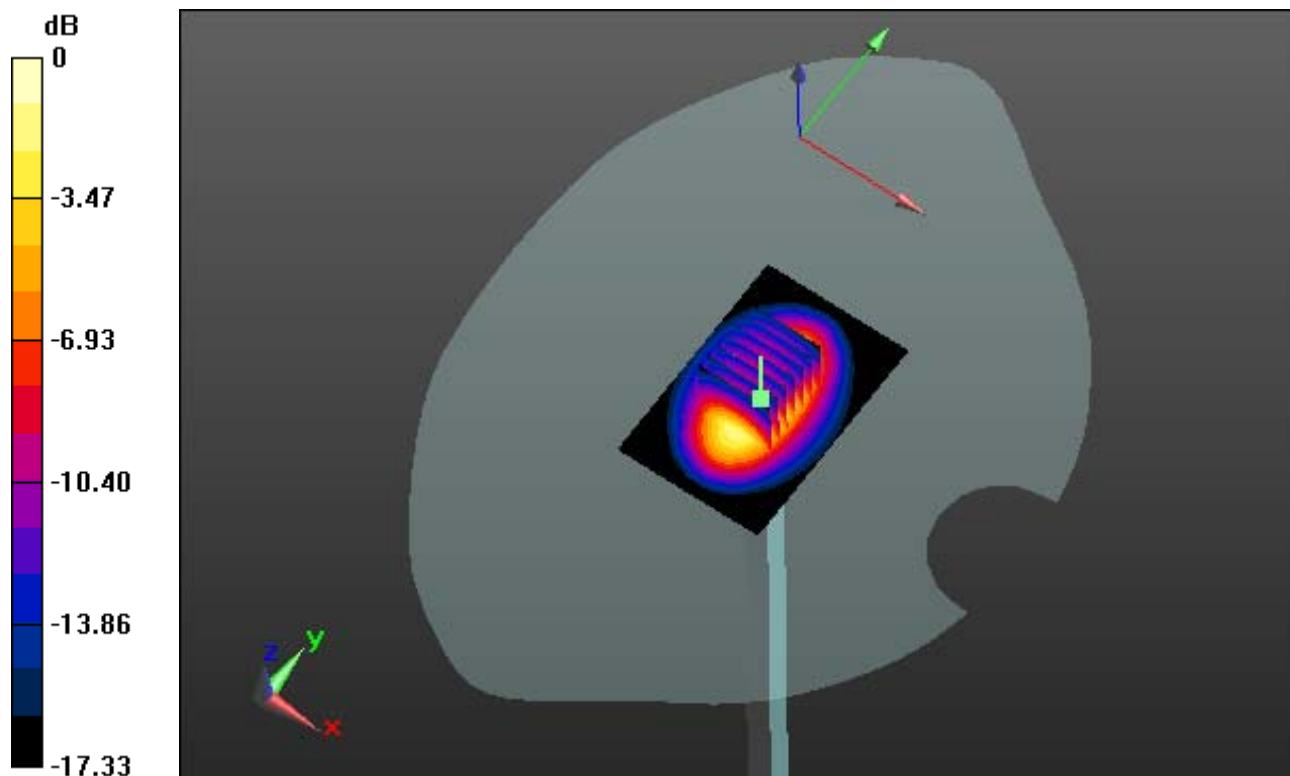
**Area Scan (61x91x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 17.6 W/kg

**SAR(1 g) = 9.51 W/kg; SAR(10 g) = 5.01 W/kg**



0 dB = 12.9 W/kg



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.436$  S/m;  $\epsilon_r = 39.118$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(8.25, 8.25, 8.25); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-22; Ambient Temp: 21.0; Tissue Temp: 21.6

