

## Dipole Verification Plots

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.889 \text{ mho/m}$ ;  $\epsilon_r = 41.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.15, 9.15, 9.15); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-04; Ambient Temp: 22.1; Tissue Temp: 22.4

## **Dipole Verification**

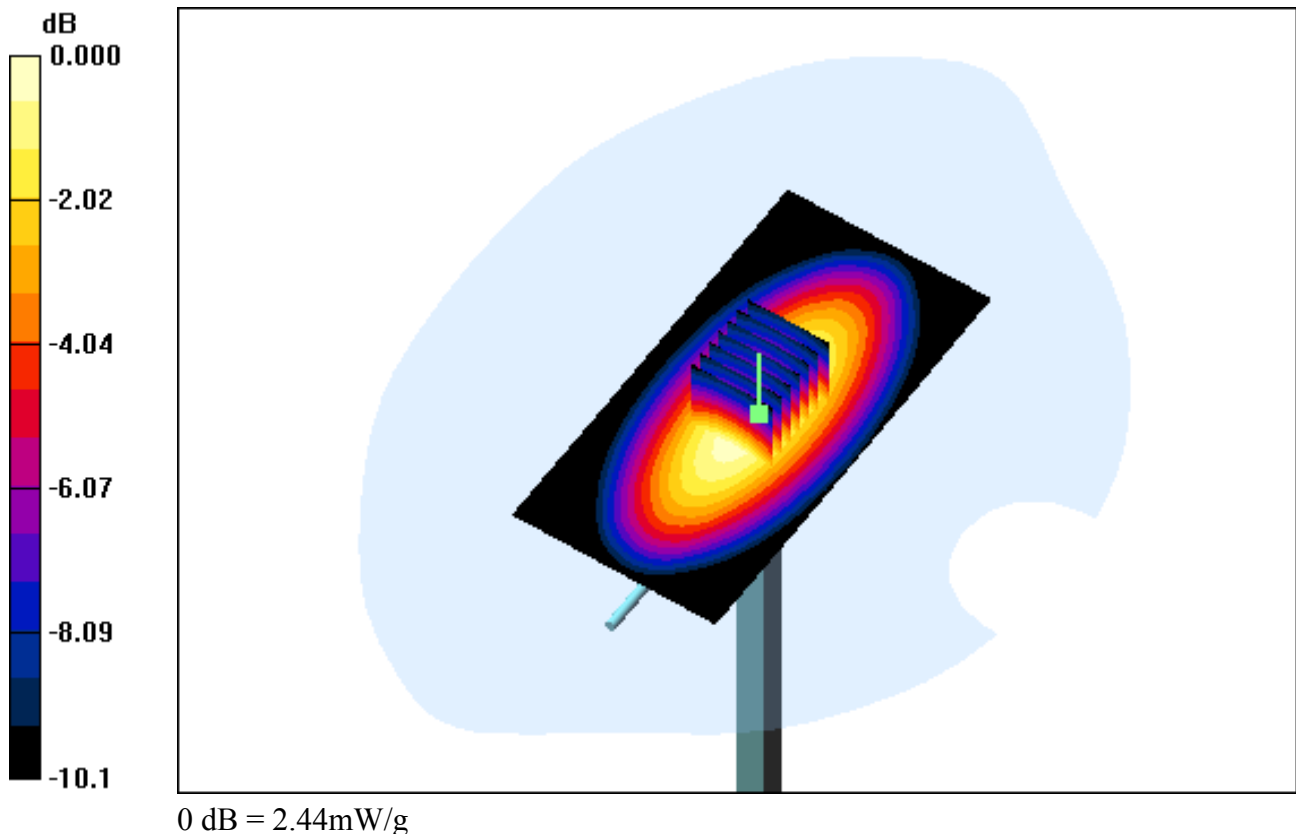
**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Power Drift = -0.136 dB

Peak SAR (extrapolated) = 3.39 W/kg

**SAR(1 g) = 2.26 W/kg; SAR(10 g) = 1.49 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.889$  mho/m;  $\epsilon_r = 41.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(9.15, 9.15, 9.15); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-04; Ambient Temp: 22.1; Tissue Temp: 22.4

## Dipole Verification

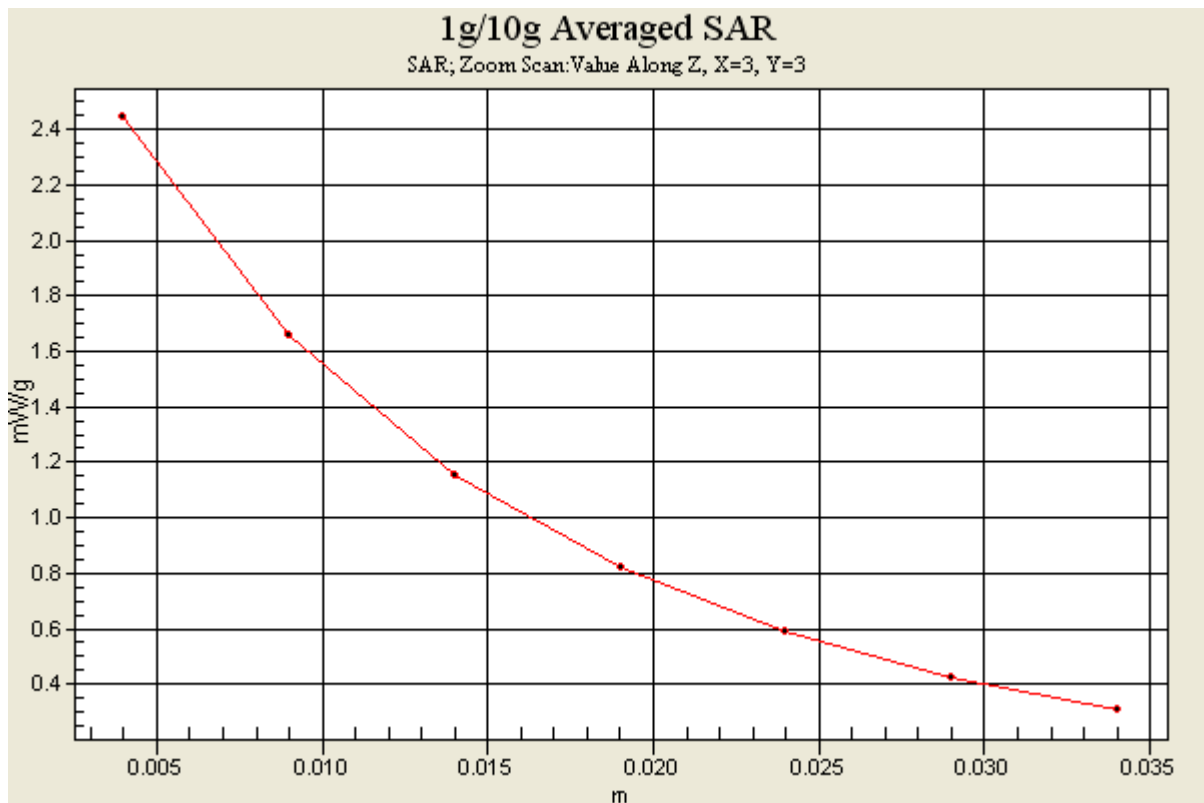
**Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.136 dB

