

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: $f = 835 \text{ MHz}$; $\sigma = 0.898 \text{ mho/m}$; $\epsilon_r = 41.039$; $\rho = 1000 \text{ kg/m}^3$

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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

Dipole Validation

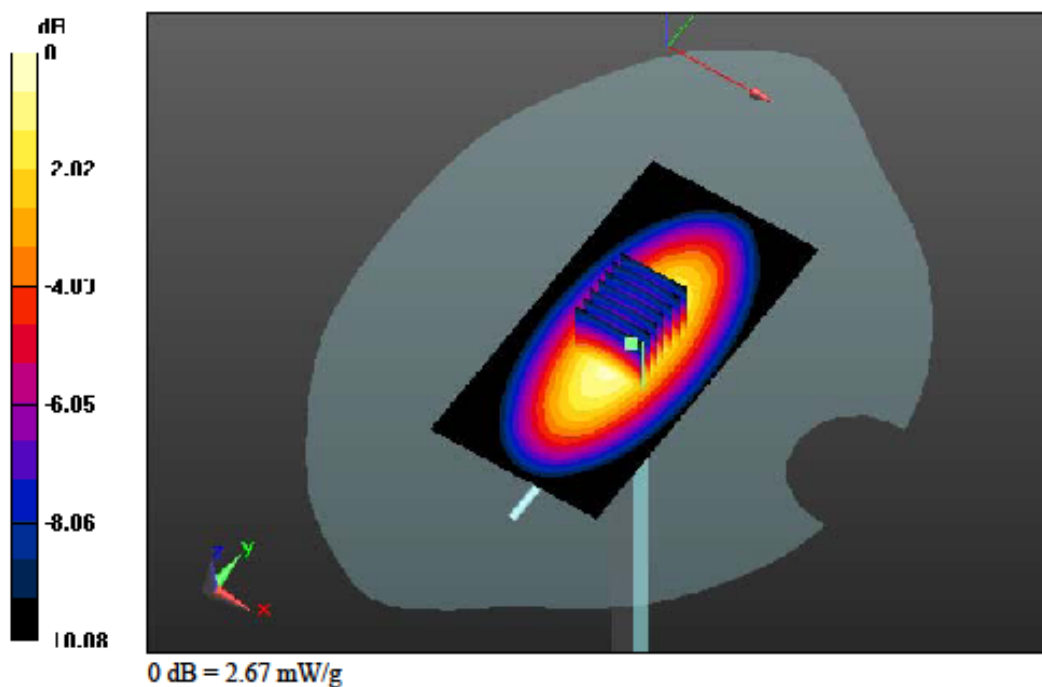
Area Scan (51x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.733 mW/g

SAR(1 g) = 2.48 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: $f = 835 \text{ MHz}$; $\sigma = 0.898 \text{ mho/m}$; $\epsilon_r = 41.039$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

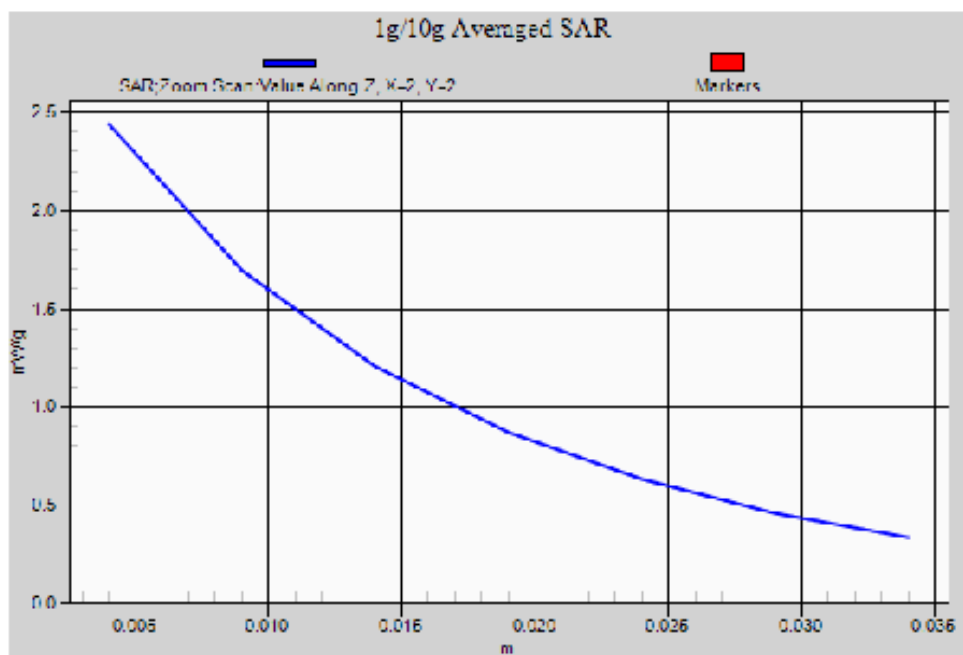
DASY5 Configuration:

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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

Dipole Validation

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 = 0.04 dB
Peak SAR (extrapolated) = 3.733 mW/g
SAR(1 g) = 2.48 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: $f = 835 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 53.518$; $\rho = 1000 \text{ kg/m}^3$

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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

