

Attachment 1. – Dipole Validation 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: $f = 835$ MHz; $\sigma = 0.885$ mho/m; $\epsilon_r = 40.862$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

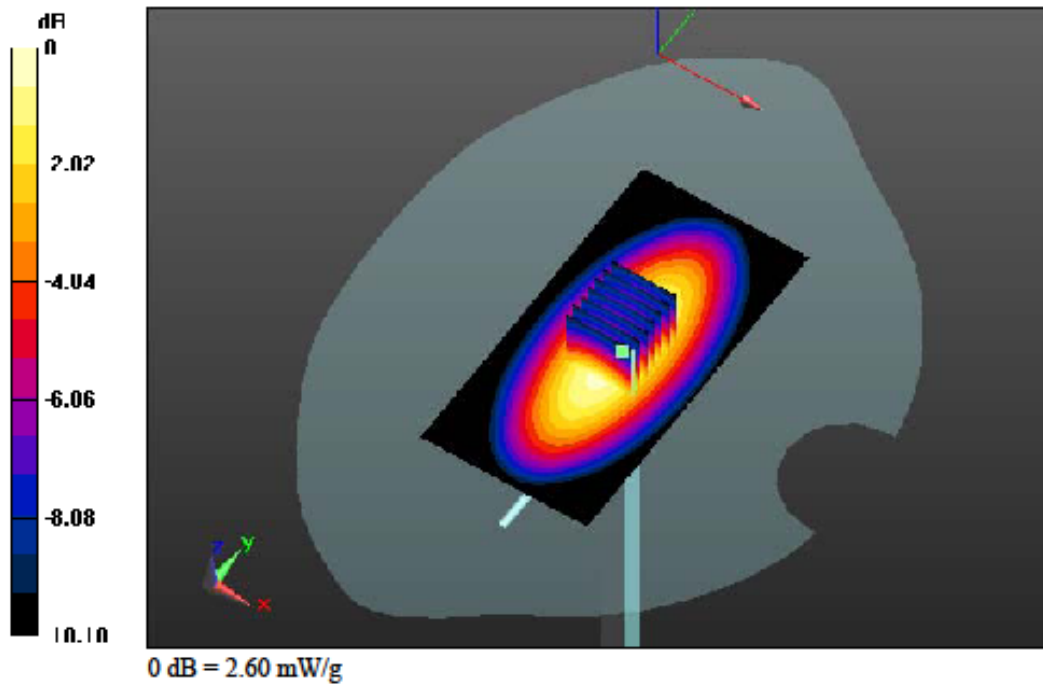
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(8.98, 8.98, 8.98); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.641 mW/g
SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.59 mW/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; $\sigma = 0.885$ mho/m; $\epsilon_r = 40.862$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

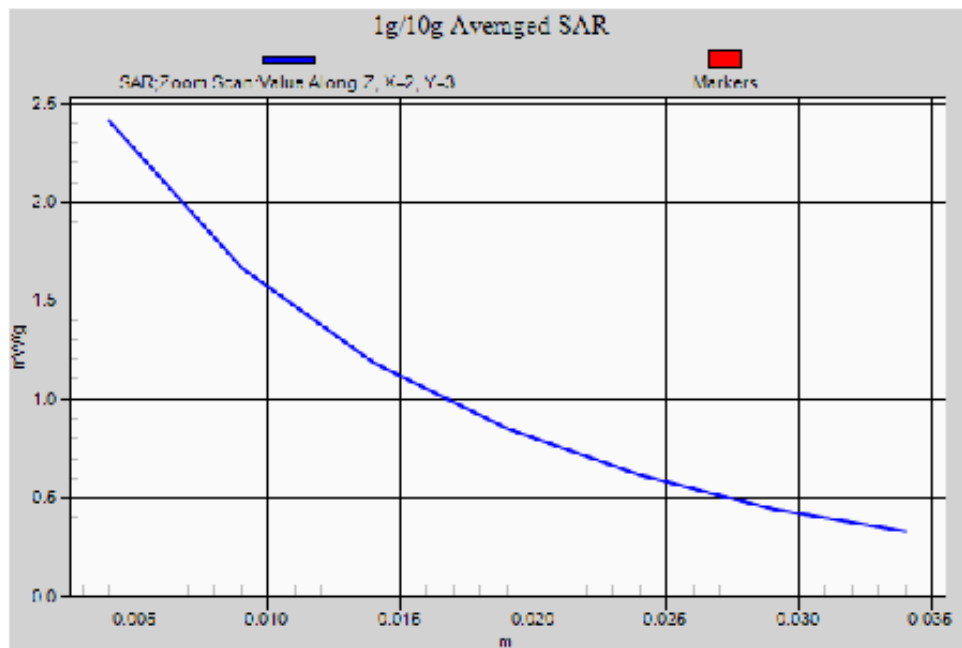
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(8.98, 8.98, 8.98); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Power Drift = -0.01 dB
 Peak SAR (extrapolated) = 3.641 mW/g
 SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.59 mW/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; $\sigma = 0.986$ mho/m; $\epsilon_r = 53.132$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