Peak SAR (extrapolated) = 3.39 W/kg

**SAR(1 g) = 2.26 W/kg; SAR(10 g) = 1.49 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.948 \text{ mho/m}$ ;  $\epsilon_r = 53.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.14, 9.14, 9.14); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-05; Ambient Temp: 20.7; Tissue Temp: 21.1

## **Dipole Verification**

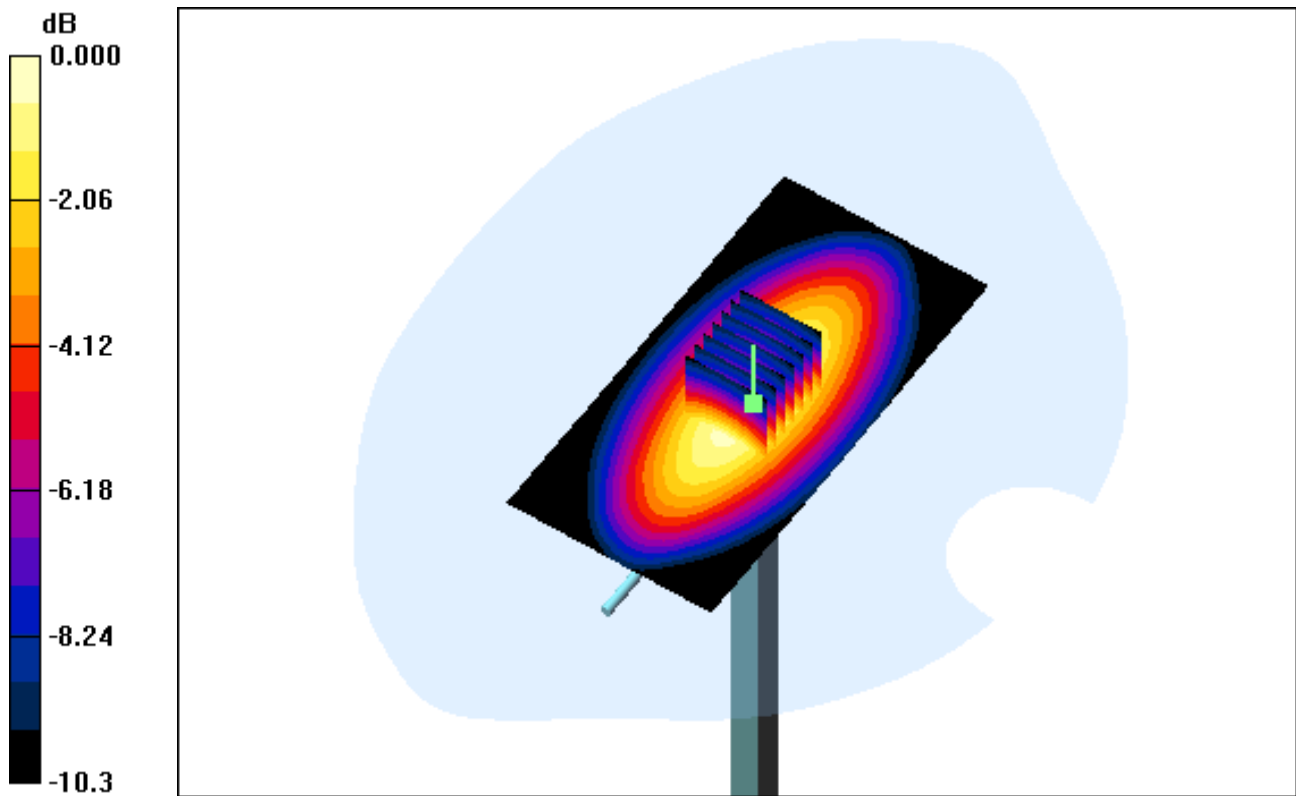
**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Power Drift = -0.005 dB

Peak SAR (extrapolated) = 3.77 W/kg

**SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.65 W/kg**



0 dB = 3.06mW/g

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.948$  mho/m;  $\epsilon_r = 53.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.14, 9.14, 9.14); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-05; Ambient Temp: 20.7; Tissue Temp: 21.1

## **Dipole Verification**

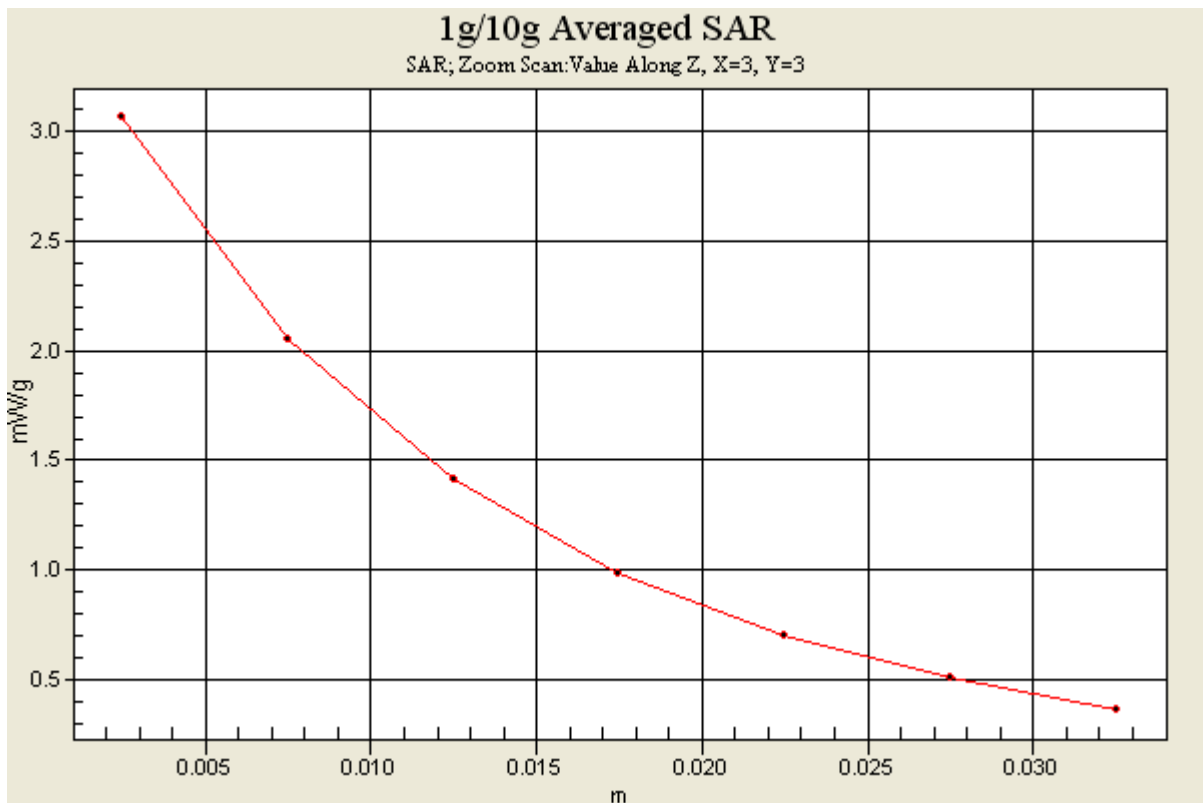
**Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.005 dB