## **1900 MHz System Verification**

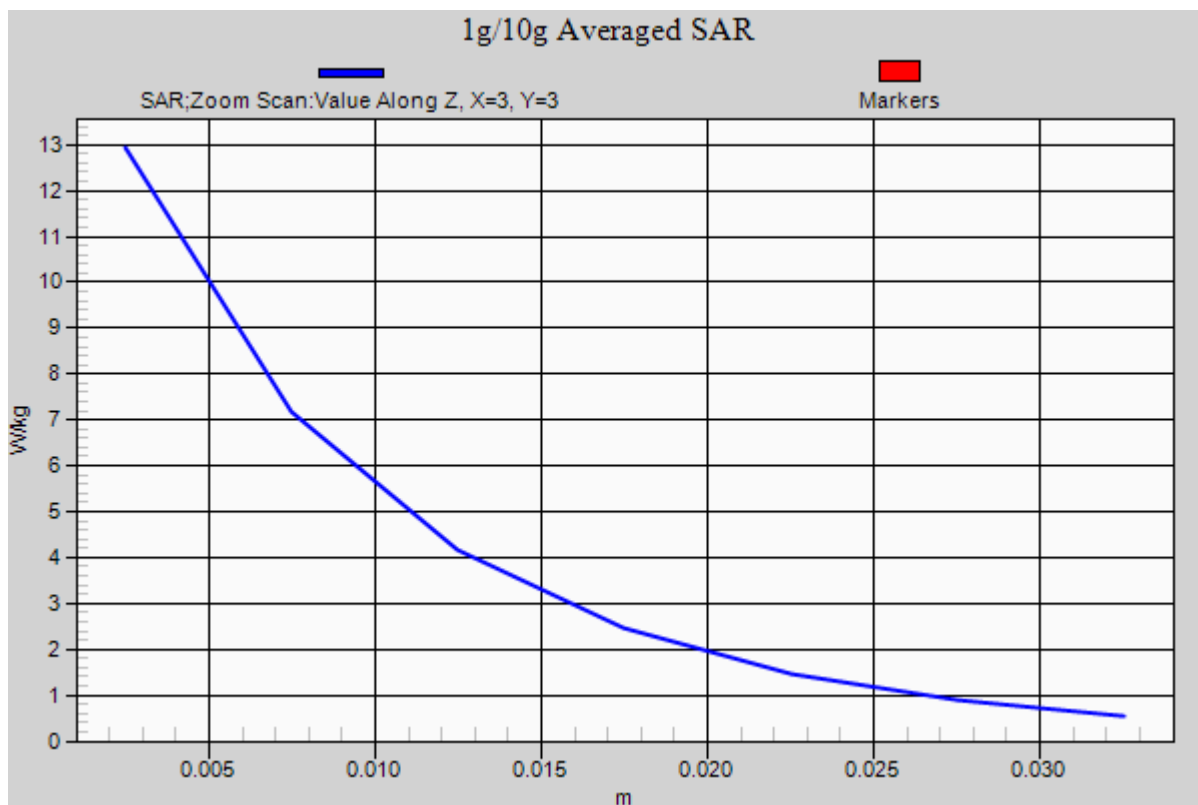
**Area Scan (61x91x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 17.6 W/kg

**SAR(1 g) = 9.51 W/kg; SAR(10 g) = 5.01 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 40.123$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(8.25, 8.25, 8.25); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-02-10; Ambient Temp: 20.7; Tissue Temp: 21.0