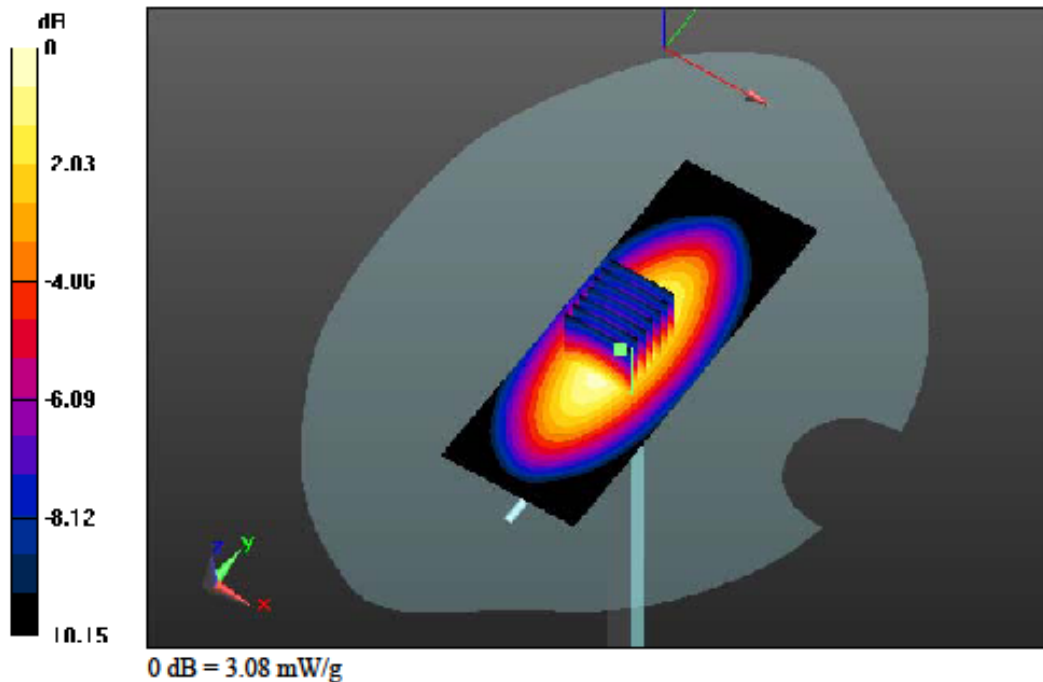
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(9.03, 9.03, 9.03); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (41x111x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = -0.01 dB
Peak SAR (extrapolated) = 3.762 mW/g
SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.68 mW/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: $f = 835 \text{ MHz}$; $\sigma = 0.986 \text{ mho/m}$; $\epsilon_r = 53.132$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

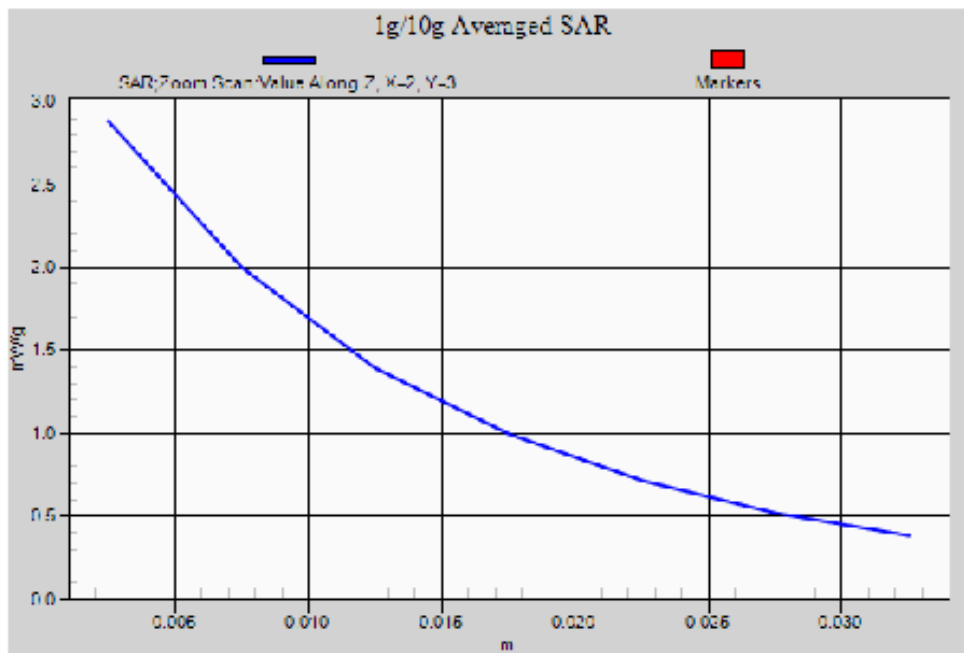
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(9.03, 9.03, 9.03); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (41x111x1): 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 = -0.01 dB
 Peak SAR (extrapolated) = 3.762 mW/g
 SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.68 mW/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; $\sigma = 0.892$ mho/m; $\epsilon_r = 41.854$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