Peak SAR (extrapolated) = 3.77 W/kg

**SAR(1 g) = 2.52 W/kg; SAR(10 g) = 1.65 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.887 \text{ mho/m}$ ;  $\epsilon_r = 41.4$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.15, 9.15, 9.15); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-17; Ambient Temp: 21.1; Tissue Temp: 21.4

## **Dipole Verification**

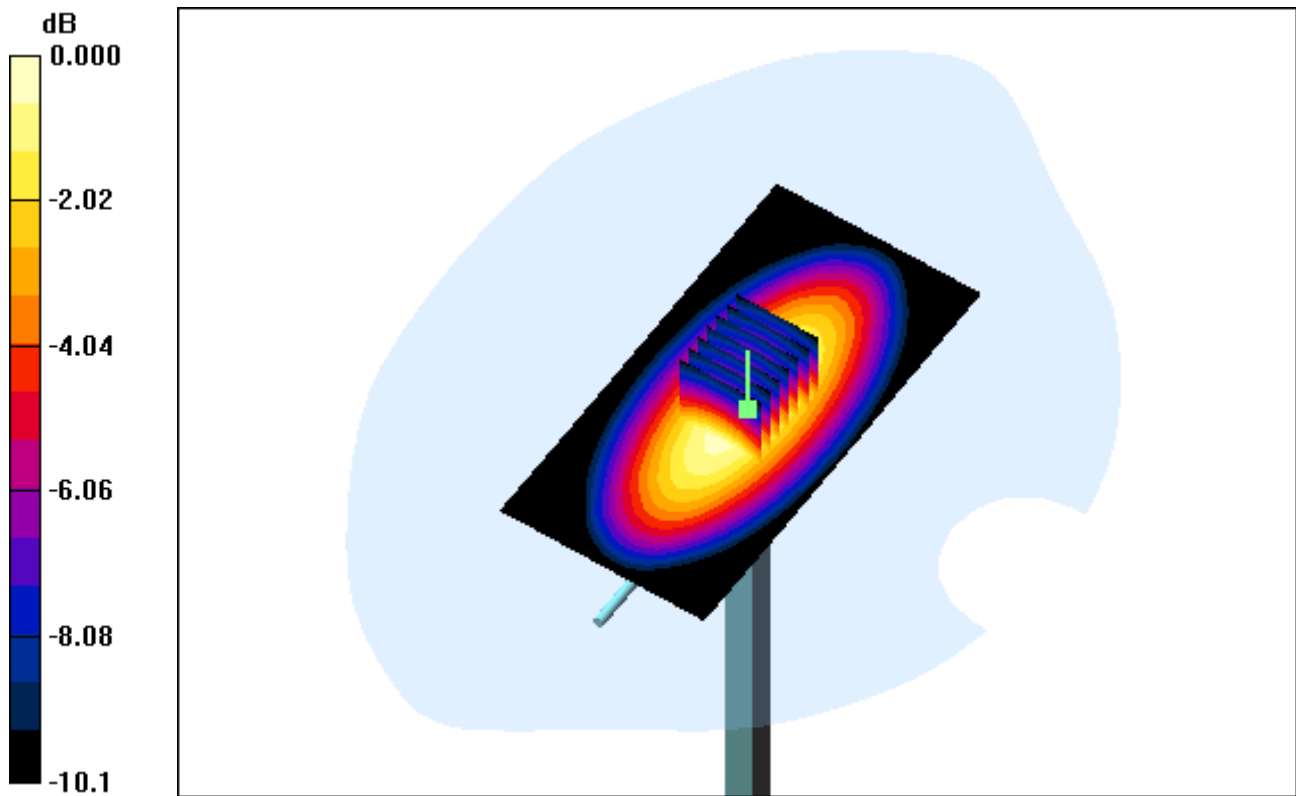
**Area Scan (51x101x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Power Drift = -0.005 dB

Peak SAR (extrapolated) = 3.32 W/kg

**SAR(1 g) = 2.21 W/kg; SAR(10 g) = 1.45 W/kg**



0 dB = 2.39mW/g

# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.887$  mho/m;  $\epsilon_r = 41.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.15, 9.15, 9.15); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-17; Ambient Temp: 21.1; Tissue Temp: 21.4

## **Dipole Verification**

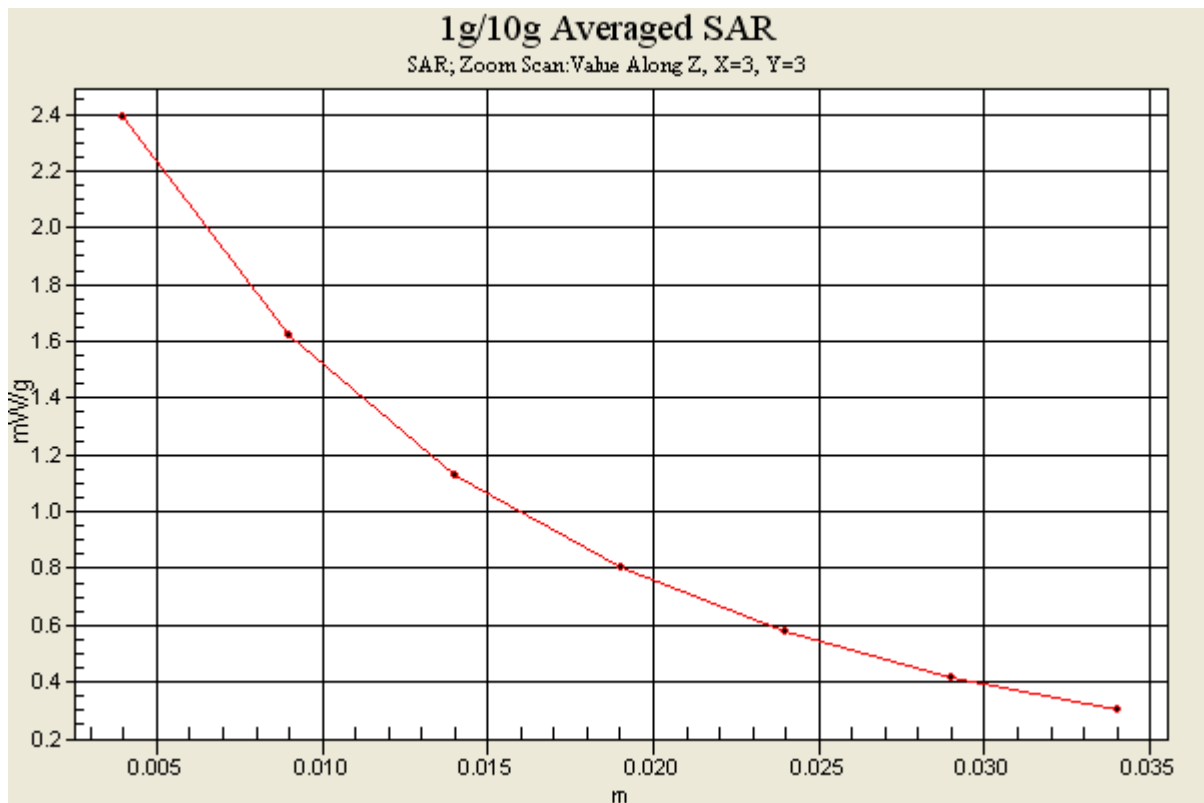
**Area Scan (51x101x1):** Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.005 dB