## **1900 MHz System Verification**

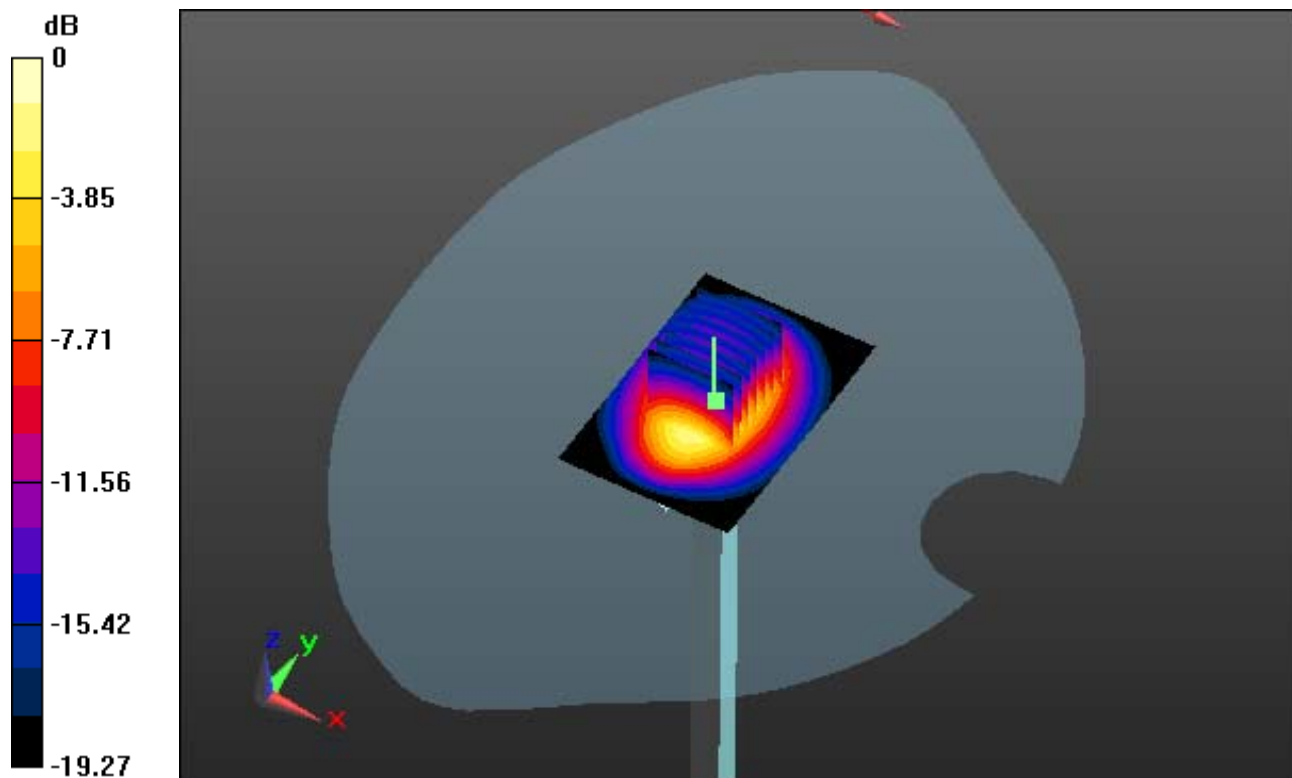
**Area Scan (61x91x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 18.5 W/kg

**SAR(1 g) = 9.46 W/kg; SAR(10 g) = 4.92 W/kg**



0 dB = 12.9 W/kg

# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.418$  S/m;  $\epsilon_r = 40.123$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(8.25, 8.25, 8.25); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-02-10; Ambient Temp: 20.7; Tissue Temp: 21.0

## **1900 MHz System Verification**

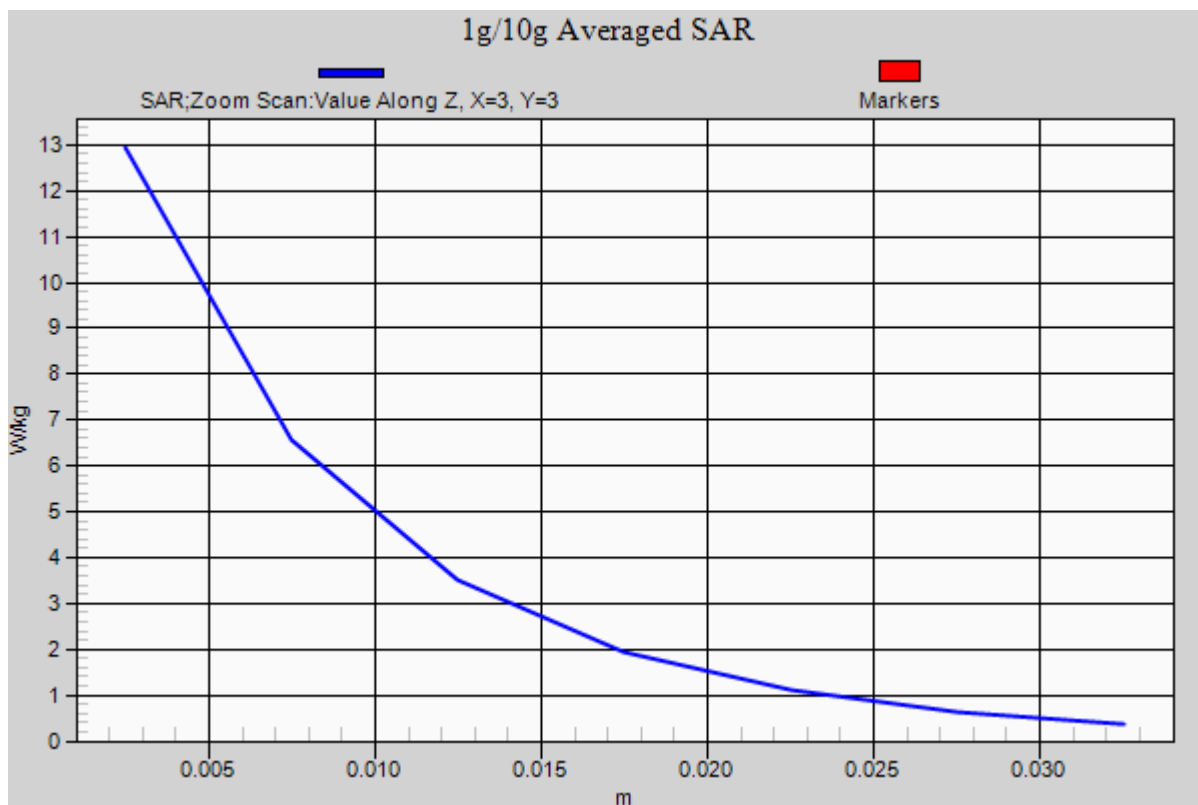
**Area Scan (61x91x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 18.5 W/kg

