

Appendix A:

Validation Test Plots

Date/Time: 4/14/2006 12:20:57 AM

Test Laboratory: Kyocera

835Mhz Validation, Probe 1664, DAE 602, Dipole 495

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 42$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.77, 6.77, 6.77), Calibrated: 6/15/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/30/2005

Measurement SW: DASY4, V4.6 Build 19

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

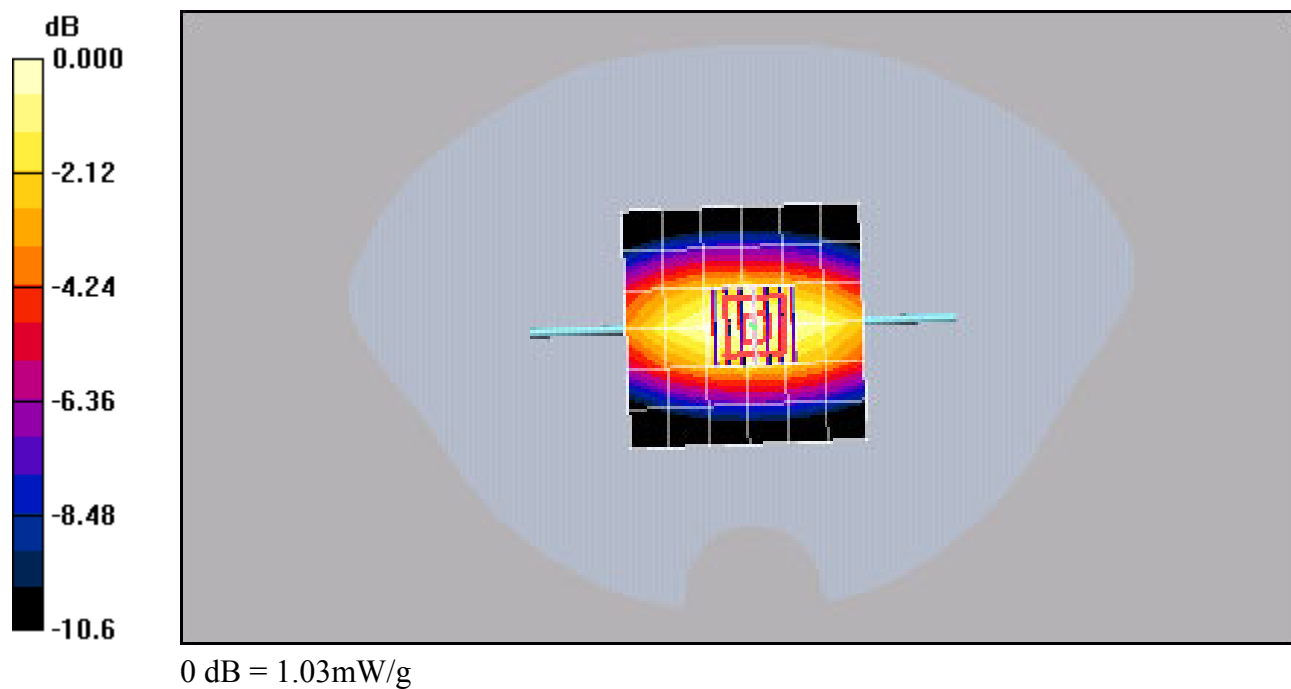
20 dbm validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.2 V/m; Power Drift = 0.012 dB

Peak SAR (extrapolated) = 1.46 W/kg

SAR(1 g) = 0.961 mW/g; SAR(10 g) = 0.621 mW/g

Maximum value of SAR (measured) = 1.03 mW/g



Date/Time: 4/21/2006 12:41:53 AM

Test Laboratory: Kyocera

835Mhz Validation, Probe 1664, DAE 602, Dipole 495

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.901$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.77, 6.77, 6.77), Calibrated: 6/15/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/30/2005

