

Appendix A:

Validation Test Plots

Test Laboratory: Kyocera

835MHz Validation@20.00dBm, Probe#1713, DAE#602, Dipole#454, 06-21-05

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.905$ mho/m; $\epsilon_r = 42.2$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/27/2004

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:

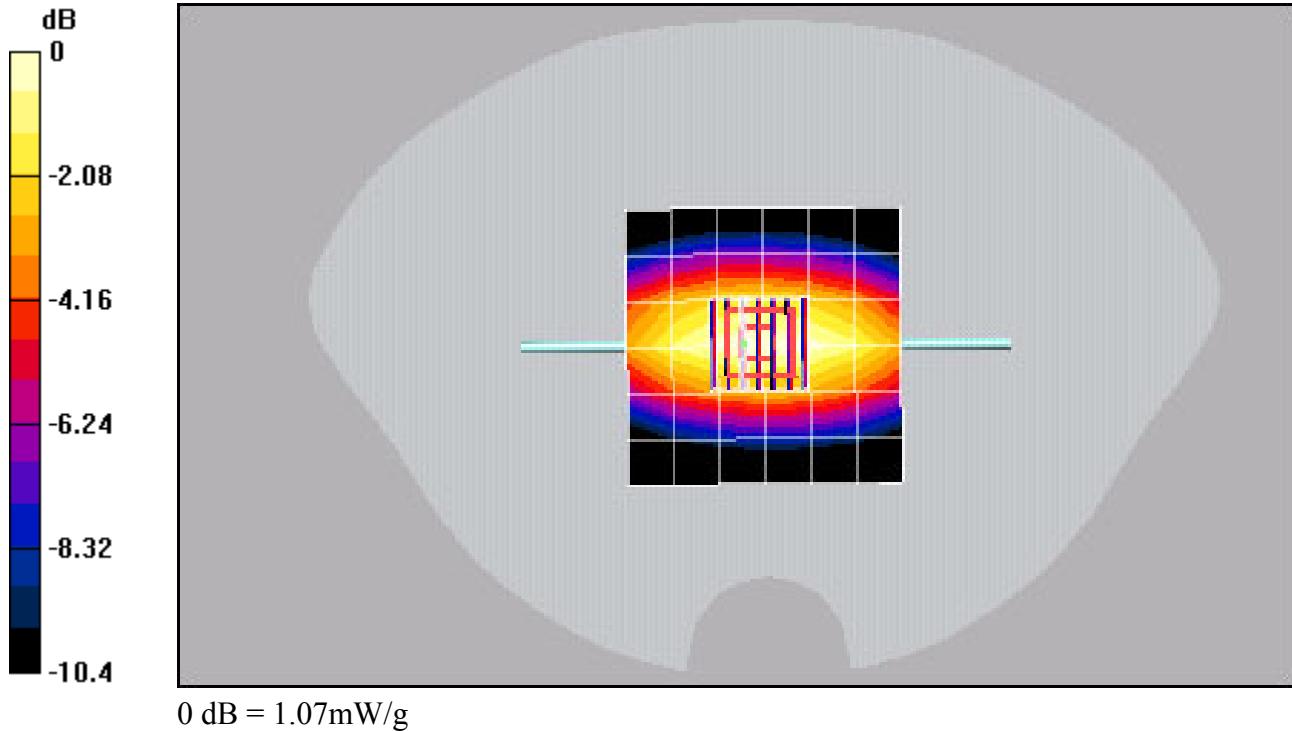
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.995 mW/g; SAR(10 g) = 0.650 mW/g

Maximum value of SAR (measured) = 1.07 mW/g



Test Laboratory: Kyocera

835MHz Validation@20.00dBm, Probe#1713, DAE#602, Dipole#454, 06-22-05

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.914$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/27/2004