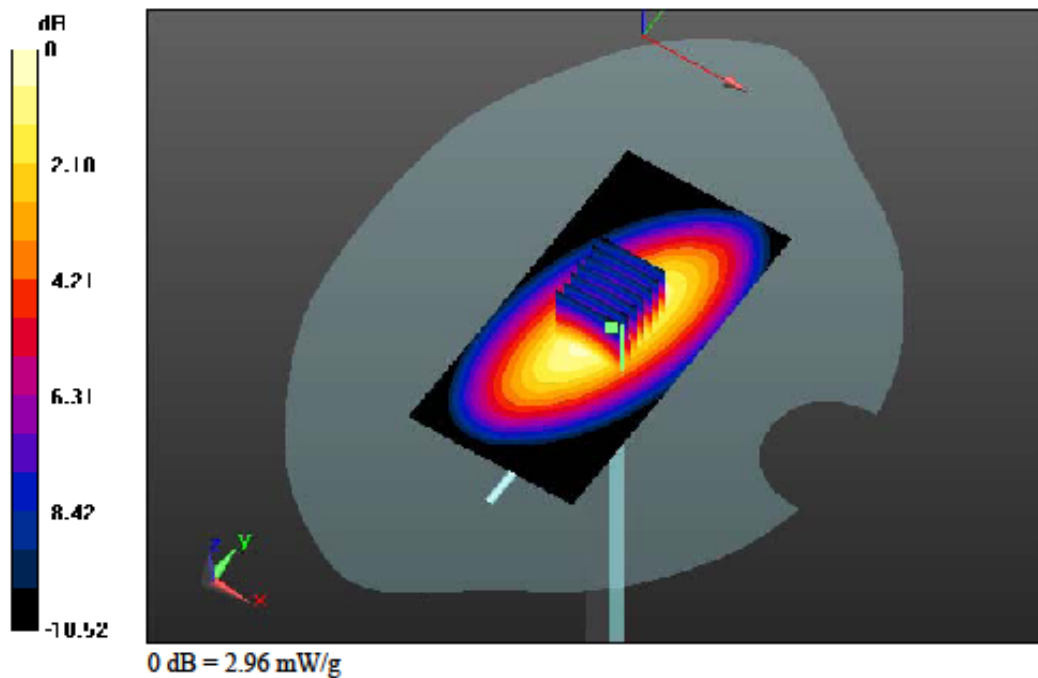
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(8.98, 8.98, 8.98); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-23; Ambient Temp: 22.1; Tissue Temp: 22.2

Dipole Validation

Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = -0.10 dB
Peak SAR (extrapolated) = 3.681 mW/g
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.59 mW/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; $\sigma = 0.892$ mho/m; $\epsilon_r = 41.854$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

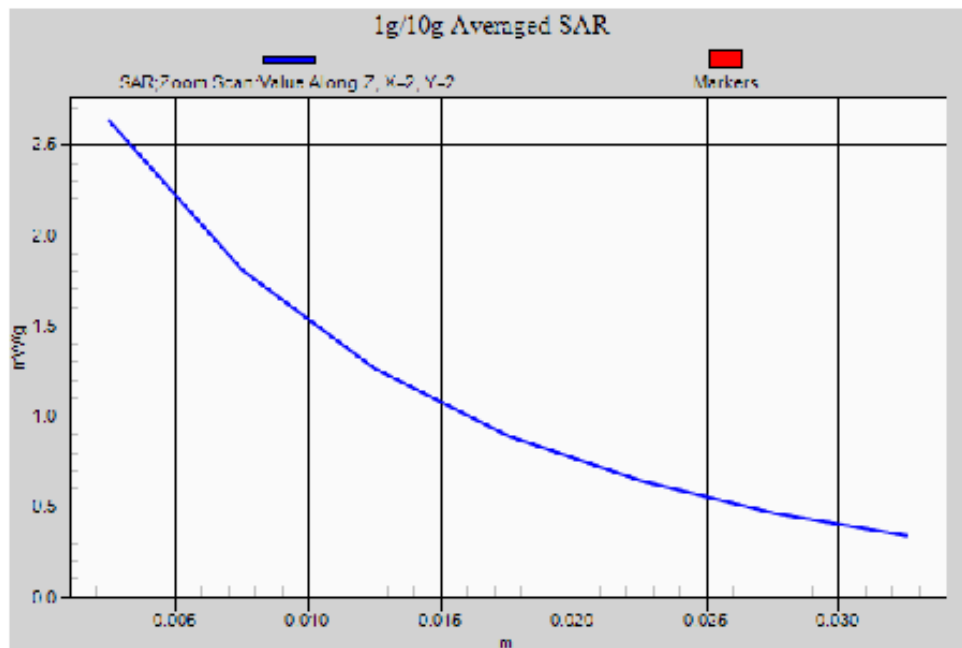
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(8.98, 8.98, 8.98); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-23; Ambient Temp: 22.1; Tissue Temp: 22.2

Dipole Validation

Area Scan (51x101x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Power Drift = -0.10 dB
 Peak SAR (extrapolated) = 3.681 mW/g
 SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.59 mW/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; $\sigma = 0.95$ mho/m; $\epsilon_r = 53.108$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

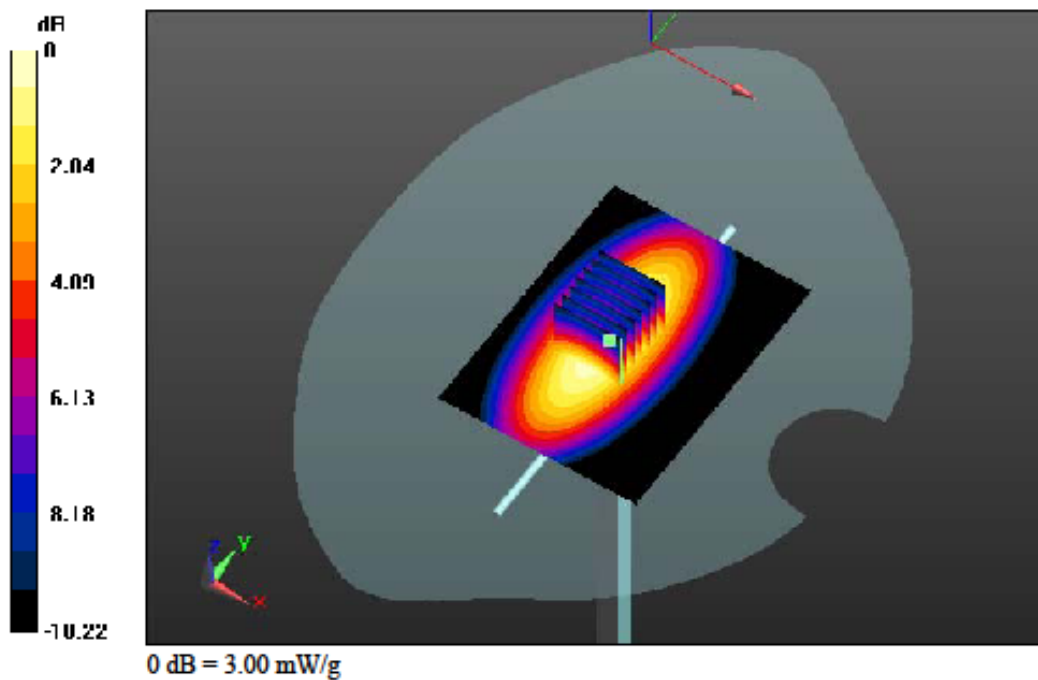
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(9.03, 9.03, 9.03); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-23; Ambient Temp: 22.1; Tissue Temp: 22.2