Peak SAR (extrapolated) = 3.32 W/kg

**SAR(1 g) = 2.21 W/kg; SAR(10 g) = 1.45 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835 \text{ MHz}$ ;  $\sigma = 0.946 \text{ mho/m}$ ;  $\epsilon_r = 53.3$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.14, 9.14, 9.14); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-17; Ambient Temp: 21.1; Tissue Temp: 21.4

## **Dipole Verification**

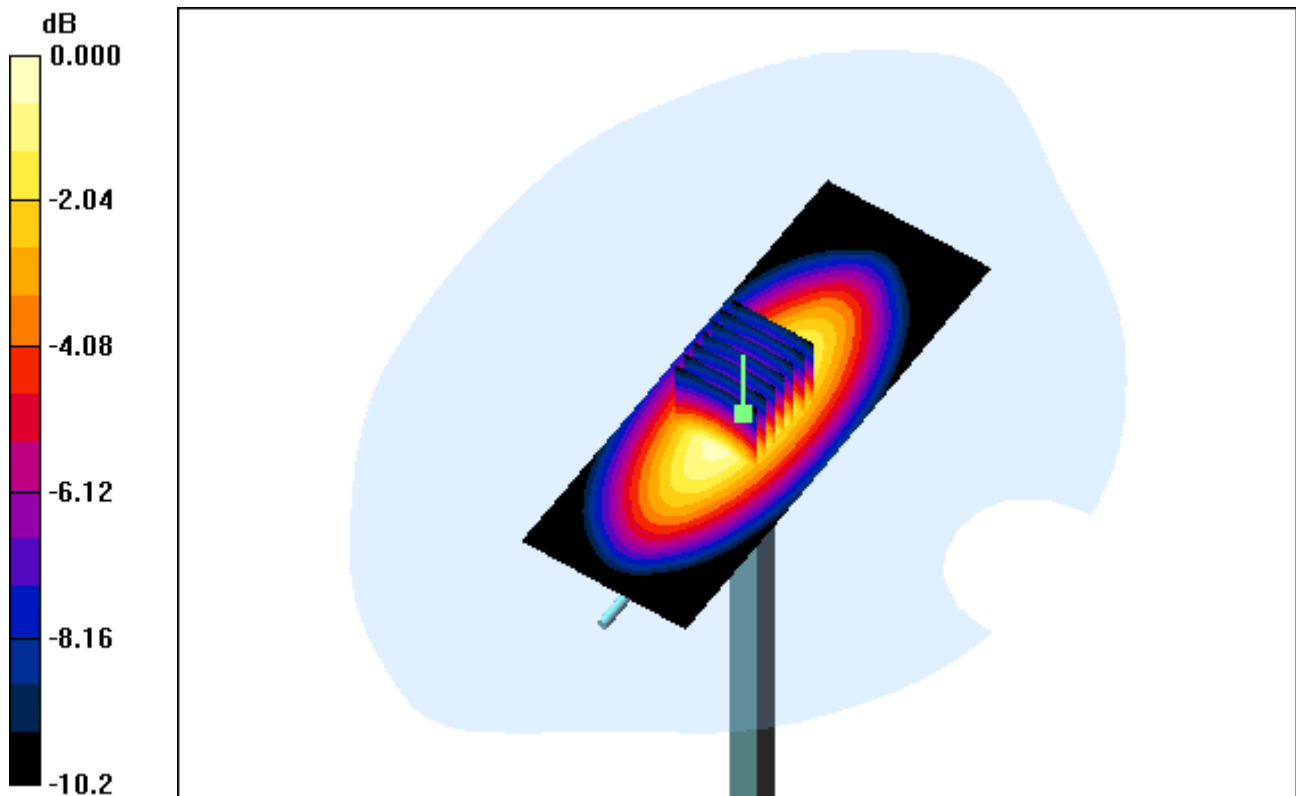
**Area Scan (41x11x1):** Measurement grid:  $dx=15\text{mm}$ ,  $dy=15\text{mm}$

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

Power Drift = -0.026 dB

Peak SAR (extrapolated) = 3.62 W/kg

**SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.61 W/kg**



0 dB = 2.97mW/g



# DIGITAL EMC CO., LTD

**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:464**

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 835$  MHz;  $\sigma = 0.946$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(9.14, 9.14, 9.14); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM with 835MHz; Type: SAM; Serial: TP-1223

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-17; Ambient Temp: 21.1; Tissue Temp: 21.4

## **Dipole Verification**

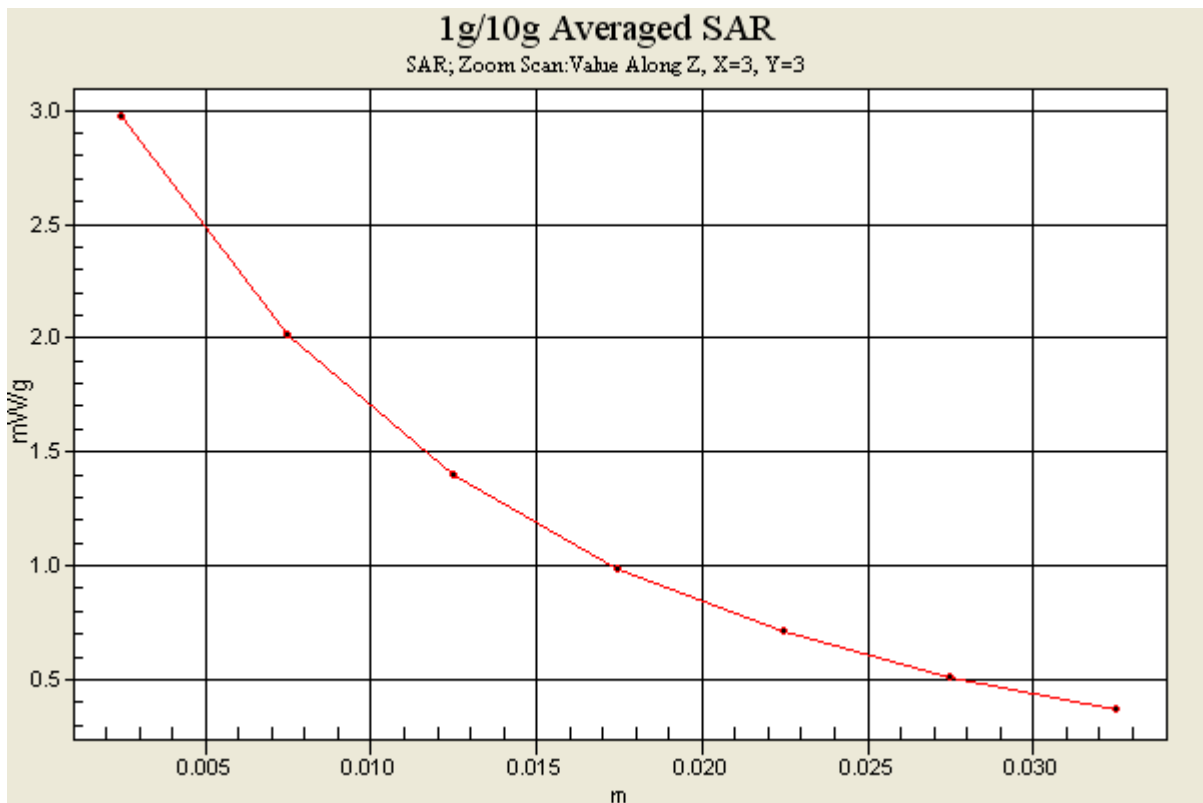
**Area Scan (41x11x1):** Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.026 dB