**SAR(1 g) = 9.46 W/kg; SAR(10 g) = 4.92 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.549$  S/m;  $\epsilon_r = 52.764$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(7.79, 7.79, 7.79); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-23; Ambient Temp: 20.8; Tissue Temp: 21.3

## **1900 MHz System Verification**

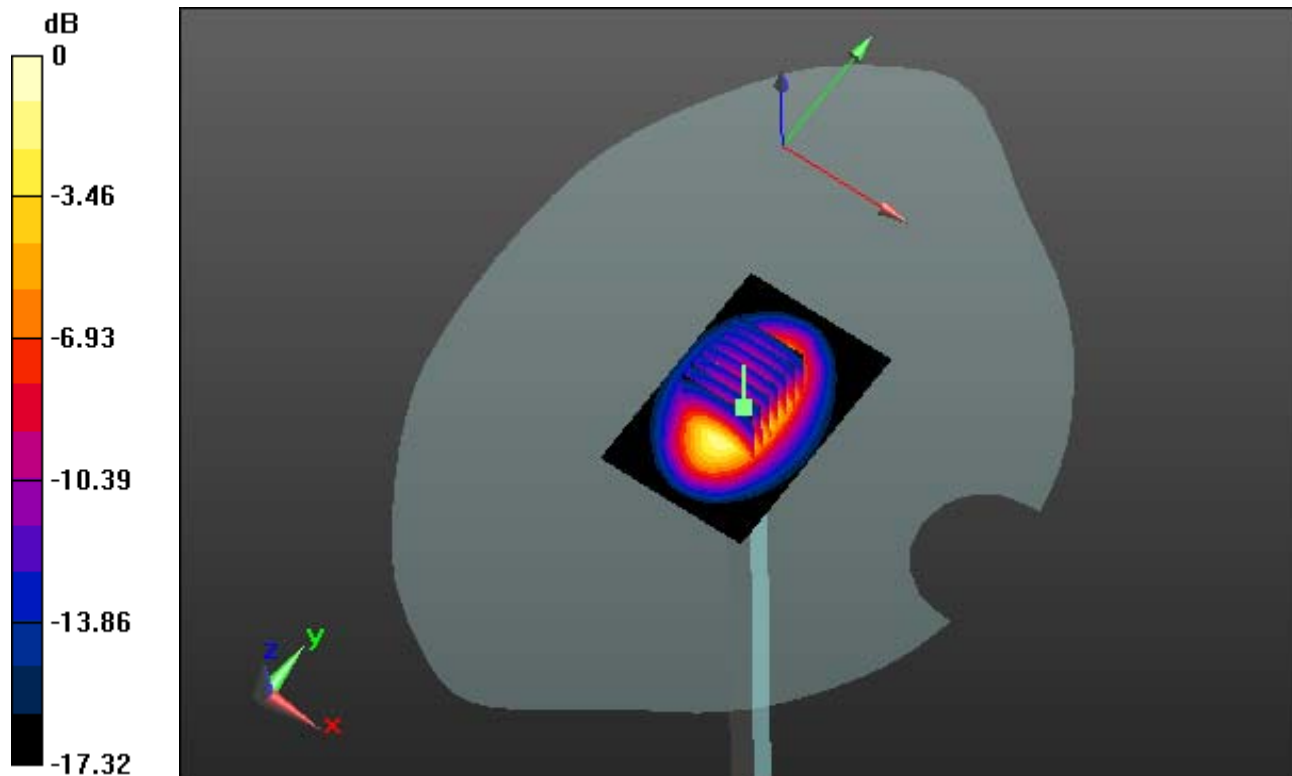
**Area Scan (61x91x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 20.0 W/kg