Dipole Validation

Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = -0.02 dB
Peak SAR (extrapolated) = 3.664 mW/g
SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.63 mW/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: $f = 835 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 53.108$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

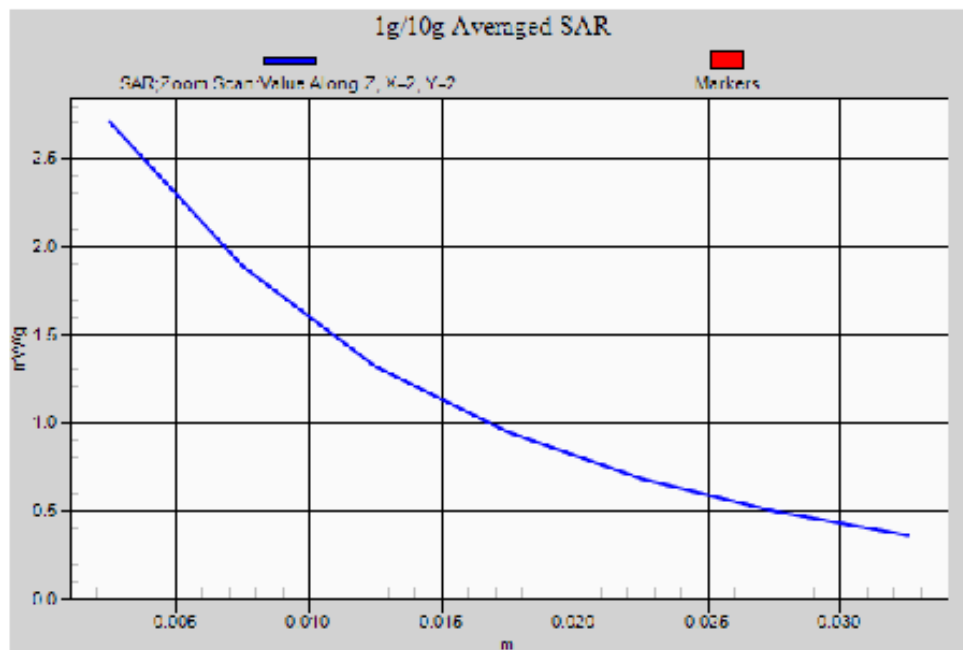
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(9.03, 9.03, 9.03); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-23; Ambient Temp: 22.1; Tissue Temp: 22.2

Dipole Validation

Area Scan (61x81x1): 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 = -0.02 dB
 Peak SAR (extrapolated) = 3.664 mW/g
 SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.63 mW/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; $\sigma = 1.434$ mho/m; $\epsilon_r = 40.484$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.76, 7.76, 7.76); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335

Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679

Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

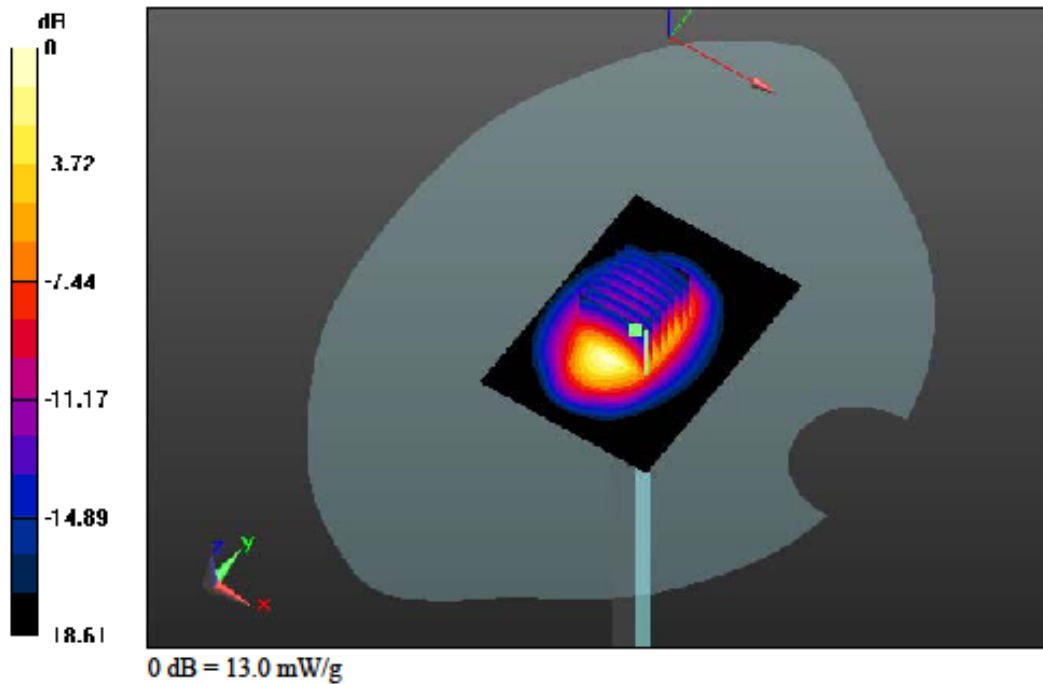
Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.13 dB

