

APPENDIX A:

Validation Plots

Date/Time: 12/07/04 08:08:02

Test Laboratory: Kyocera

FCC 835MHz Validation@20.00dBm, Probe#1664, DAE#494, Dipole#454, 12-07-04

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

Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$, $\sigma = 0.929 \text{ mho/m}$, $\epsilon_r = 41$, $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

Temperature:

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

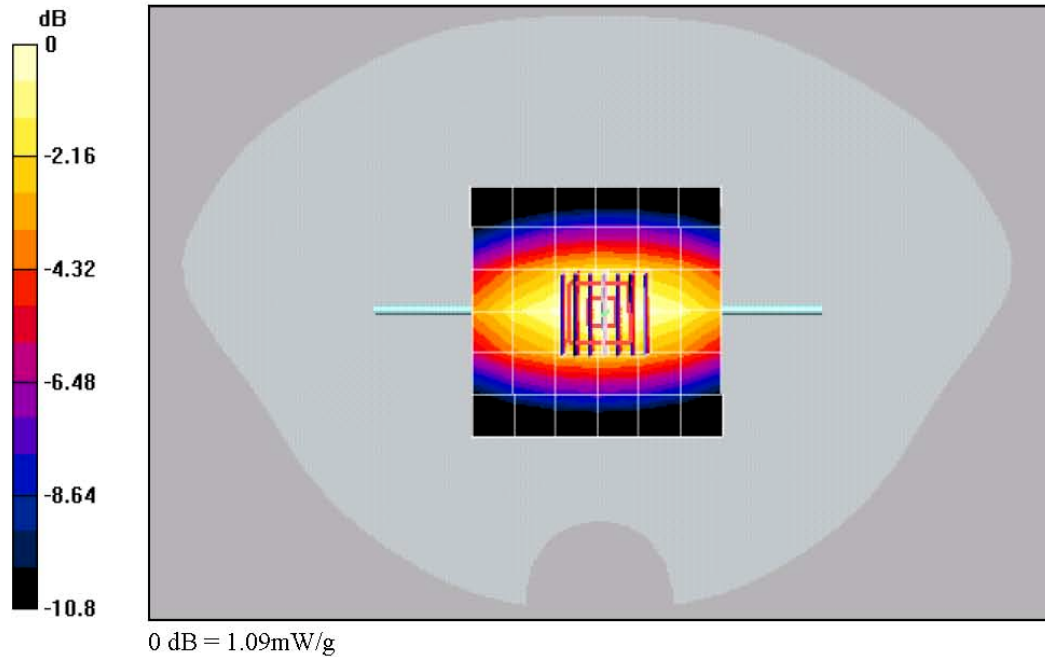
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = 0.002 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.643 mW/g

Maximum value of SAR (measured) = 1.09 mW/g



Date/Time: 12/08/04 00:27:47

Test Laboratory: Kyocera

FCC 835MHz Validation@20.00dBm, Probe#1664, DAE#494, Dipole#454, 12-08-04

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

Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$, $\sigma = 0.937 \text{ mho/m}$, $\epsilon_r = 41.3$, $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

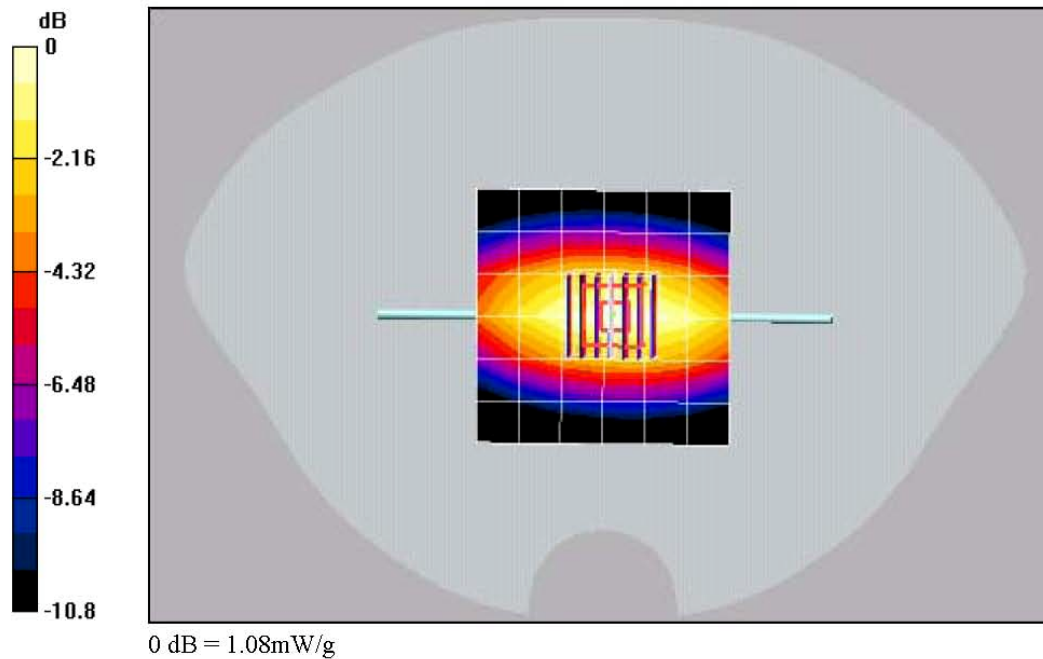
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.9 V/m; Power Drift = 0.0002 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 0.994 mW/g, SAR(10 g) = 0.640 mW/g