Dipole Validation

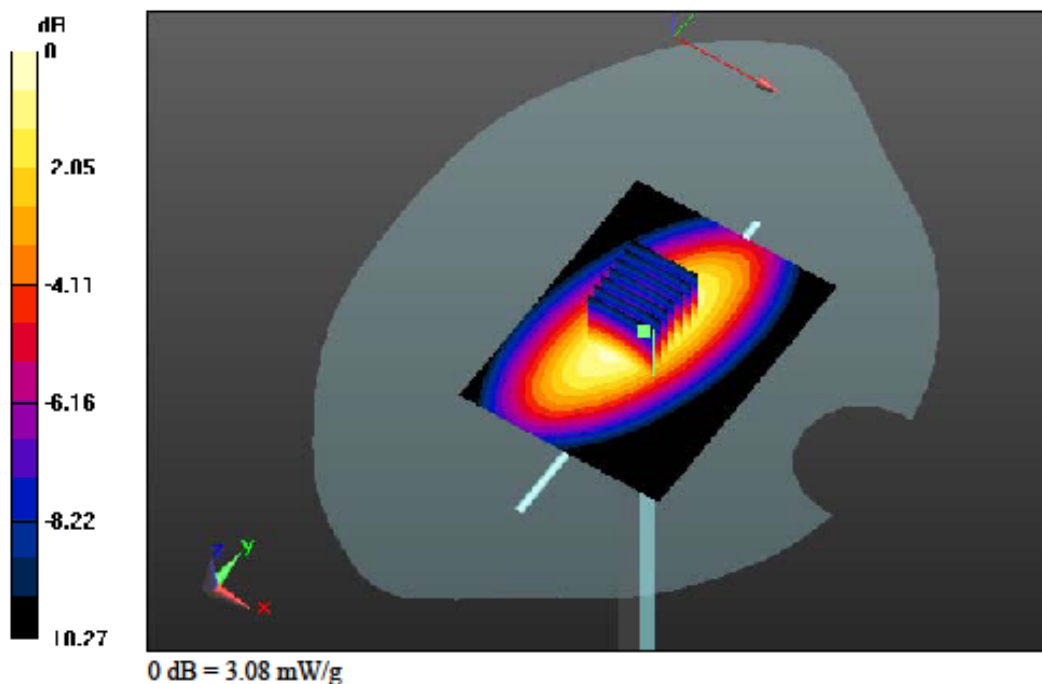
Area Scan (61x81x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

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

Power Drift = 0.04 dB

Peak SAR (extrapolated) = 3.778 mW/g

SAR(1 g) = 2.52 mW/g; SAR(10 g) = 1.66 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: $f = 835 \text{ MHz}$; $\sigma = 0.99 \text{ mho/m}$; $\epsilon_r = 53.518$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

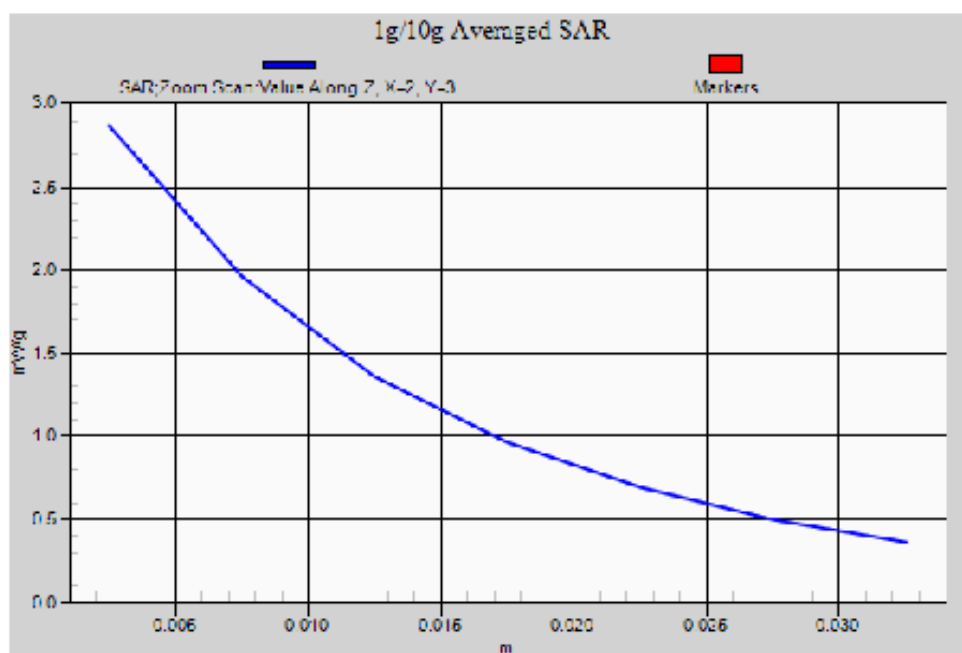
DASY5 Configuration:

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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

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 = 0.04 dB
Peak SAR (extrapolated) = 3.778 mW/g
SAR(1 g) = 2.52 mW/g; SAR(10 g) = 1.66 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: $f = 835 \text{ MHz}$; $\sigma = 0.909 \text{ mho/m}$; $\epsilon_r = 42.943$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