Peak SAR (extrapolated) = 18.276 mW/g

SAR(1 g) = 9.55 mW/g; SAR(10 g) = 4.87 mW/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: $f = 1900 \text{ MHz}$; $\sigma = 1.434 \text{ mho/m}$; $\epsilon_r = 40.484$; $\rho = 1000 \text{ kg/m}^3$
 Phantom section: Flat Section

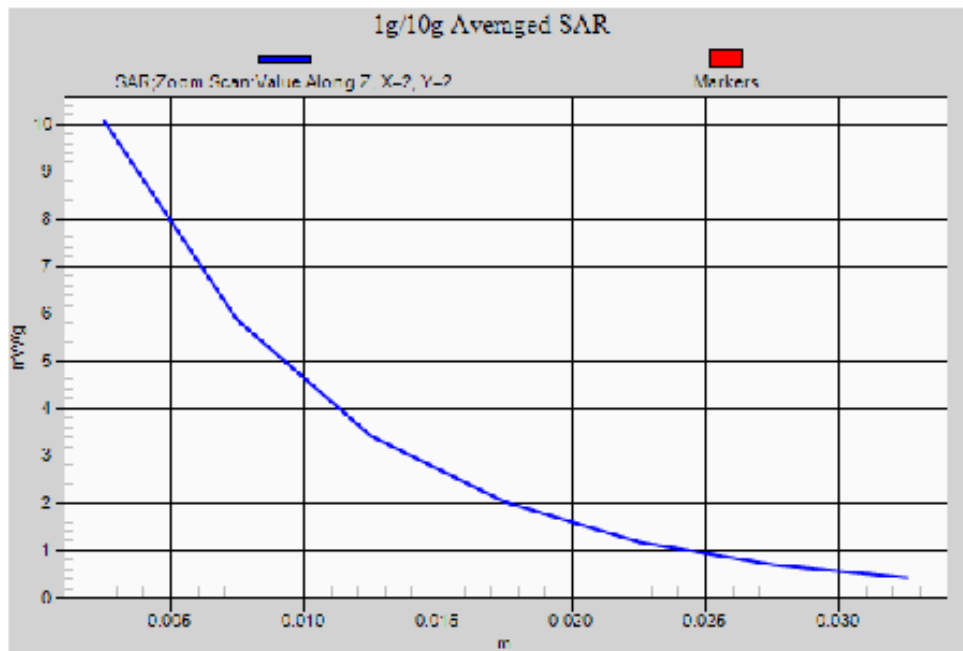
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.76, 7.76, 7.76); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (51x71x1): 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 = -0.13 dB
 Peak SAR (extrapolated) = 18.276 mW/g
 SAR(1 g) = 9.55 mW/g; SAR(10 g) = 4.87 mW/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; $\sigma = 1.515$ mho/m; $\epsilon_r = 52.349$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

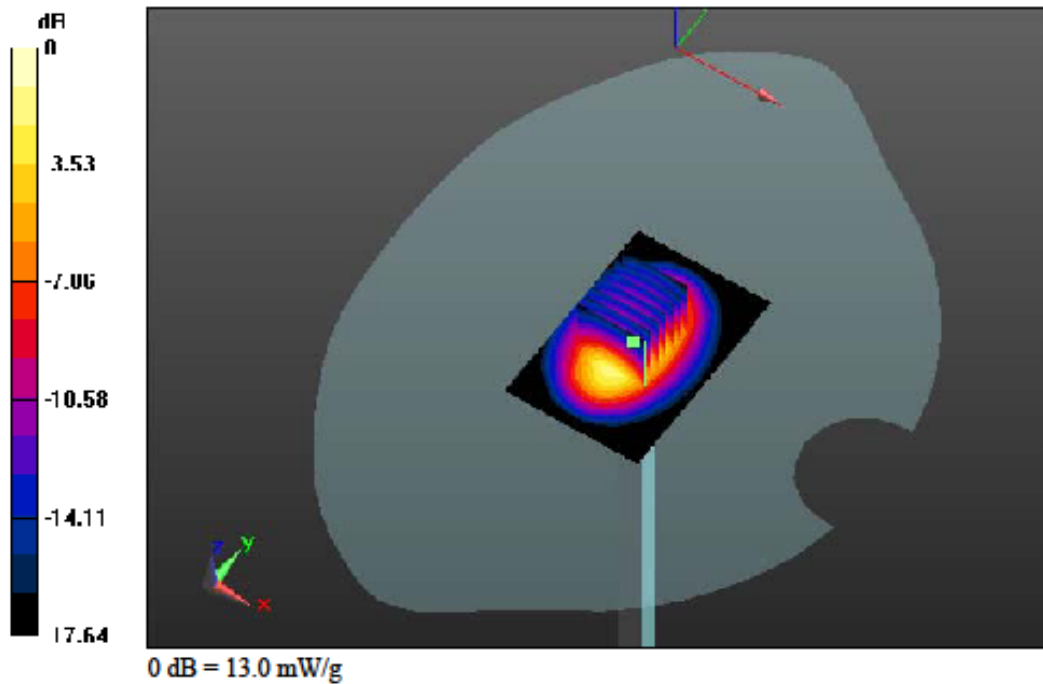
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.34, 7.34, 7.34); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = 0.05 dB
Peak SAR (extrapolated) = 17.844 mW/g
SAR(1 g) = 9.51 mW/g; SAR(10 g) = 4.9 mW/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; $\sigma = 1.515$ mho/m; $\epsilon_r = 52.349$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

