

Appendix A:

Validation Test Plots

Test Laboratory: Kyocera

835MHz Validation @ 20dBm, Probe #3036, DAE #493 and Dipole #454

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.92$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV2 - SN3036, ConvF(5.99, 5.99, 5.99), Calibrated: 10/25/2005

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

Electronics: DAE3 Sn493, Calibrated: 11/14/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

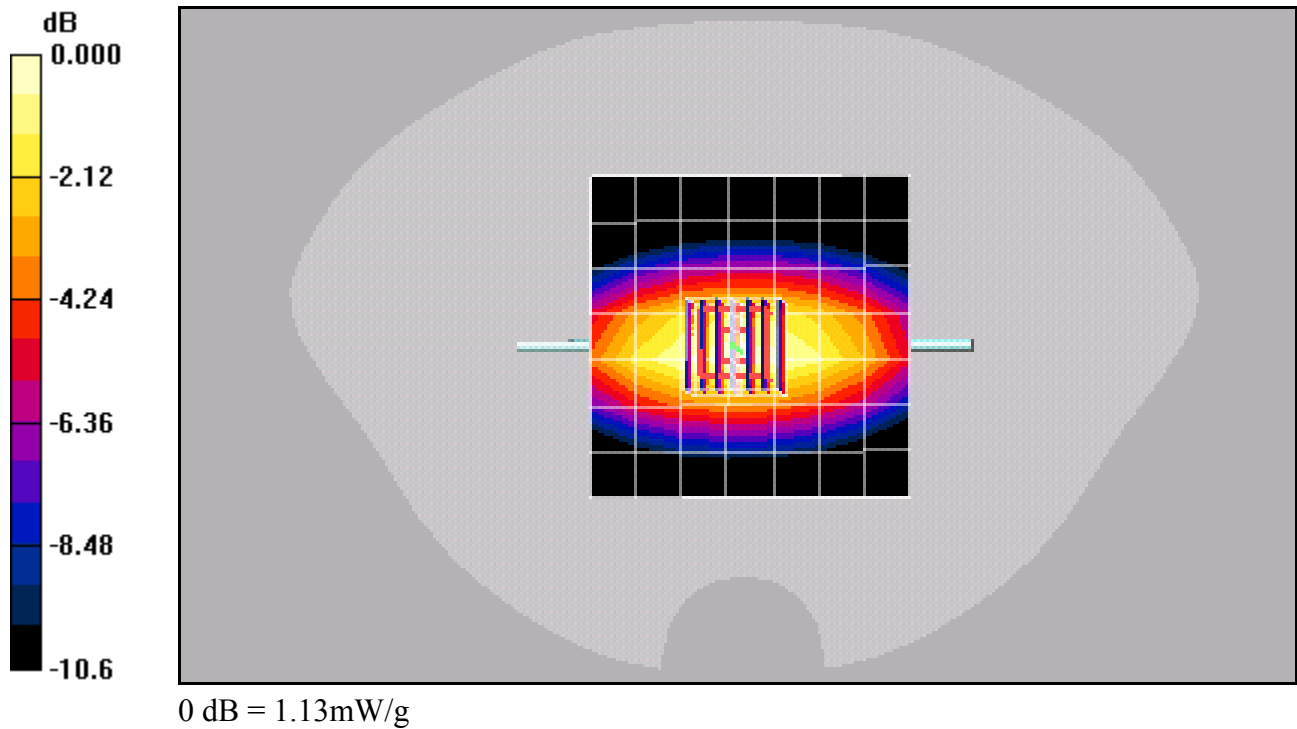
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.5 V/m; Power Drift = -0.011 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.677 mW/g

Maximum value of SAR (measured) = 1.13 mW/g



Test Laboratory: Kyocera

835MHz Validation @ 20dBm, Probe #3036, DAE #493 and Dipole #454

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

Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 42$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV2 - SN3036, ConvF(5.99, 5.99, 5.99), Calibrated: 10/25/2005

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

Electronics: DAE3 Sn493, Calibrated: 11/14/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