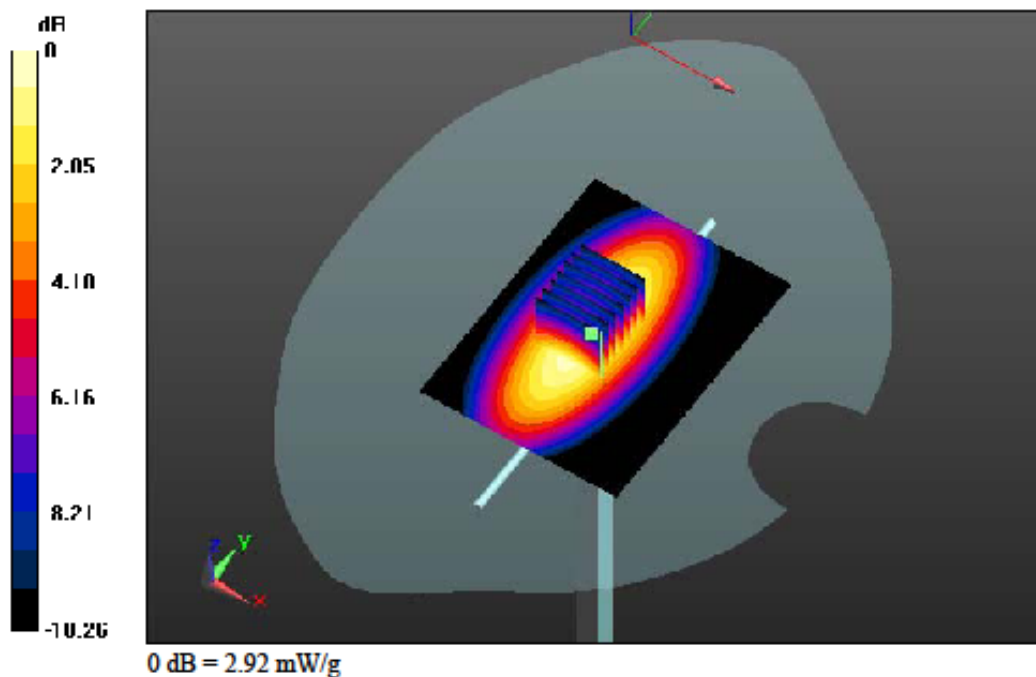
DASY5 Configuration:

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: 2012-10-19; Ambient Temp: 22.4; Tissue Temp: 22.5

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) = 3.593 mW/g
SAR(1 g) = 2.39 mW/g; SAR(10 g) = 1.57 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; $\sigma = 0.909$ mho/m; $\epsilon_r = 42.943$; $\rho = 1000$ 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)

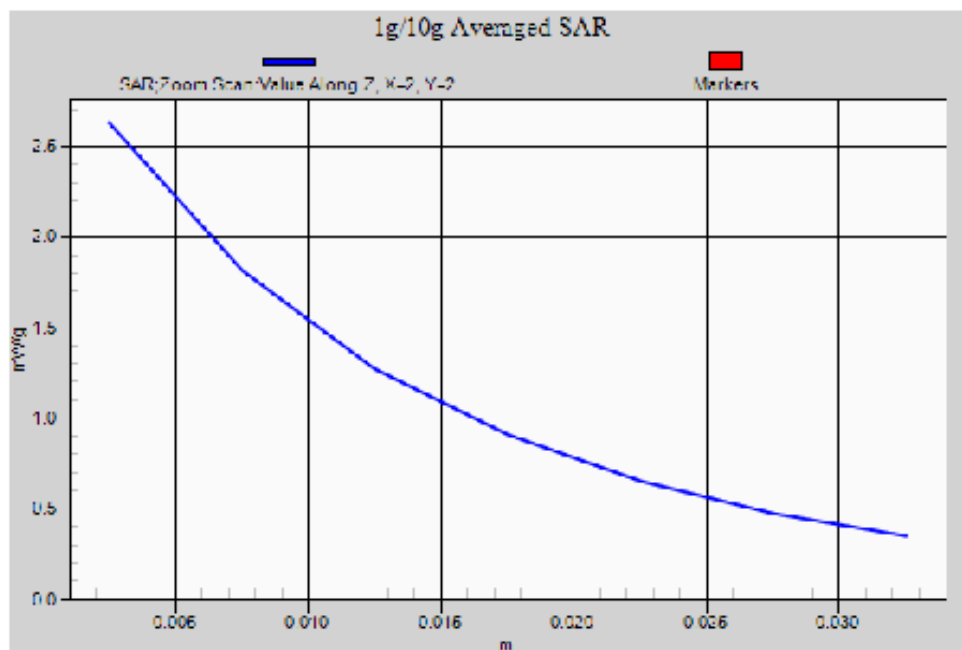
Test Date: 2012-10-19; Ambient Temp: 22.4; Tissue Temp: 22.5

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) = 3.593 mW/g

SAR(1 g) = 2.39 mW/g; SAR(10 g) = 1.57 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: $f = 835 \text{ MHz}$; $\sigma = 0.953 \text{ mho/m}$; $\epsilon_r = 53.383$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