Peak SAR (extrapolated) = 3.62 W/kg

**SAR(1 g) = 2.45 W/kg; SAR(10 g) = 1.61 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.68, 7.68, 7.68); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-06; Ambient Temp: 21.2; Tissue Temp: 21.5

## **Dipole Verification**

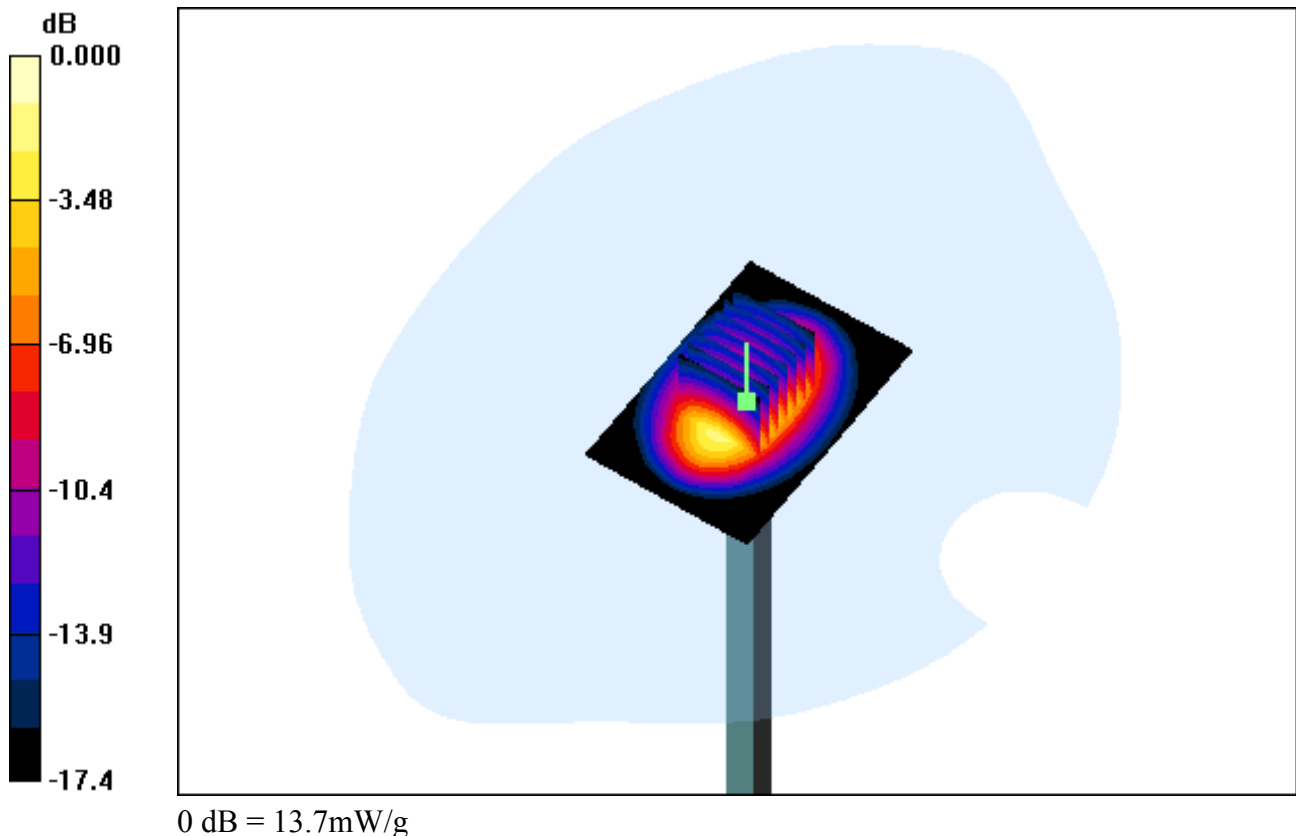
**Area Scan (61x91x1):** Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.017 dB

Peak SAR (extrapolated) = 18.8 W/kg

**SAR(1 g) = 10 W/kg; SAR(10 g) = 5.21 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.42$  mho/m;  $\epsilon_r = 39.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.68, 7.68, 7.68); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-06; Ambient Temp: 21.2; Tissue Temp: 21.5

## **Dipole Verification**

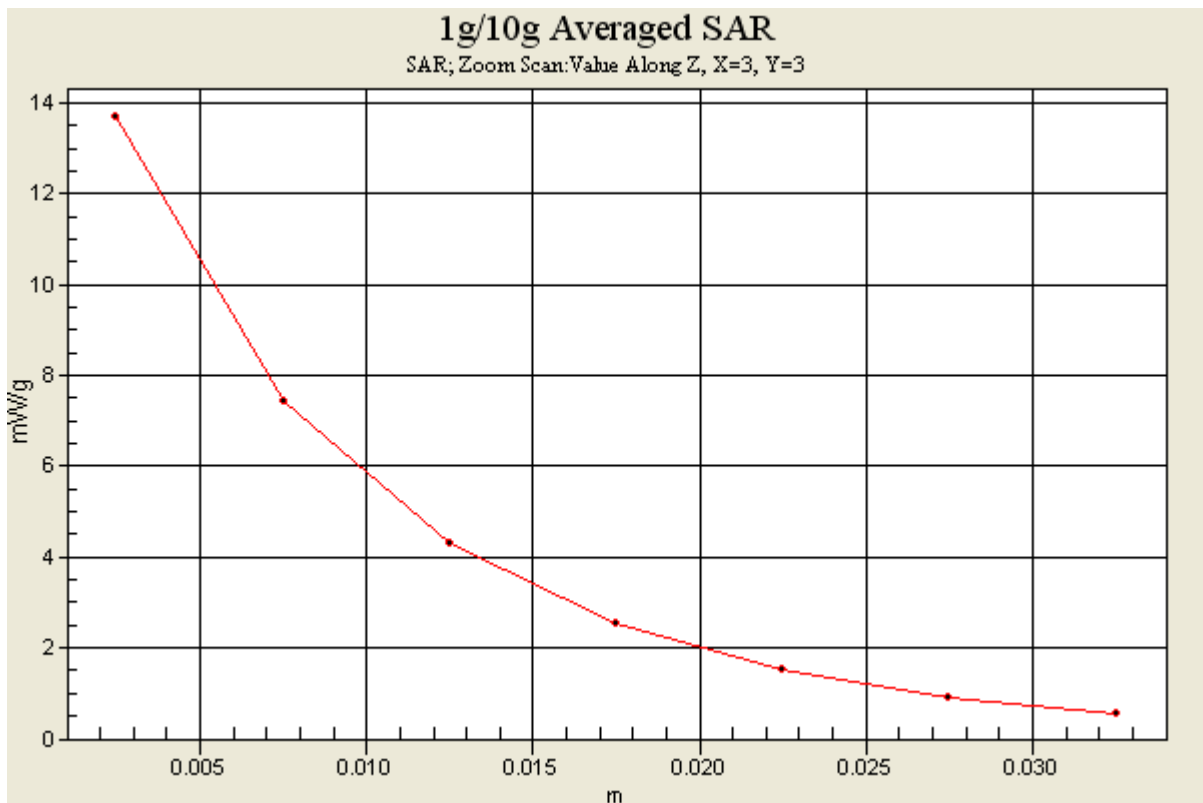
**Area Scan (61x91x1):** Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.017 dB