**SAR(1 g) = 10.8 W/kg; SAR(10 g) = 5.6 W/kg**



0 dB = 14.7 W/kg

# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d176**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.549$  S/m;  $\epsilon_r = 52.764$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(7.79, 7.79, 7.79); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-23; Ambient Temp: 20.8; Tissue Temp: 21.3

## **1900 MHz System Verification**

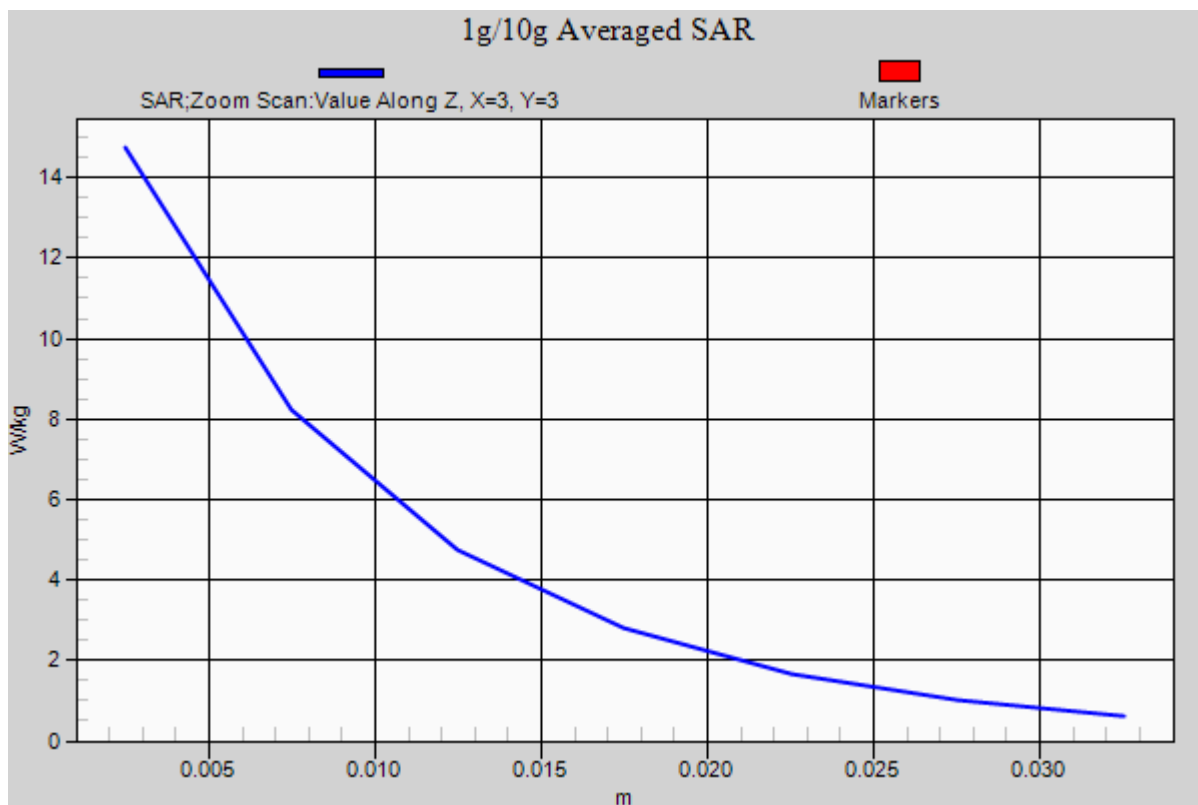
**Area Scan (61x91x1):** Interpolated grid: dx=15mm, dy=15mm