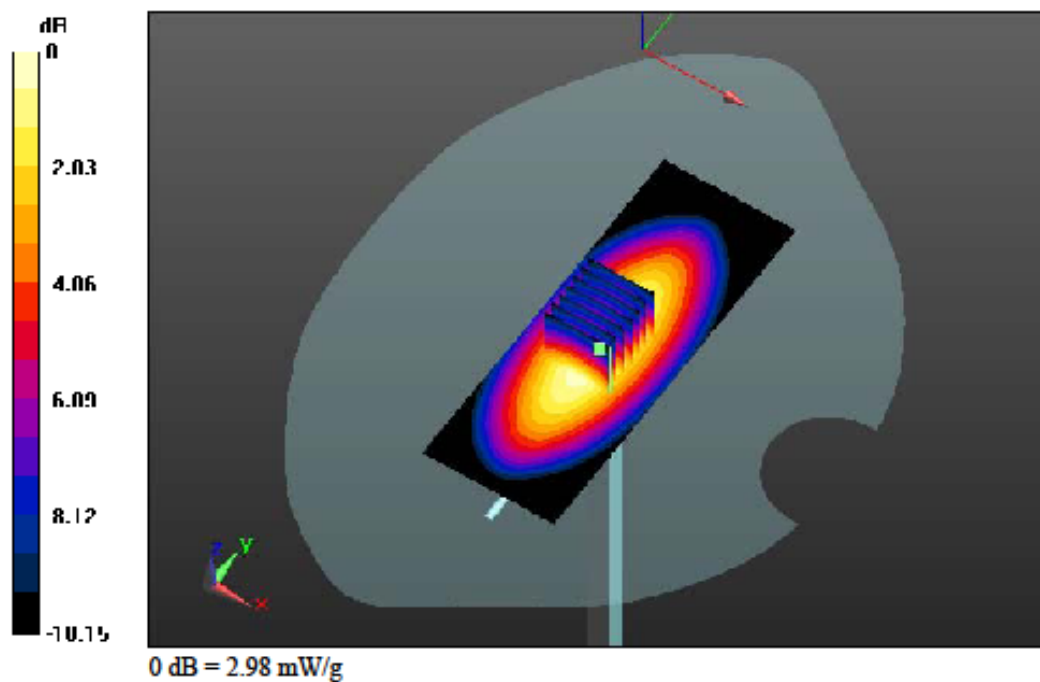
DASY5 Configuration:

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: 2012-10-19; Ambient Temp: 22.4; Tissue Temp: 22.5

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) = 3.634 mW/g
SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.62 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: $f = 835 \text{ MHz}$; $\sigma = 0.953 \text{ mho/m}$; $\epsilon_r = 53.383$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

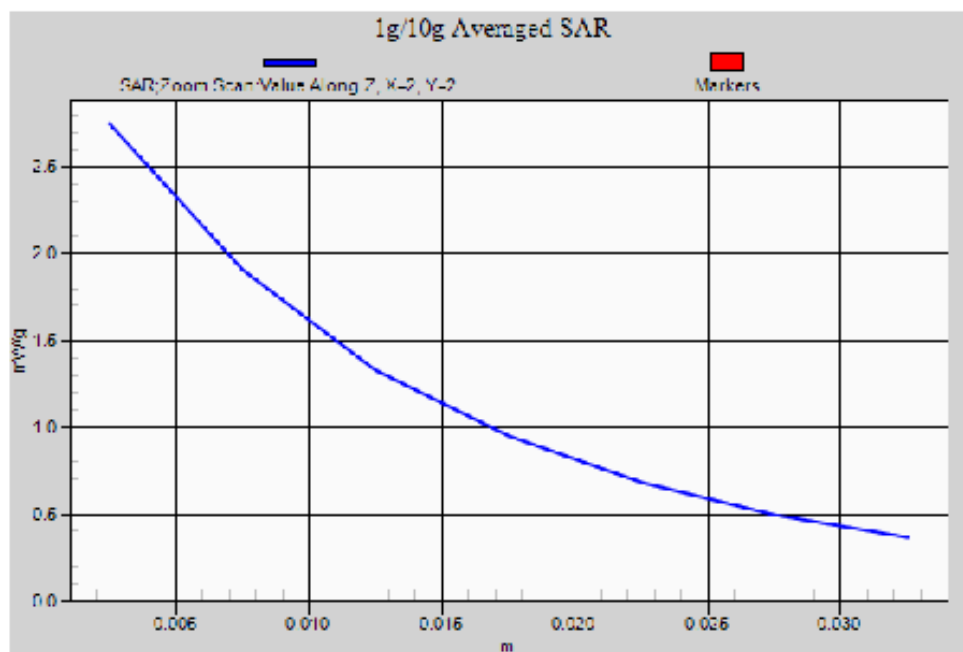
DASY5 Configuration:

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: 2012-10-19; Ambient Temp: 22.4; Tissue Temp: 22.5

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) = 3.634 mW/g
SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.62 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; $\sigma = 1.429$ mho/m; $\epsilon_r = 40.201$; $\rho = 1000$ 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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

Dipole Validation

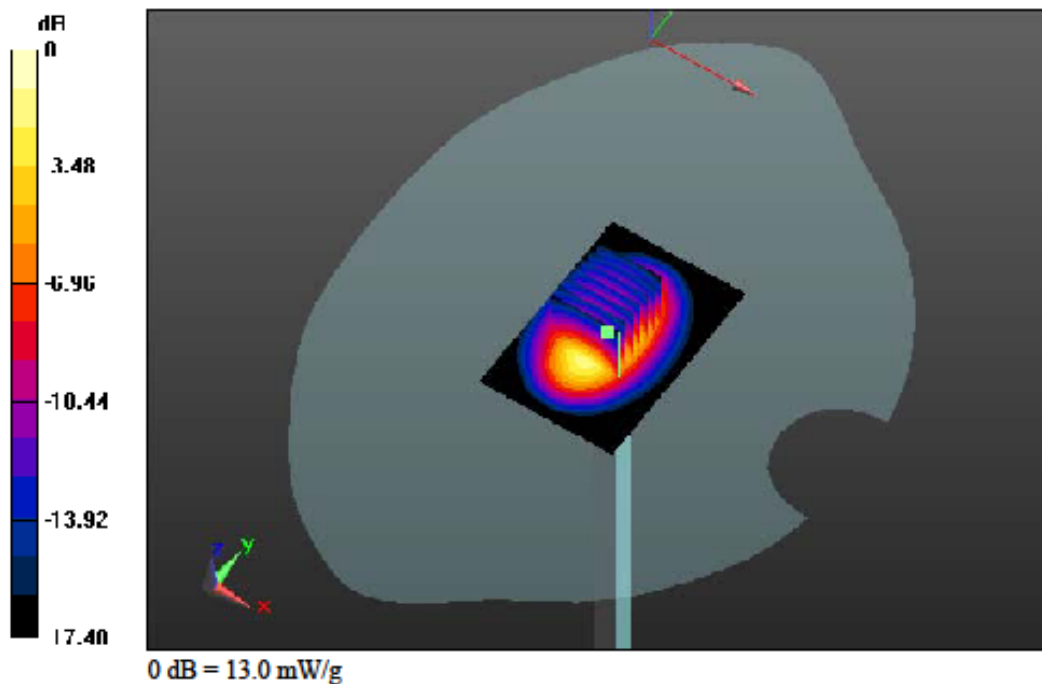
Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 17.965 mW/g