Peak SAR (extrapolated) = 18.8 W/kg

**SAR(1 g) = 10 W/kg; SAR(10 g) = 5.21 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.47, 7.47, 7.47); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-16; Ambient Temp: 20.9; Tissue Temp: 21.3

## **Dipole Verification**

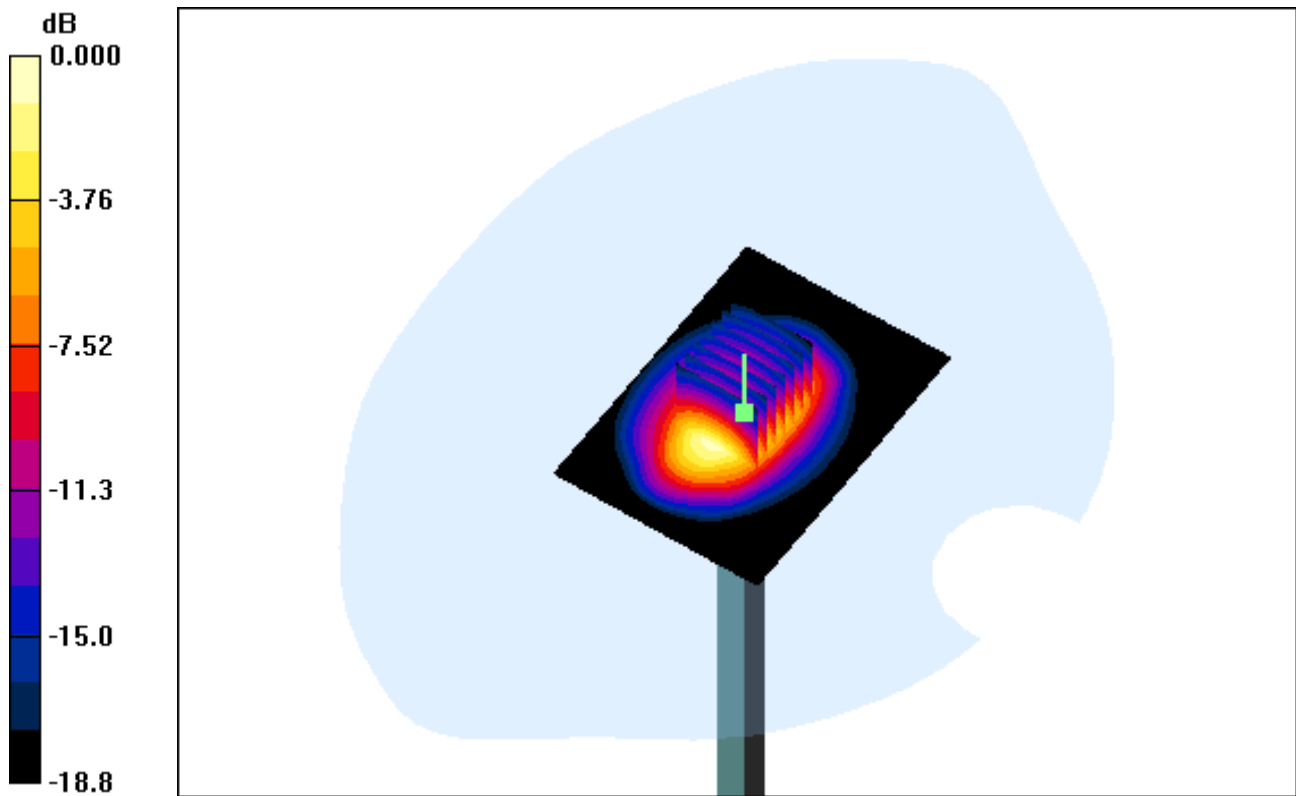
**Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.145 dB

Peak SAR (extrapolated) = 19.6 W/kg

**SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.19 W/kg**



0 dB = 14.0mW/g

# DIGITAL EMC CO., LTD

**DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN:5d029**

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1900$  MHz;  $\sigma = 1.52$  mho/m;  $\epsilon_r = 53.3$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.47, 7.47, 7.47); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-16; Ambient Temp: 20.9; Tissue Temp: 21.3