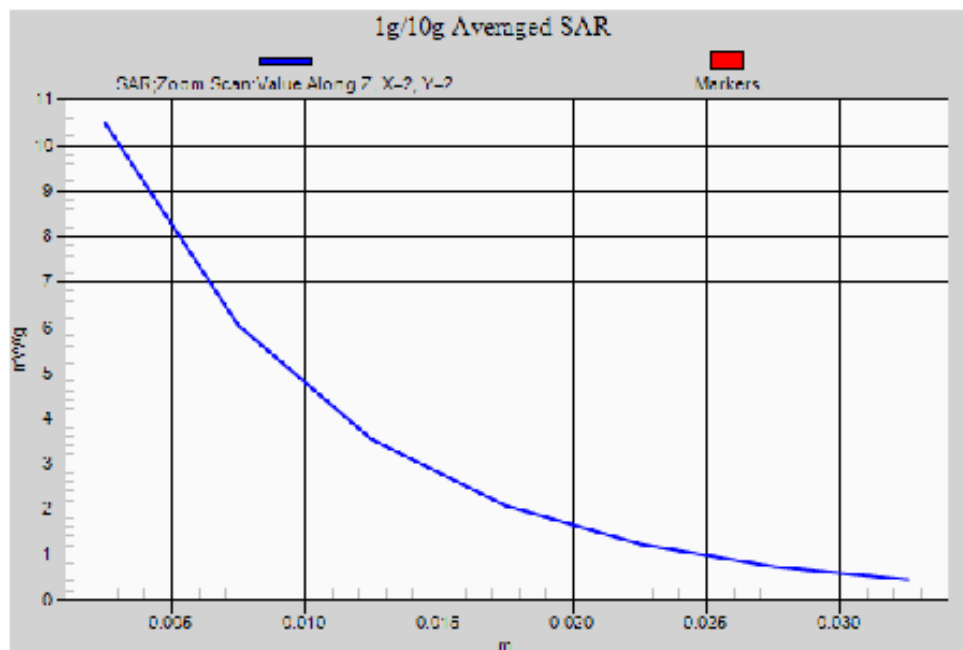
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.34, 7.34, 7.34); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-13; Ambient Temp: 22.5; Tissue Temp: 22.7

Dipole Validation

Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Power Drift = 0.05 dB
 Peak SAR (extrapolated) = 17.844 mW/g
 SAR(1 g) = 9.51 mW/g; SAR(10 g) = 4.9 mW/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; $\sigma = 1.434$ mho/m; $\epsilon_r = 40.146$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

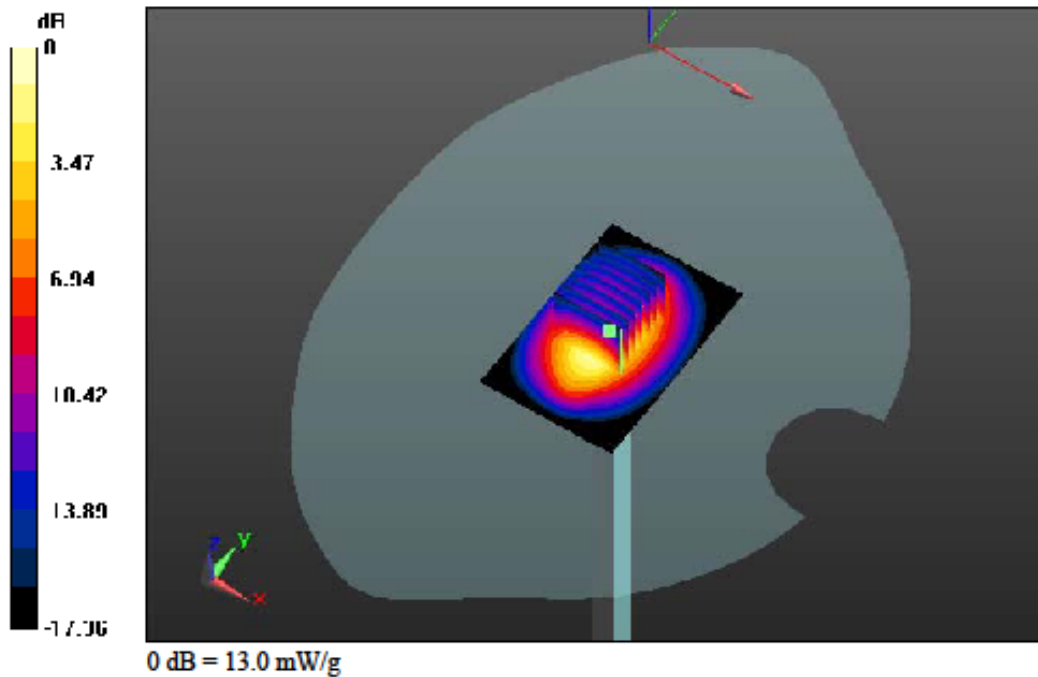
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.76, 7.76, 7.76); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-24; Ambient Temp: 22.0; Tissue Temp: 22.1

Dipole Validation

Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = 0.02 dB
Peak SAR (extrapolated) = 17.982 mW/g
SAR(1 g) = 9.7 mW/g; SAR(10 g) = 5.1 mW/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; $\sigma = 1.434$ mho/m; $\epsilon_r = 40.146$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