SAR(1 g) = 9.52 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; $\sigma = 1.429$ mho/m; $\epsilon_r = 40.201$; $\rho = 1000$ 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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

Dipole Validation

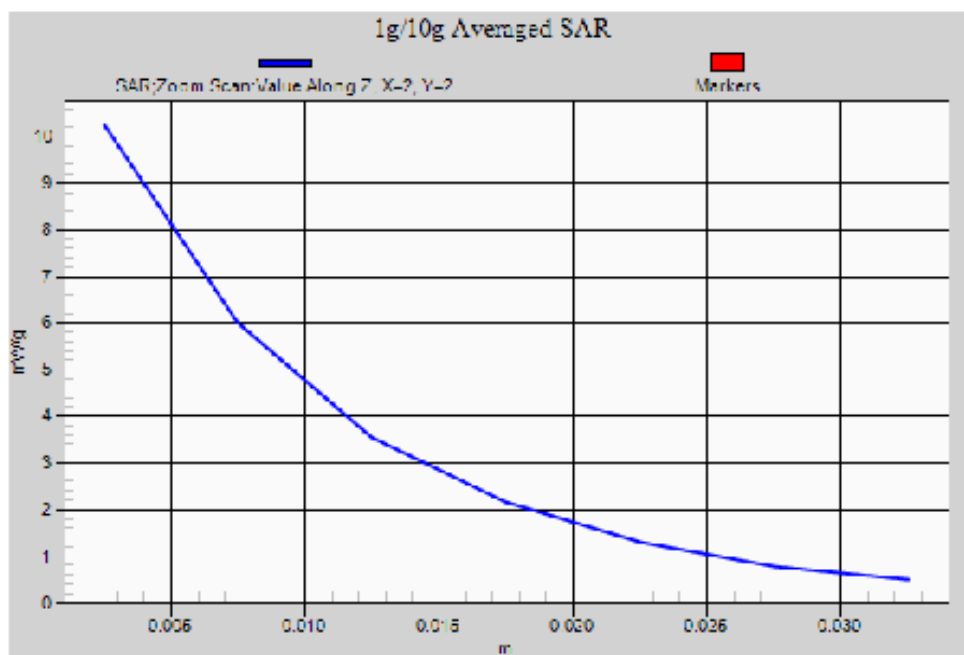
Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.09 dB

Peak SAR (extrapolated) = 17.965 mW/g

SAR(1 g) = 9.52 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; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.038$; $\rho = 1000$ 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: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

Dipole Validation

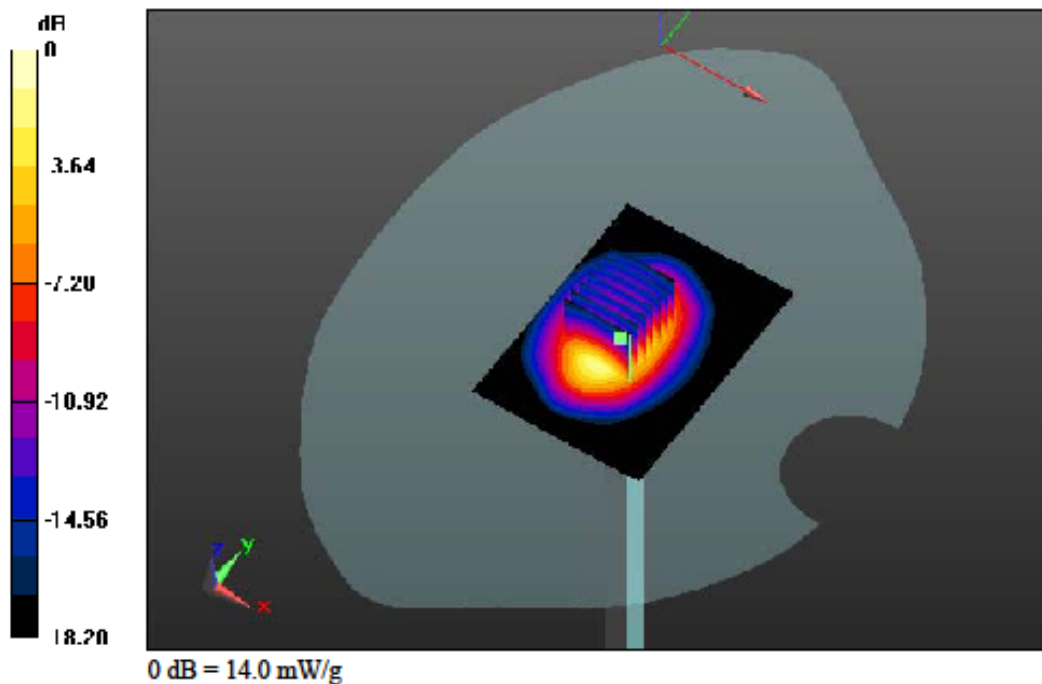
Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.05 dB