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 20.0 W/kg

**SAR(1 g) = 10.8 W/kg; SAR(10 g) = 5.6 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:920**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.768$  S/m;  $\epsilon_r = 38.355$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(7.44, 7.44, 7.44); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-27; Ambient Temp: 21.1; Tissue Temp: 21.7

## **2450 MHz System Verification**

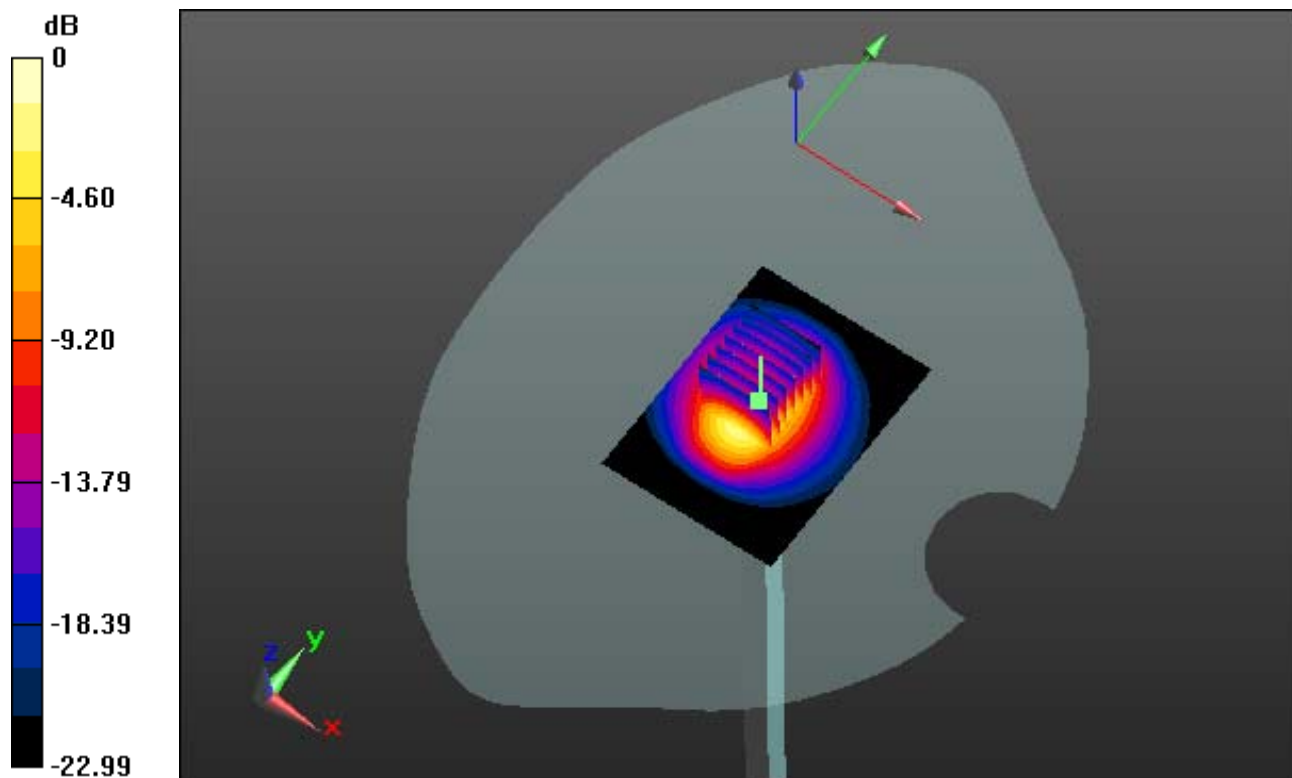
**Area Scan (61x81x1):** Interpolated grid: dx=12mm, dy=12mm