## **Dipole Verification**

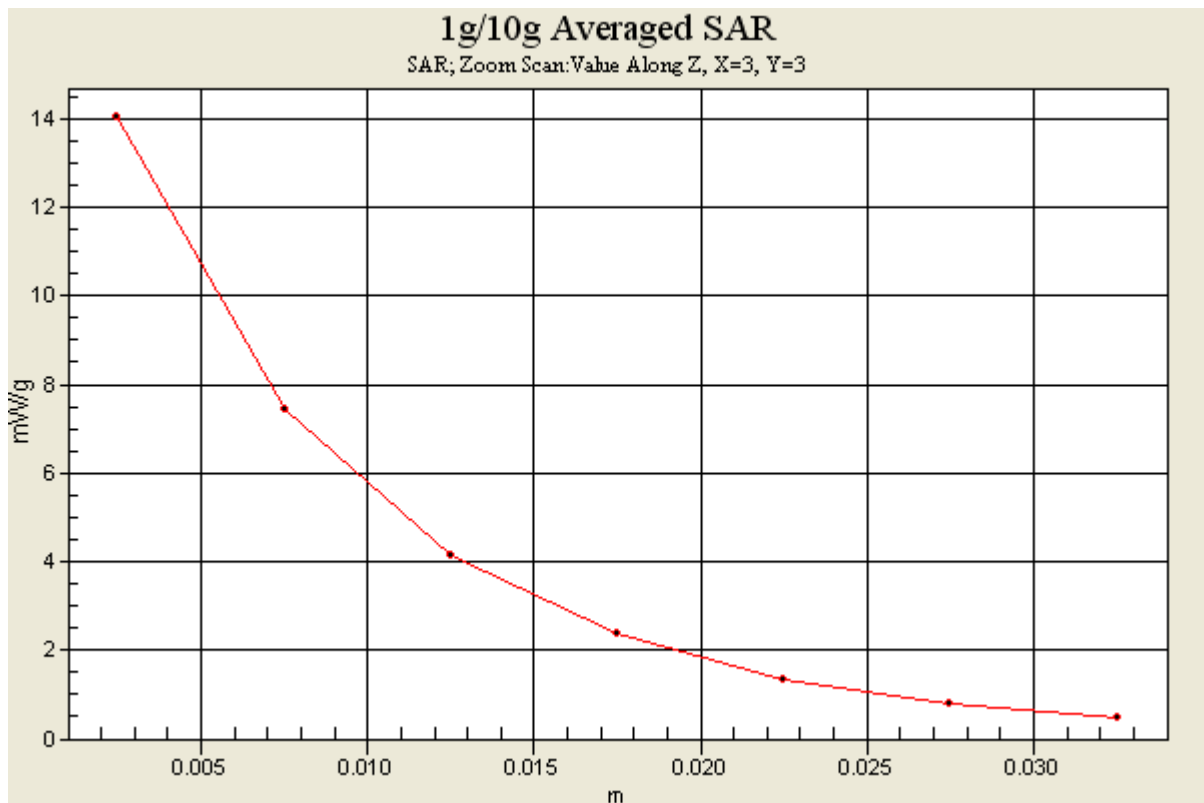
**Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.145 dB

Peak SAR (extrapolated) = 19.6 W/kg

**SAR(1 g) = 10.2 W/kg; SAR(10 g) = 5.19 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:726**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.8$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(6.97, 6.97, 6.97); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-18; Ambient Temp: 21.5; Tissue Temp: 21.7

## **Dipole Verification**

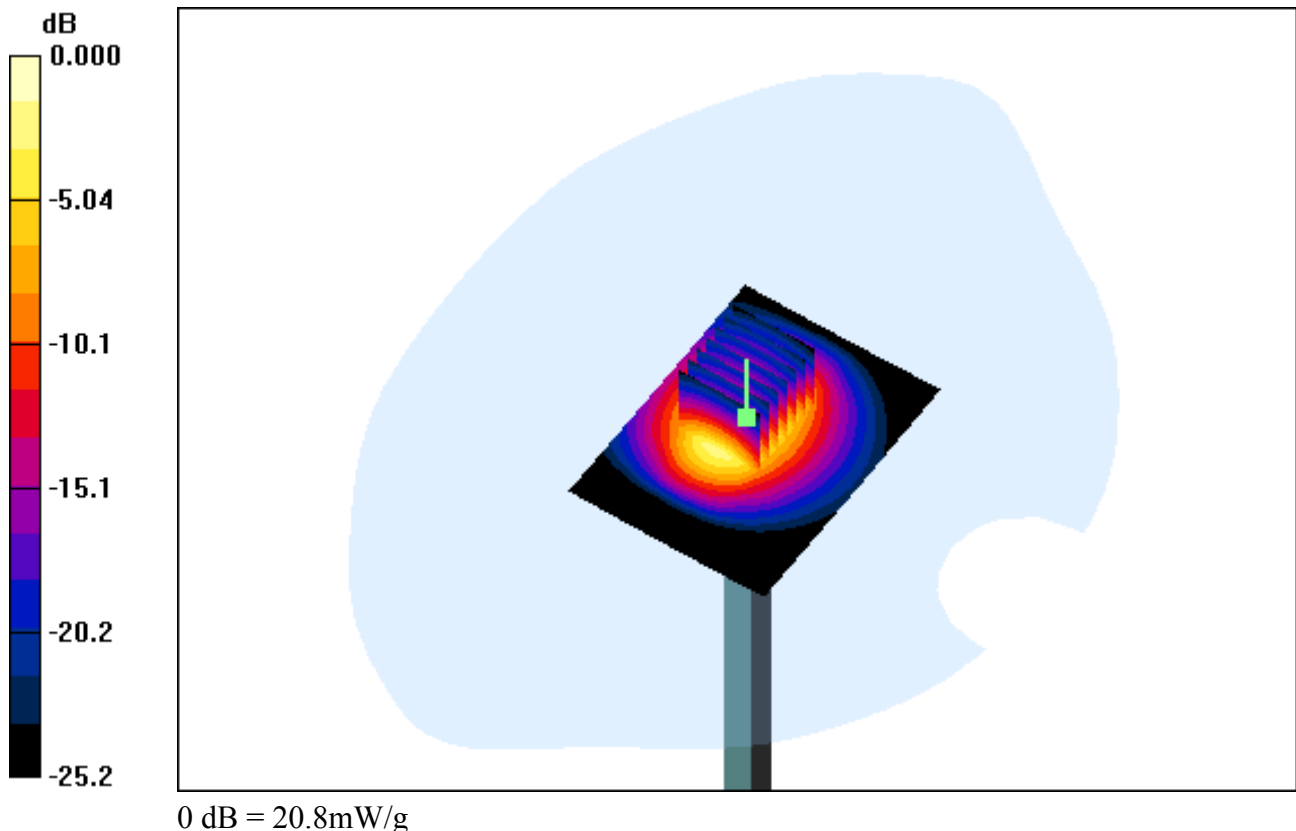
**Area Scan (61x81x1):** Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.058 dB

Peak SAR (extrapolated) = 30.2 W/kg

**SAR(1 g) = 13.1 W/kg; SAR(10 g) = 5.77 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:726**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.8$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

## DASY4 Configuration:

Probe: EX3DV4 - SN3643; ConvF(6.97, 6.97, 6.97); Calibrated: 2013-01-24; Electronics: DAE3 Sn519

Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-18; Ambient Temp: 21.5; Tissue Temp: 21.7