Peak SAR (extrapolated) = 19.490 mW/g

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.25 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; $\sigma = 1.52$ mho/m; $\epsilon_r = 52.038$; $\rho = 1000$ 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)

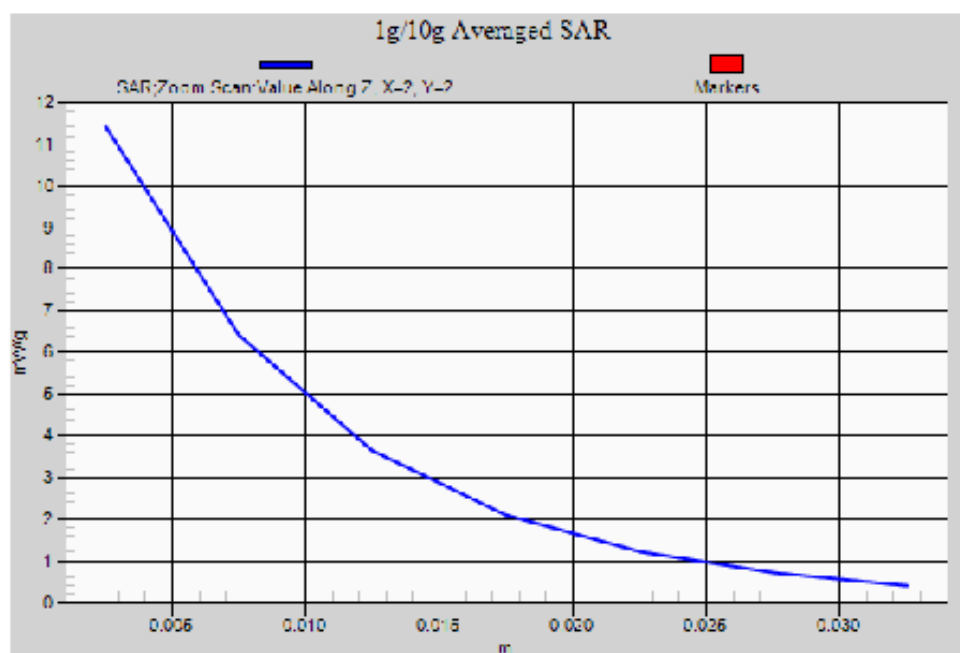
Test Date: 2012-09-11; Ambient Temp: 22.2; Tissue Temp: 22.5

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 = 0.05 dB

Peak SAR (extrapolated) = 19.490 mW/g

SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.25 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; $\sigma = 1.428$ mho/m; $\epsilon_r = 39.647$; $\rho = 1000$ 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: 2012-10-22; Ambient Temp: 22.3; Tissue Temp: 22.4

Dipole Validation

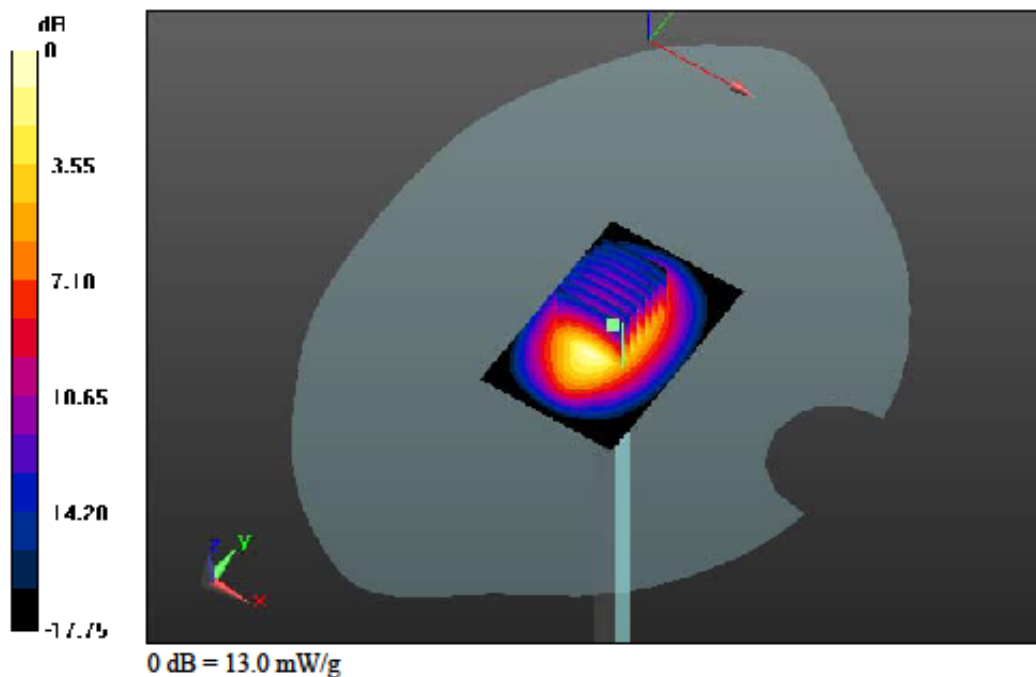
Area Scan (41x61x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = 0.02 dB