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

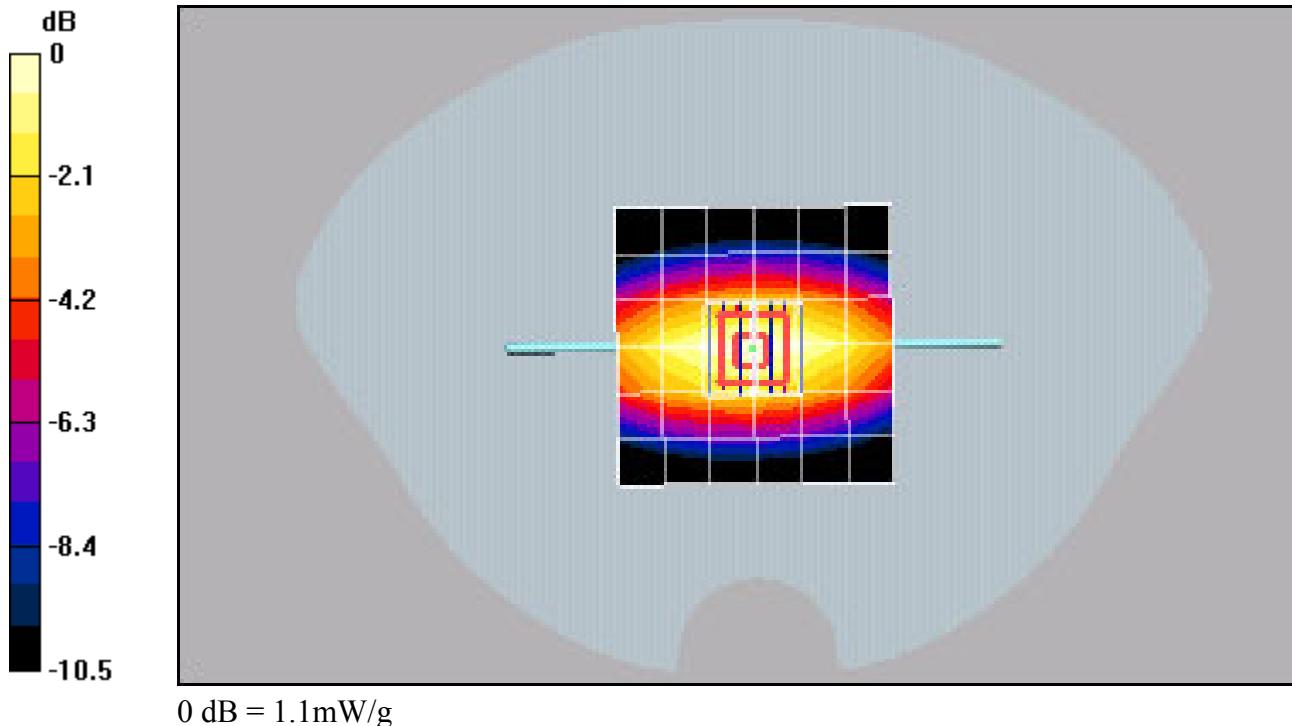
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.659 mW/g

Maximum value of SAR (measured) = 1.1 mW/g



Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe #1713, DAE #602, Dipole #454, 06-24-05

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 41.5$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/27/2004

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:

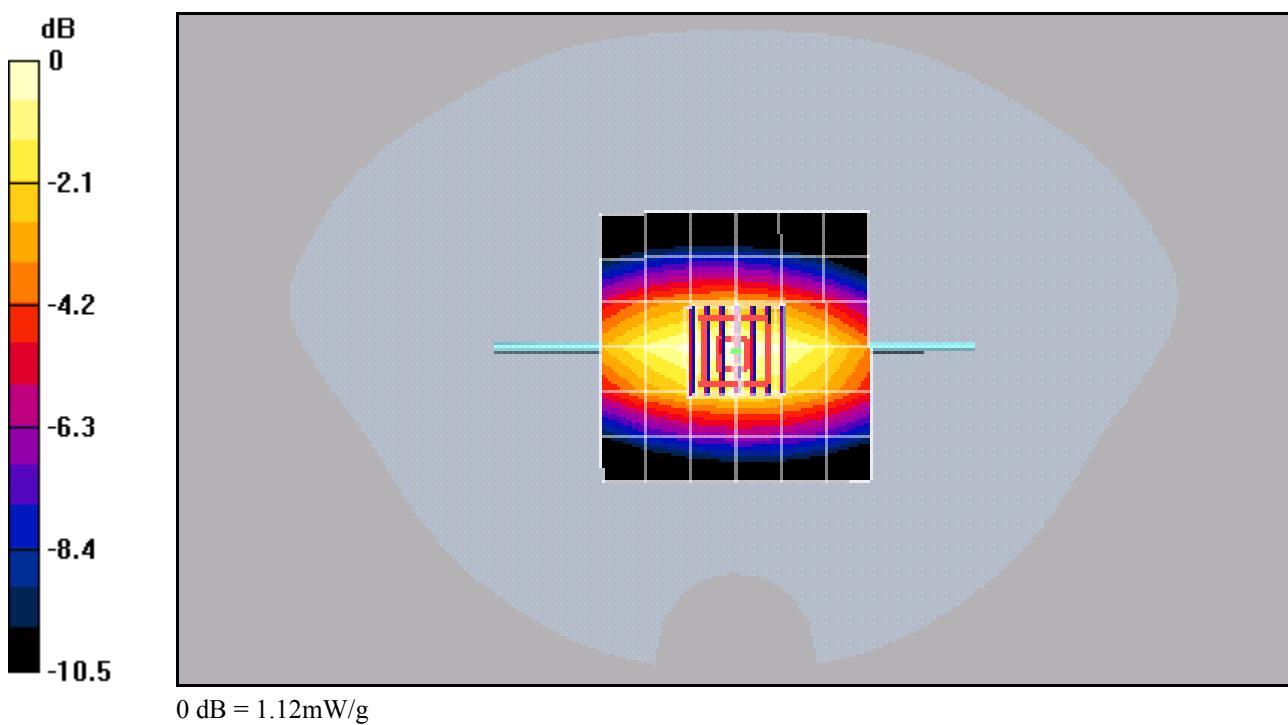
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36 V/m; Power Drift = 0.1 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.667 mW/g