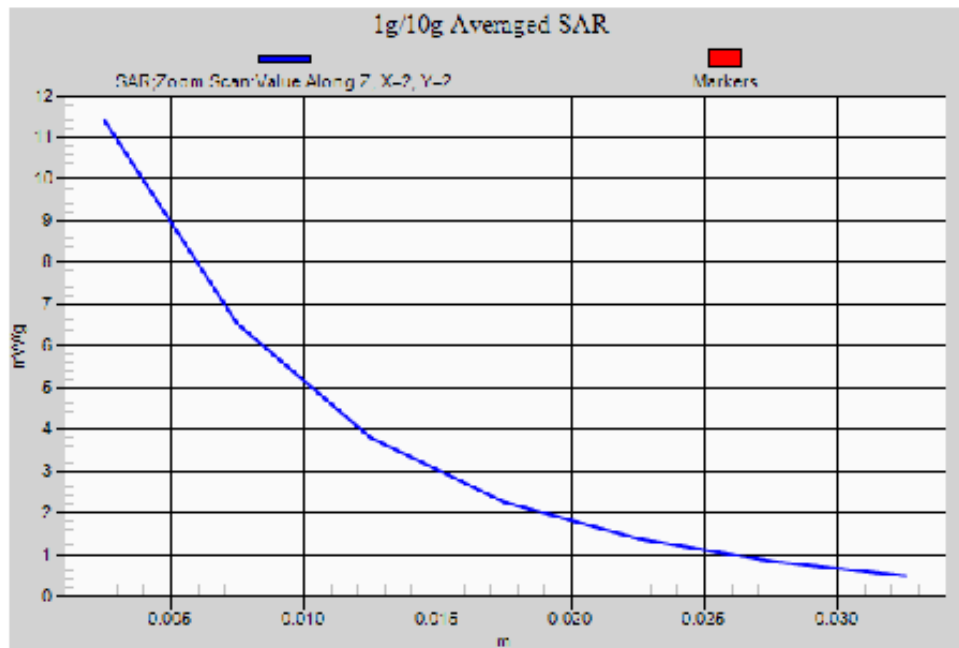
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.76, 7.76, 7.76); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-24; Ambient Temp: 22.0; Tissue Temp: 22.1

Dipole Validation

Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Power Drift = 0.02 dB
 Peak SAR (extrapolated) = 17.982 mW/g
 SAR(1 g) = 9.7 mW/g; SAR(10 g) = 5.1 mW/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; $\sigma = 1.521$ mho/m; $\epsilon_r = 52.969$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

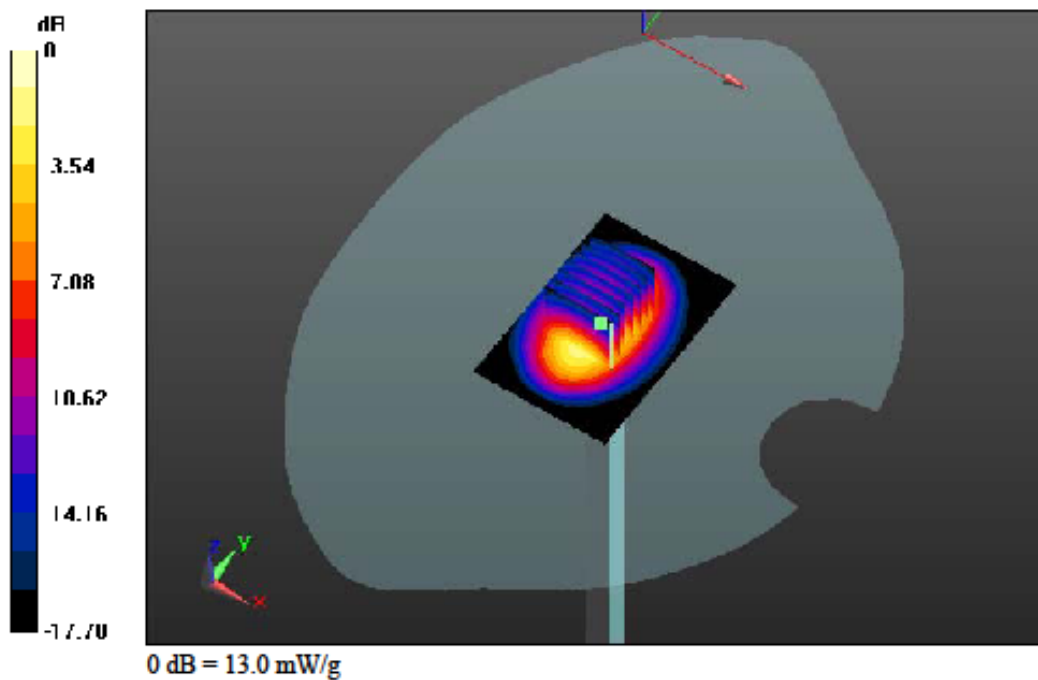
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.34, 7.34, 7.34); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-24; Ambient Temp: 22.0; Tissue Temp: 22.1

Dipole Validation

Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Power Drift = 0.05 dB
Peak SAR (extrapolated) = 17.920 mW/g
SAR(1 g) = 9.54 mW/g; SAR(10 g) = 4.92 mW/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; $\sigma = 1.521$ mho/m; $\epsilon_r = 52.969$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