Peak SAR (extrapolated) = 17.913 mW/g

SAR(1 g) = 9.62 mW/g; SAR(10 g) = 5.05 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; $\sigma = 1.428$ mho/m; $\epsilon_r = 39.647$; $\rho = 1000$ 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)

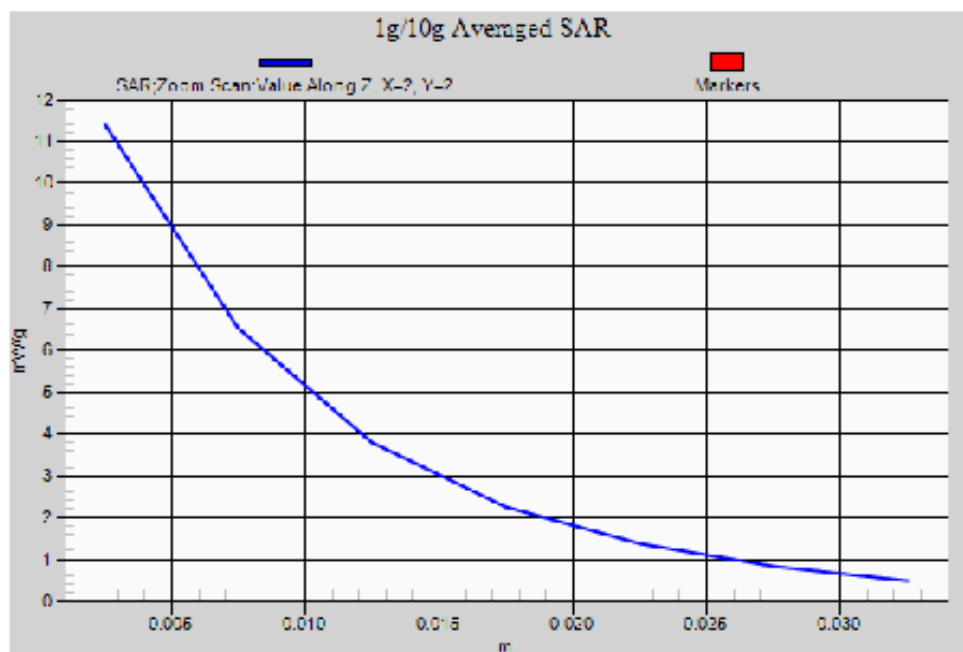
Test Date: 2012-10-22; Ambient Temp: 22.3; Tissue Temp: 22.4

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) = 17.913 mW/g

SAR(1 g) = 9.62 mW/g; SAR(10 g) = 5.05 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; $\sigma = 1.536$ mho/m; $\epsilon_r = 52.995$; $\rho = 1000$ 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: 2012-10-22; Ambient Temp: 22.3; Tissue Temp: 22.4

Dipole Validation

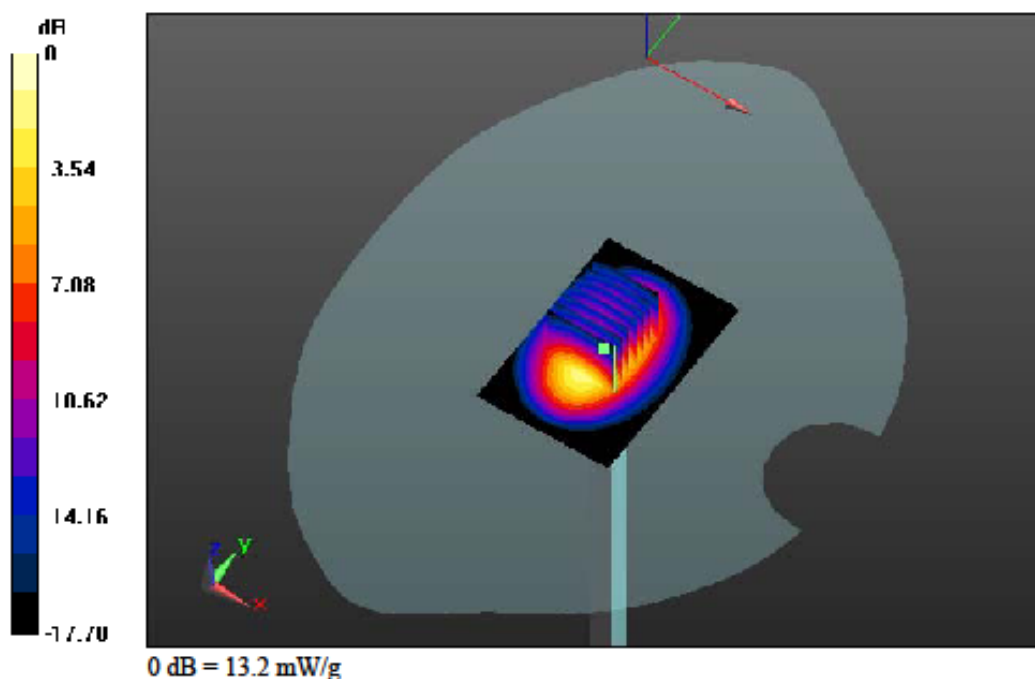
Area Scan (61x91x1): Measurement grid: dx=10mm, dy=10mm

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

Power Drift = 0.03 dB

Peak SAR (extrapolated) = 18.165 mW/g

SAR(1 g) = 9.65 mW/g; SAR(10 g) = 4.97 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; $\sigma = 1.536$ mho/m; $\epsilon_r = 52.995$; $\rho = 1000$ 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)