Maximum value of SAR (measured) = 1.08 mW/g



Date/Time: 12/09/04 00:30:48

Test Laboratory: Kyocera

FCC 835MHz Validation@20.00dBm, Probe#1664, DAE#494, Dipole#454, 12-09-04

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

Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$, $\sigma = 0.92 \text{ mho/m}$, $\epsilon_r = 40.5$, $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

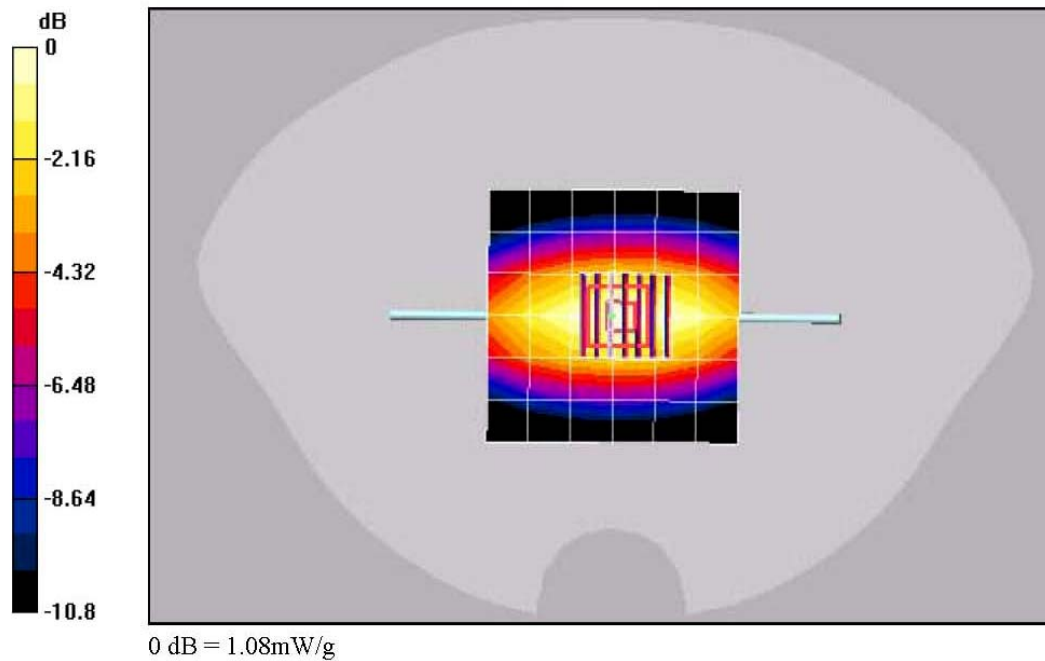
Temperature

Room T = $21.8 \pm 1 \text{ deg C}$, Liquid T = $22.0 \pm 1 \text{ deg C}$

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

Reference Value = 35.6 V/m ; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1 mW/g ; SAR(10 g) = 0.647 mW/g


Date/Time: 12/10/04 00:21:35

Test Laboratory: Kyocera

FCC 835MHz Validation@20.00dBm, Probe#1664, DAE#494, Dipole#454, 12-10-04

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

Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$, $\sigma = 0.91 \text{ mho/m}$, $\epsilon_r = 39.9$, $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.56, 6.56, 6.56), Calibrated: 9/2/2004

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

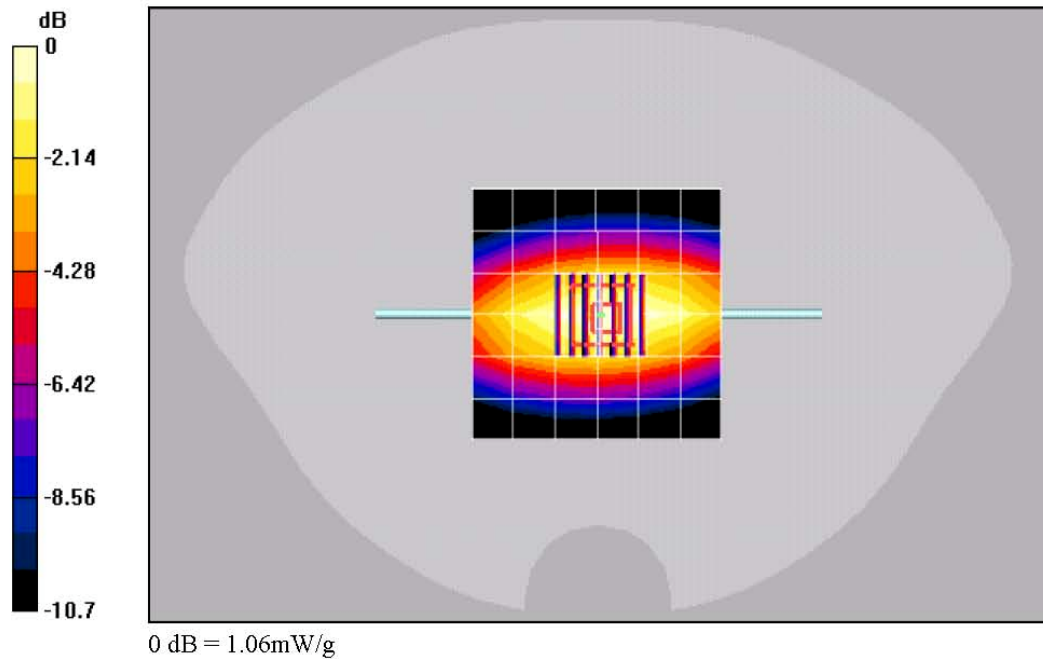
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.8 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.987 mW/g SAR(10 g) = 0.635 mW/g