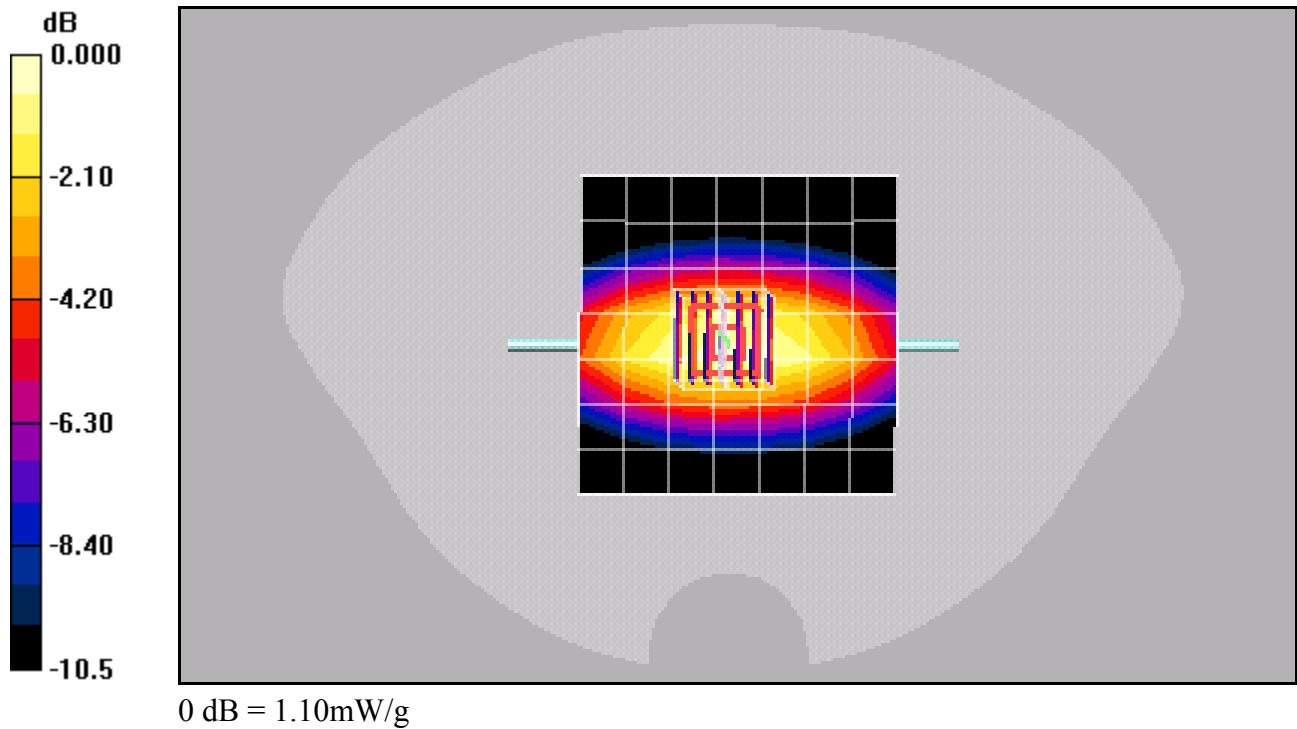
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 35.3 V/m; Power Drift = -0.082 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.657 mW/g

Maximum value of SAR (measured) = 1.10 mW/g



Test Laboratory: Kyocera

835MHz Validation @ 20dBm, Probe #3036, DAE #493 and Dipole #454

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.9$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV2 - SN3036, ConvF(5.99, 5.99, 5.99), Calibrated: 10/25/2005

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

Electronics: DAE3 Sn493, Calibrated: 11/14/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

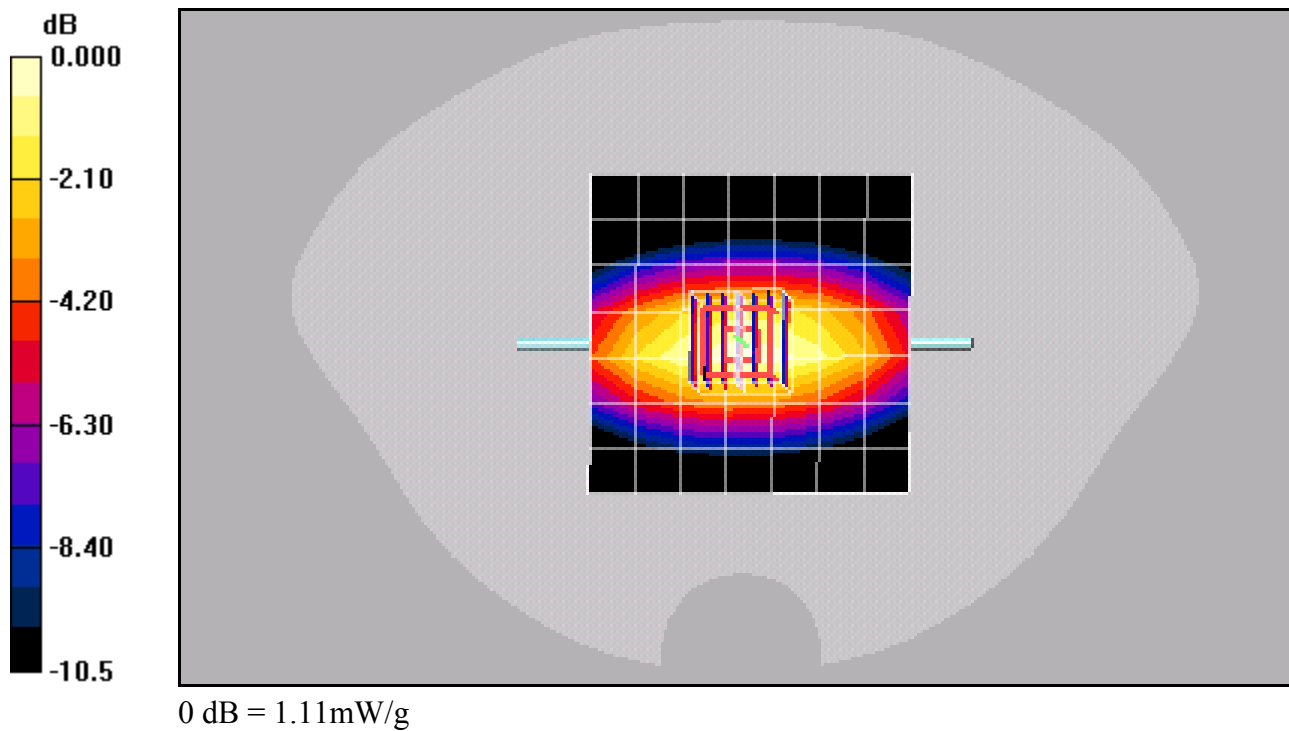
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.2 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.663 mW/g