Maximum value of SAR (measured) = 1.12 mW/g



Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe#1713, DAE#602, Dipole #454, 06-25-05

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.903$ mho/m; $\epsilon_r = 41.4$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(6.29, 6.29, 6.29), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/27/2004

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

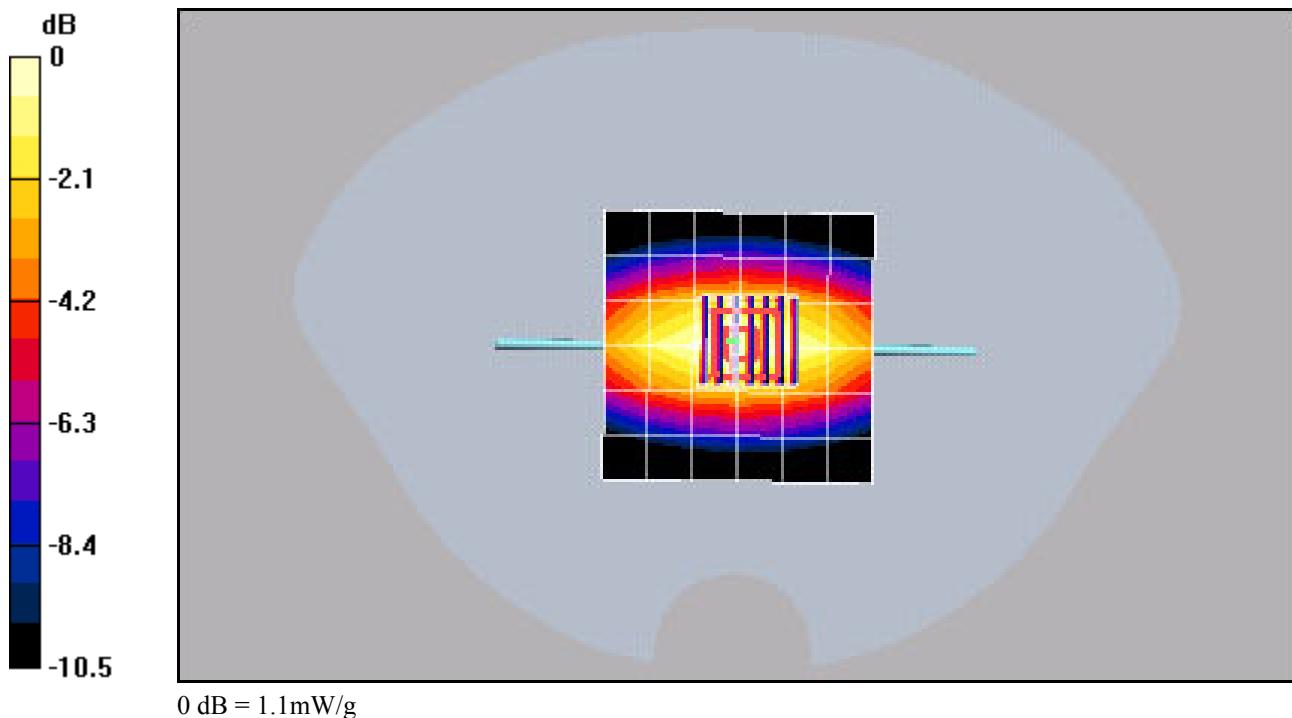
Validation Flat/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.3 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.658 mW/g



Test Laboratory: Kyocera

1900MHz Validation@20.00dBm, Probe#1713, DAE#602, Dipole#5d005, 06-23-05

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

Medium: HSL1800, Medium parameters used (interpolated): $f = 1900 \text{ MHz}$; $\sigma = 1.42 \text{ mho/m}$; $\epsilon_r = 40.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1713, ConvF(5.18, 5.18, 5.18), Calibrated: 5/19/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/27/2004

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 = 61.1 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 7.35 W/kg

SAR(1 g) = 4.23 mW/g; SAR(10 g) = 2.24 mW/g

Maximum value of SAR (measured) = 4.8 mW/g