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

Power Drift = 0.11 dB

Peak SAR (extrapolated) = 27.9 W/kg

**SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.16 W/kg**



0 dB = 20.3 W/kg

# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:920**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.768$  S/m;  $\epsilon_r = 38.355$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(7.44, 7.44, 7.44); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-27; Ambient Temp: 21.1; Tissue Temp: 21.7

## **2450 MHz System Verification**

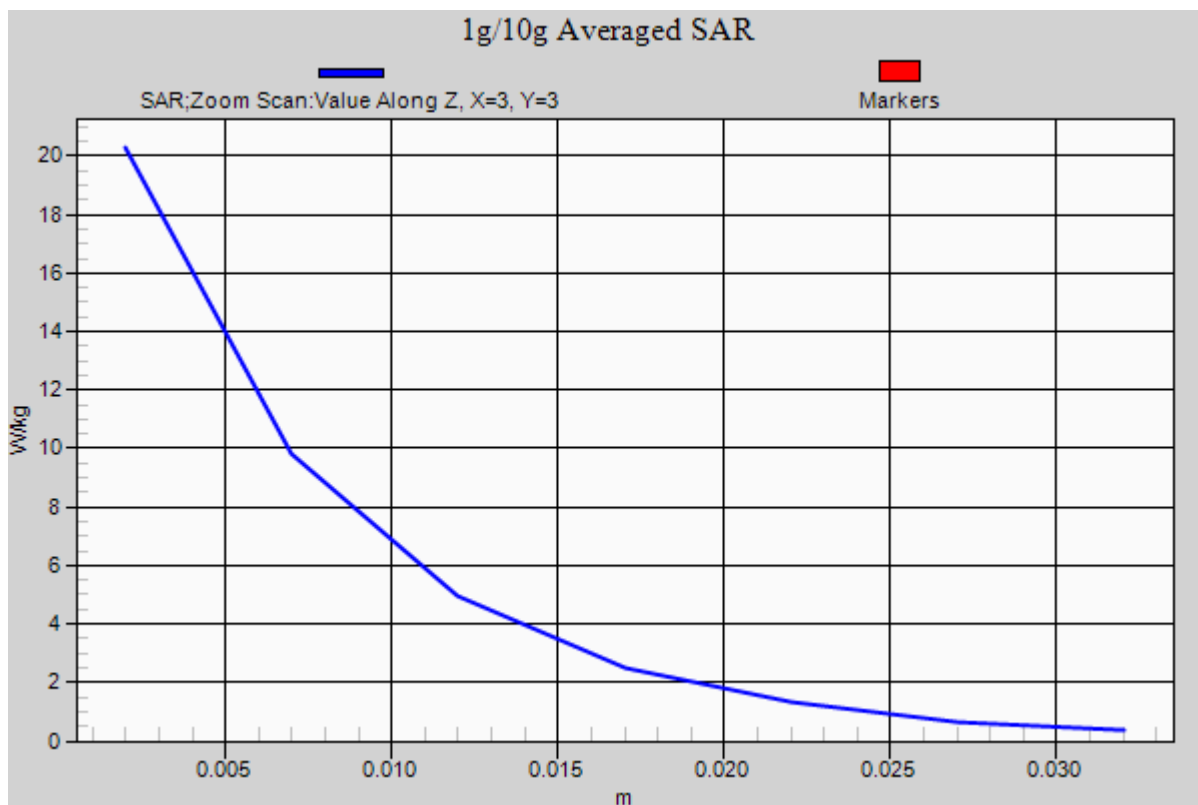
**Area Scan (61x81x1):** Interpolated grid: dx=12mm, dy=12mm

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

Power Drift = 0.11 dB

Peak SAR (extrapolated) = 27.9 W/kg

**SAR(1 g) = 13.3 W/kg; SAR(10 g) = 6.16 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:920**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.006$  S/m;  $\epsilon_r = 53.256$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(7.36, 7.36, 7.36); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-27; Ambient Temp: 21.1; Tissue Temp: 21.7