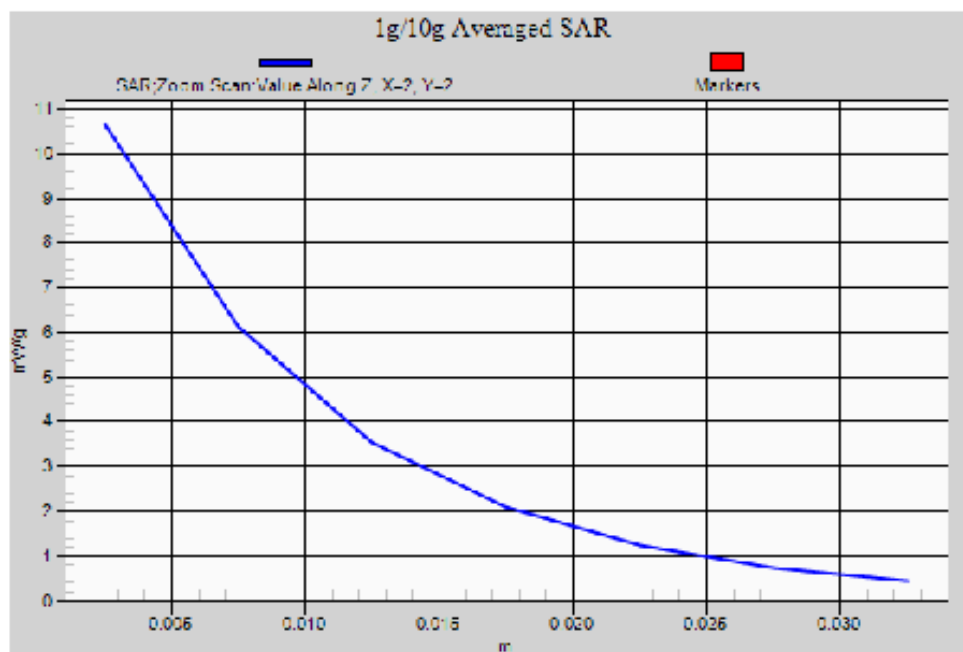
Test Date: 2012-10-22; Ambient Temp: 22.3; Tissue Temp: 22.4

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 = 0.03 dB

Peak SAR (extrapolated) = 18.165 mW/g

SAR(1 g) = 9.65 mW/g; SAR(10 g) = 4.97 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; $\sigma = 2$ mho/m; $\epsilon_r = 53.96$; $\rho = 1000$ 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

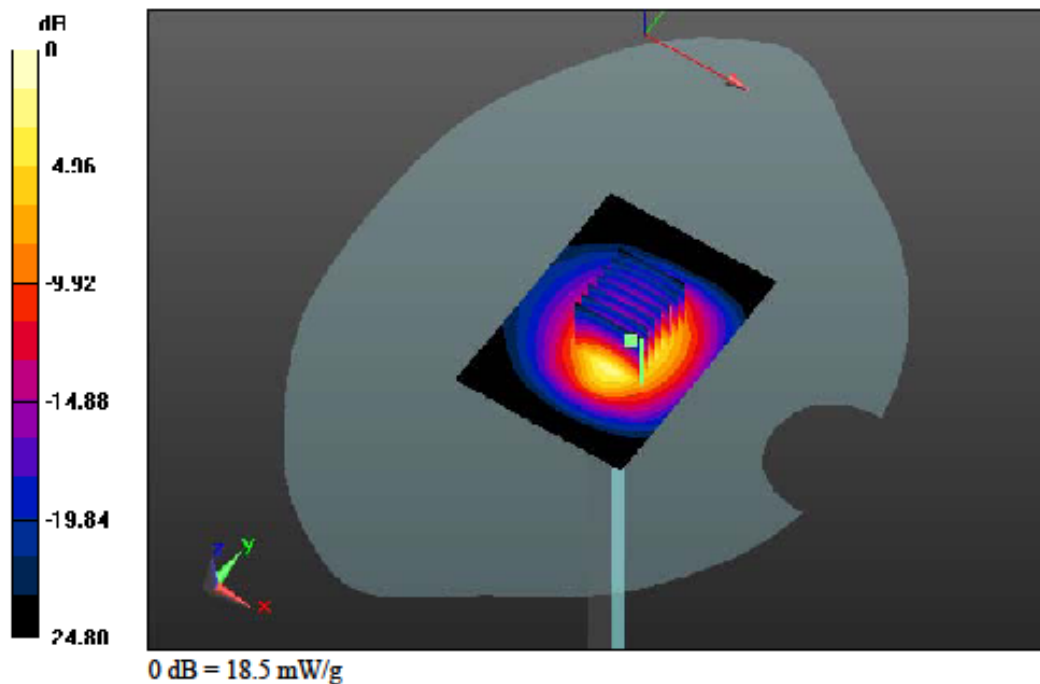
Area Scan (51x71x1): Measurement grid: dx=15mm, dy=15mm

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

Power Drift = -0.07 dB

Peak SAR (extrapolated) = 29.777 mW/g

SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.62 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; $\sigma = 2$ mho/m; $\epsilon_r = 53.96$; $\rho = 1000$ 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 = -0.07 dB

Peak SAR (extrapolated) = 29.777 mW/g

SAR(1 g) = 12.7 mW/g; SAR(10 g) = 5.62 mW/g