Maximum value of SAR (measured) = 1.06 mW/g



Date/Time: 12/13/04 06:56:03

Test Laboratory: Kyocera

FCC 1900MHz Validation@20.00dBm, Probe#1664, DAE#494, Dipole#5d003, 12-13-04

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

Medium: HSL1800, Medium parameters used: $f = 1900$ MHz, $\sigma = 1.45$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(5.43, 5.43, 5.43), Calibrated: 9/2/2004

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

Temperature

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

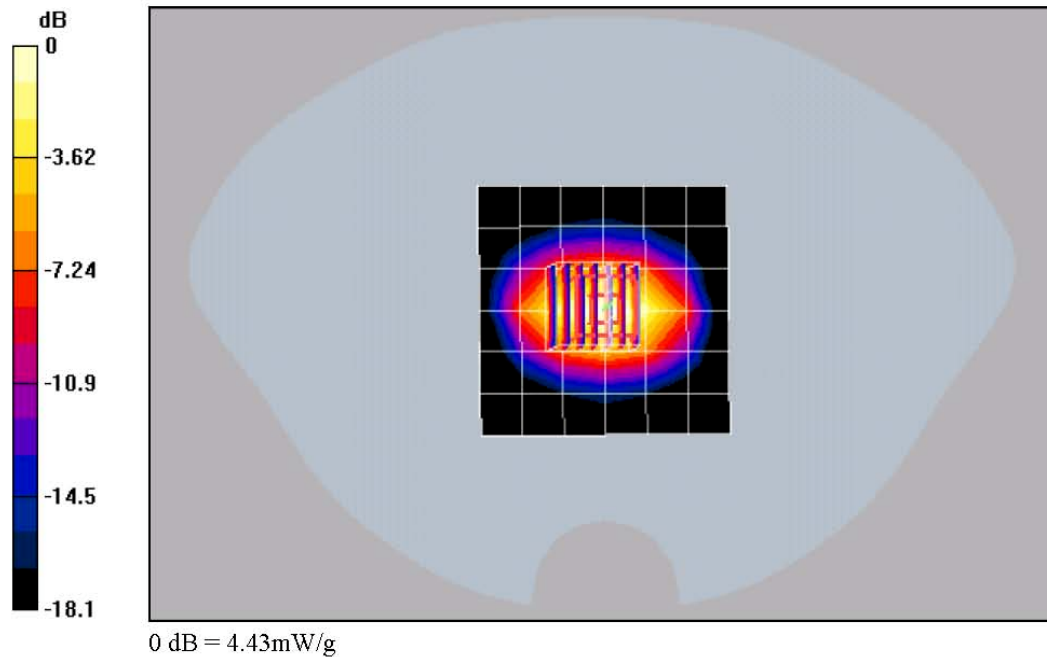
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 58.3 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 6.88 W/kg

SAR(1 g) = 3.93 mW/g; SAR(10 g) = 2.07 mW/g

Maximum value of SAR (measured) = 4.43 mW/g



Date/Time: 12/14/04 00:36:56

Test Laboratory: Kyocera

FCC 1900MHz Validation@20.00dbm, Probe 1664, DAE 494, Dipole #5d003, 12-14-04

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

Medium: HSL1800, Medium parameters used (interpolated): $f = 1900$ MHz, $\sigma = 1.43$ mho/m, $\epsilon_r = 39.3$, $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(5.43, 5.43, 5.43), Calibrated: 9/2/2004

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),

Electronics: DAE3 Sn494, Calibrated: 3/11/2004

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 130

Temperature:

Room T = 21.8 +/- 1 deg C, Liquid T = 22.0 +/- 1 deg C

1900Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 59.3 V/m, Power Drift = -0.005 dB

Peak SAR (extrapolated) = 7.02 W/kg

SAR(1 g) = 4.05 mW/g; SAR(10 g) = 2.15 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 4.56 mW/g