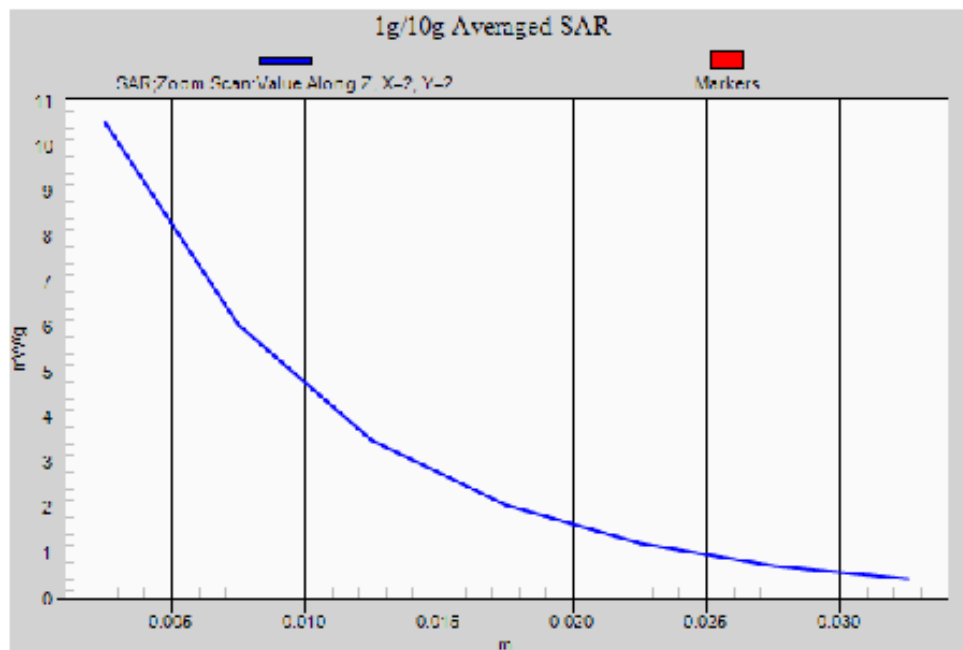
DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(7.34, 7.34, 7.34); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335
 Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679
 Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-10-24; Ambient Temp: 22.0; Tissue Temp: 22.1

Dipole Validation

Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Power Drift = 0.05 dB
 Peak SAR (extrapolated) = 17.920 mW/g
 SAR(1 g) = 9.54 mW/g; SAR(10 g) = 4.92 mW/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; $\sigma = 1.987$ mho/m; $\epsilon_r = 51.412$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(6.97, 6.97, 6.97); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335

Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679

Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-12; Ambient Temp: 22.1; Tissue Temp: 22.2

Dipole Validation

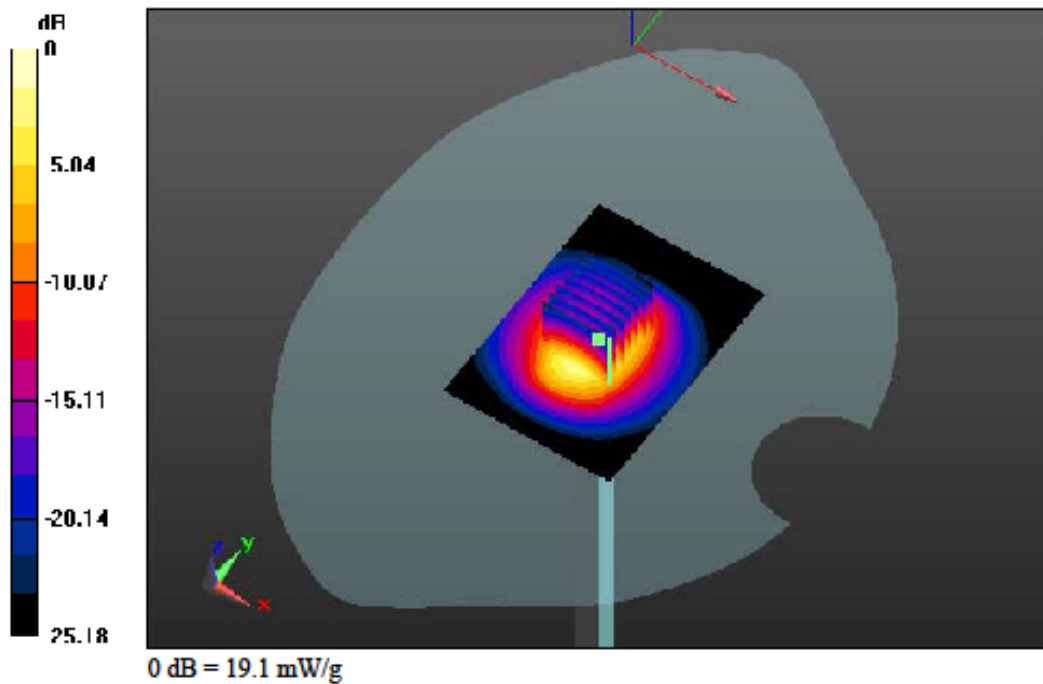
Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.00 dB

Peak SAR (extrapolated) = 30.197 mW/g

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 5.78 mW/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; $\sigma = 1.987$ mho/m; $\epsilon_r = 51.412$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY5 Configuration:

Probe: EX3DV4 - SN3866; ConvF(6.97, 6.97, 6.97); Calibrated: 2012-06-20; ; Electronics: DAE4 Sn1335

Phantom: SAM with CRP_20120521; Type: SAM; Serial: 1679

Measurement SW: DASY52, Version 52.8 (2); SEMCAD X Version 14.6.6 (6477)

Test Date: 2012-09-12; Ambient Temp: 22.1; Tissue Temp: 22.2

Dipole Validation**Area Scan (51x71x1):** Measurement grid: dx=15mm, dy=15mm**Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Power Drift = -0.00 dB

Peak SAR (extrapolated) = 30.197 mW/g

SAR(1 g) = 13.1 mW/g; SAR(10 g) = 5.78 mW/g