Maximum value of SAR (measured) = 1.11 mW/g



Test Laboratory: Kyocera

1900MHz Validation @ 20dBm, Probe 3036, DAE #493 and Dipole #5d003

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

Medium: HSL1800, Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV2 - SN3036, ConvF(4.64, 4.64, 4.64), Calibrated: 10/25/2005

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

Electronics: DAE3 Sn493, Calibrated: 11/14/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

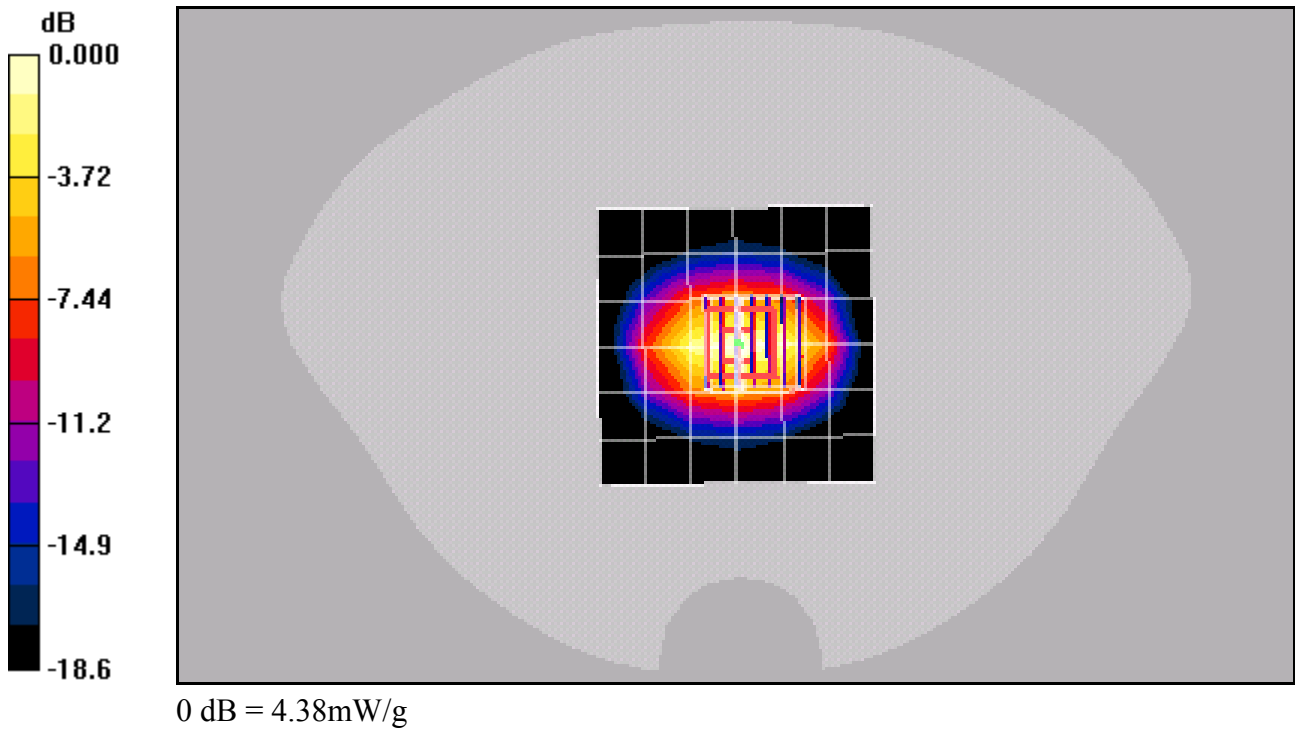
1900Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 57.7 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 6.85 W/kg

SAR(1 g) = 3.86 mW/g; SAR(10 g) = 2.03 mW/g

Maximum value of SAR (measured) = 4.38 mW/g



Test Laboratory: Kyocera

1900MHz Validation @ 20dBm, Probe 3036, DAE #493 and Dipole #5d003

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

Medium: HSL1800, Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.36$ mho/m; $\epsilon_r = 40$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ES3DV2 - SN3036, ConvF(4.64, 4.64, 4.64), Calibrated: 10/25/2005

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

Electronics: DAE3 Sn493, Calibrated: 11/14/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 160

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 = 0.033 dB

Peak SAR (extrapolated) = 7.08 W/kg

SAR(1 g) = 4.02 mW/g; SAR(10 g) = 2.12 mW/g

Maximum value of SAR (measured) = 4.54 mW/g