## **2450 MHz System Verification**

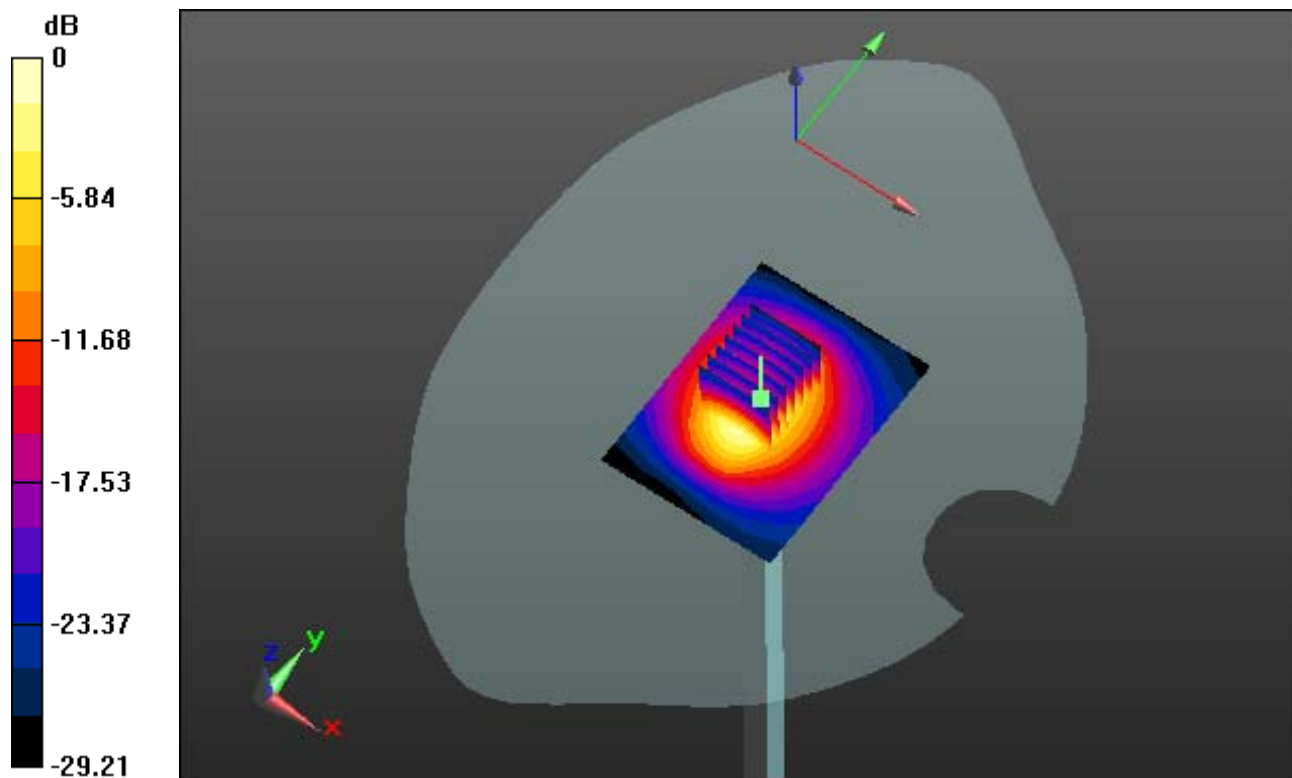
**Area Scan (61x81x1):** Interpolated grid: dx=12mm, dy=12mm

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 32.1 W/kg

**SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.17 W/kg**



0 dB = 18.7 W/kg



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:920**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 2.006$  S/m;  $\epsilon_r = 53.256$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY5 Configuration:**

Probe: EX3DV4 - SN3933; ConvF(7.36, 7.36, 7.36); Calibrated: 9/24/2013; ; Electronics: DAE4 Sn1396  
Phantom: SAM with CRP\_2013\_10\_08\_middle; Type: QD000P40CD; Serial: TP:1786  
Measurement SW: DASY52, Version 52.8 (7); SEMCAD X Version 14.6.10 (7164)

Test Date: 2014-01-27; Ambient Temp: 21.1; Tissue Temp: 21.7

## **2450 MHz System Verification**

**Area Scan (61x81x1):** Interpolated grid: dx=12mm, dy=12mm

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

Power Drift = 0.00 dB

Peak SAR (extrapolated) = 32.1 W/kg

**SAR(1 g) = 12.5 W/kg; SAR(10 g) = 5.17 W/kg**