## Dipole Verification

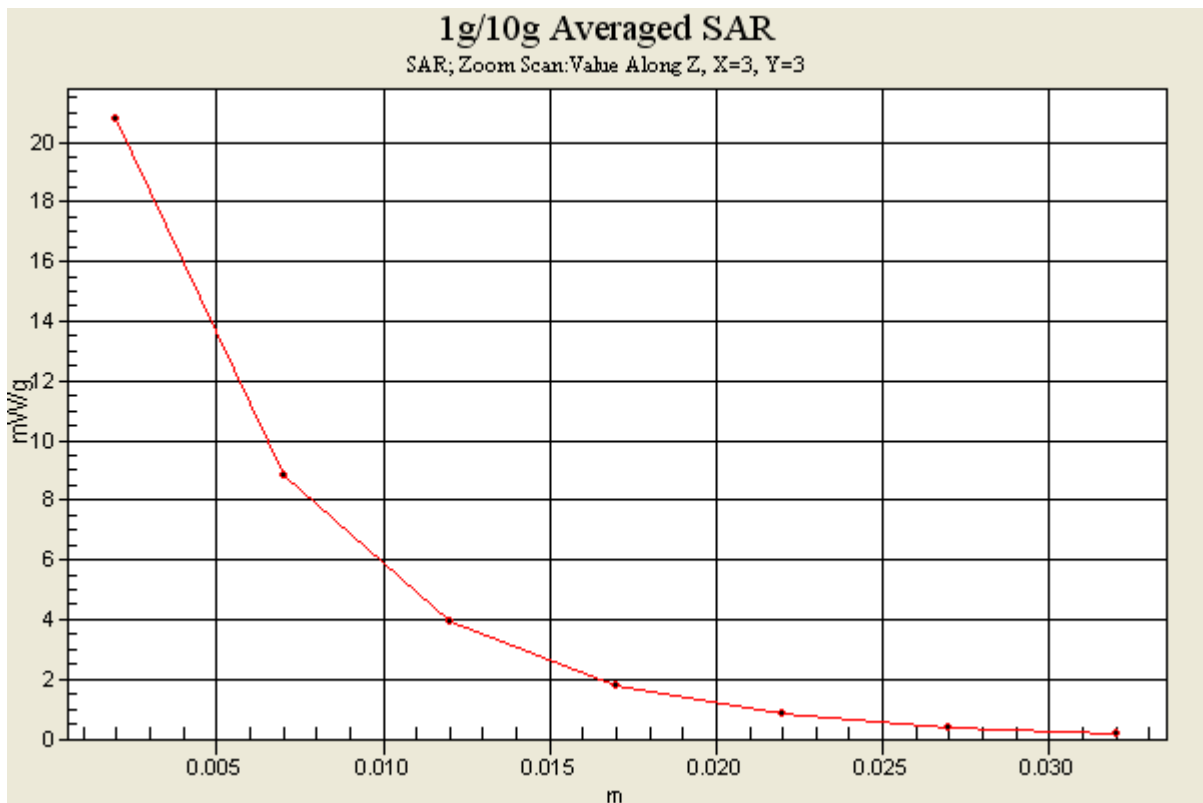
**Area Scan (61x81x1):** Measurement grid: dx=12mm, dy=12mm

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

Power Drift = 0.058 dB

Peak SAR (extrapolated) = 30.2 W/kg

**SAR(1 g) = 13.1 W/kg; SAR(10 g) = 5.77 W/kg**



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:726**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

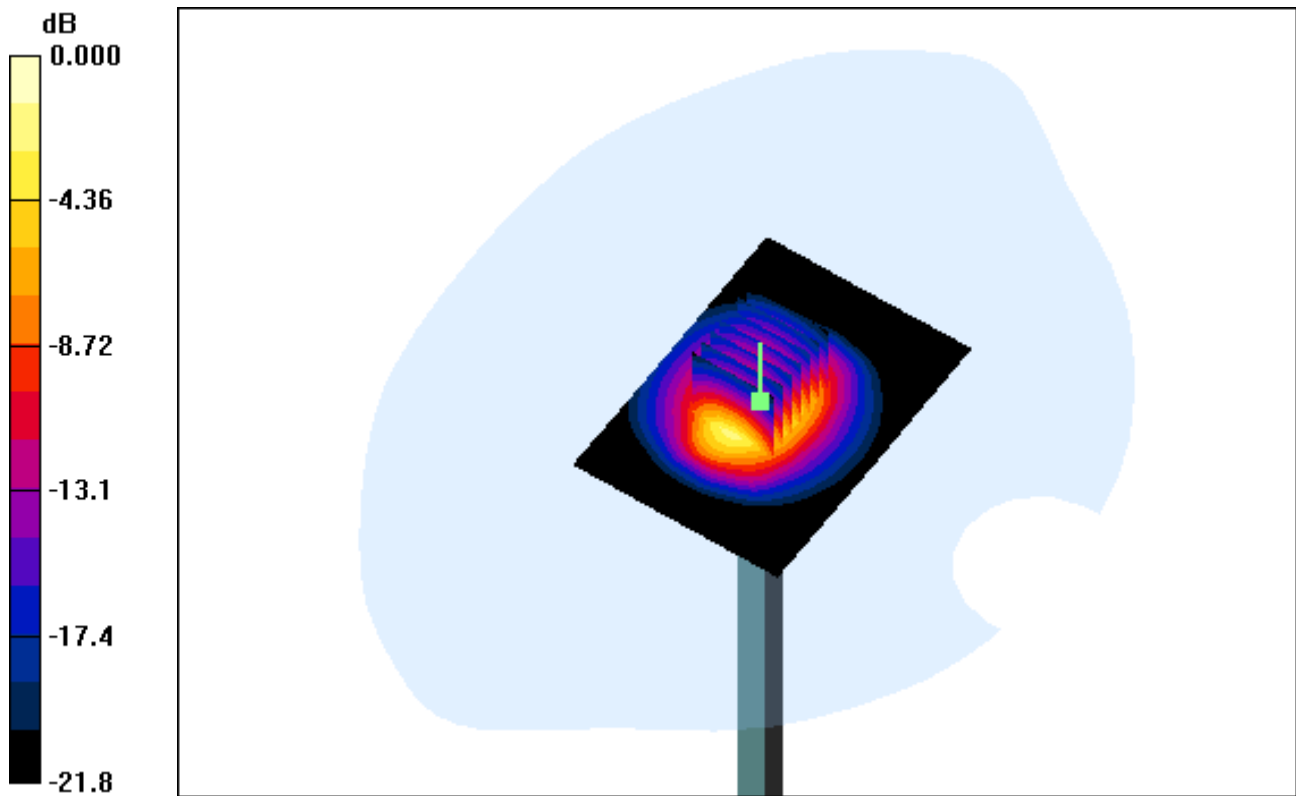
## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.07, 7.07, 7.07); Calibrated: 2013-01-24; Electronics: DAE3 Sn519  
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224  
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-18; Ambient Temp: 21.5; Tissue Temp: 21.7

## **Dipole Verification**

**Area Scan (51x71x1):** Measurement grid: dx=12mm, dy=12mm  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Power Drift = 0.007 dB  
Peak SAR (extrapolated) = 26.3 W/kg  
**SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.87 W/kg**



0 dB = 17.8mW/g



# DIGITAL EMC CO., LTD

**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN:726**

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 2450$  MHz;  $\sigma = 1.94$  mho/m;  $\epsilon_r = 54.1$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Phantom section: Flat Section

## **DASY4 Configuration:**

Probe: EX3DV4 - SN3643; ConvF(7.07, 7.07, 7.07); Calibrated: 2013-01-24; Electronics: DAE3 Sn519  
Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1224  
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Test Date: 2013-02-18; Ambient Temp: 21.5; Tissue Temp: 21.7

## **Dipole Verification**

**Area Scan (51x71x1):** Measurement grid: dx=12mm, dy=12mm  
**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm  
Power Drift = 0.007 dB  
Peak SAR (extrapolated) = 26.3 W/kg  
**SAR(1 g) = 12.6 W/kg; SAR(10 g) = 5.87 W/kg**