Measurement SW: DASY4, V4.6 Build 19

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

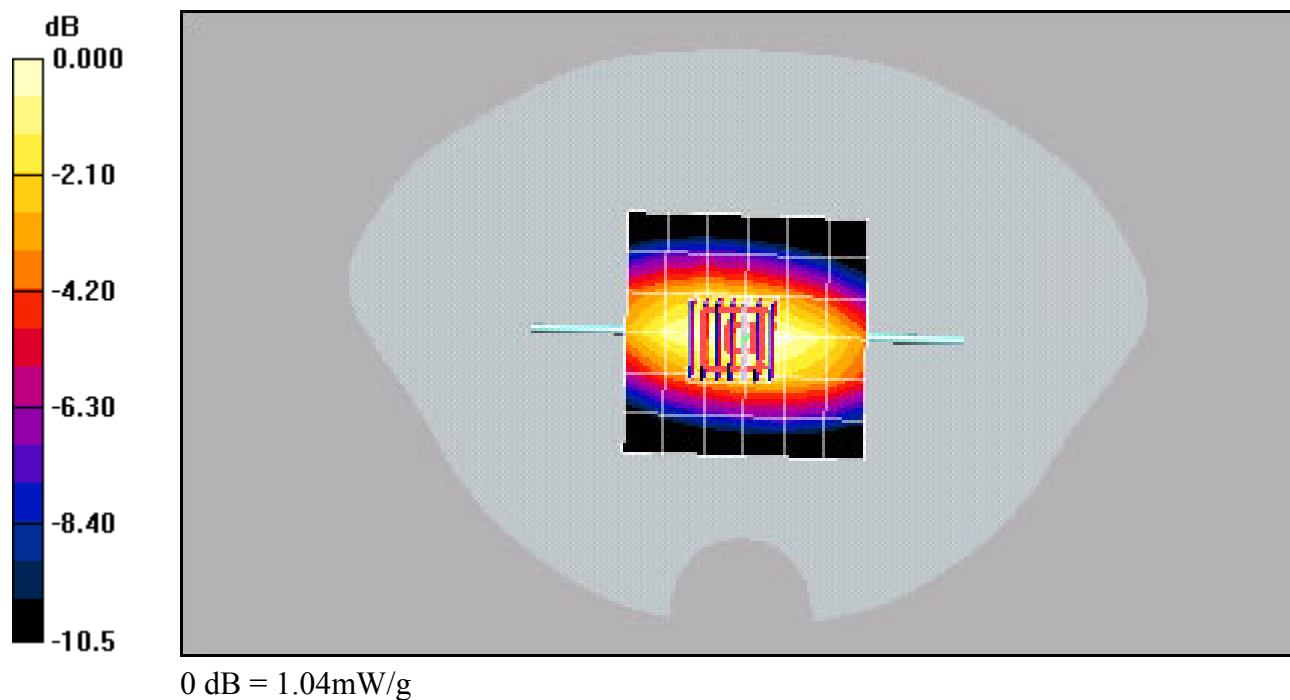
20 dbm validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.8 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.970 mW/g; SAR(10 g) = 0.636 mW/g

Maximum value of SAR (measured) = 1.04 mW/g



Date/Time: 4/22/2006 1:13:58 AM

Test Laboratory: Kyocera

835Mhz Validation, Probe 1664, DAE 602, Dipole 495

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.902$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.77, 6.77, 6.77), Calibrated: 6/15/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/30/2005

Measurement SW: DASY4, V4.6 Build 19

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

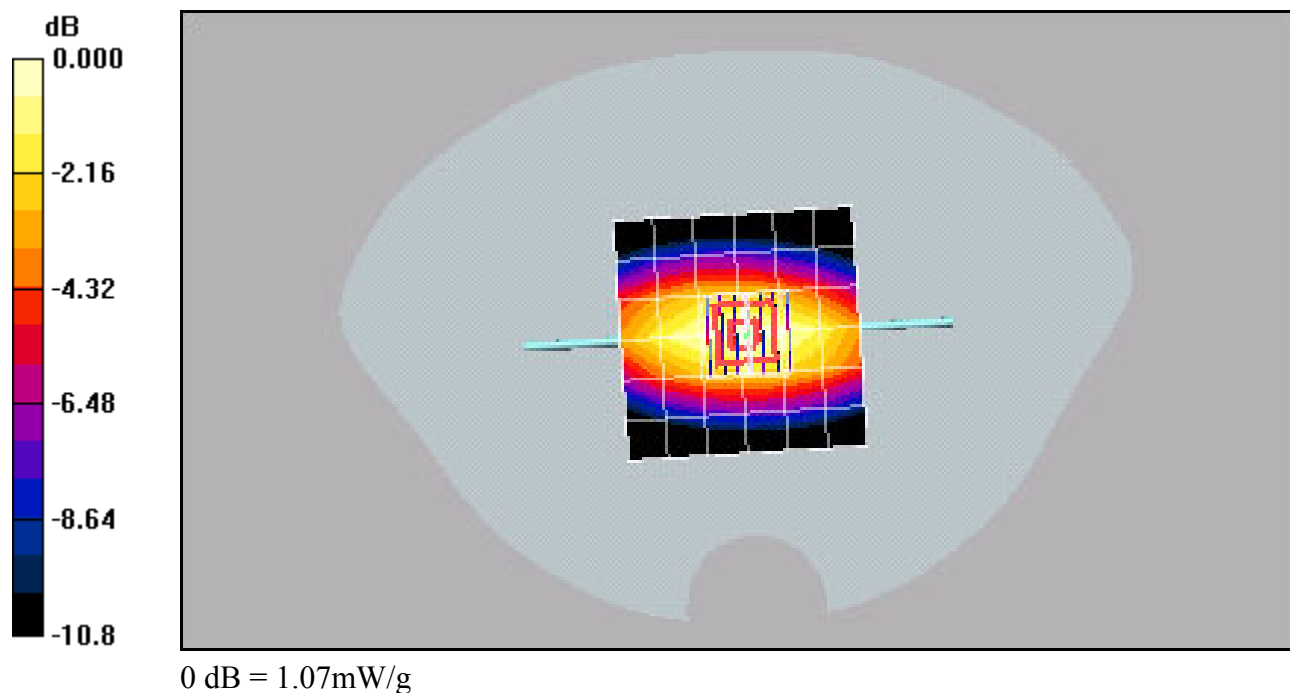
20 dbm validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.1 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 1.57 W/kg

SAR(1 g) = 0.990 mW/g; SAR(10 g) = 0.627 mW/g

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



Date/Time: 4/23/2006 8:06:19 AM

Test Laboratory: Kyocera

835Mhz Validation, Probe 1664, DAE 602, Dipole 495

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.895$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.77, 6.77, 6.77), Calibrated: 6/15/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/30/2005

Measurement SW: DASY4, V4.6 Build 19

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

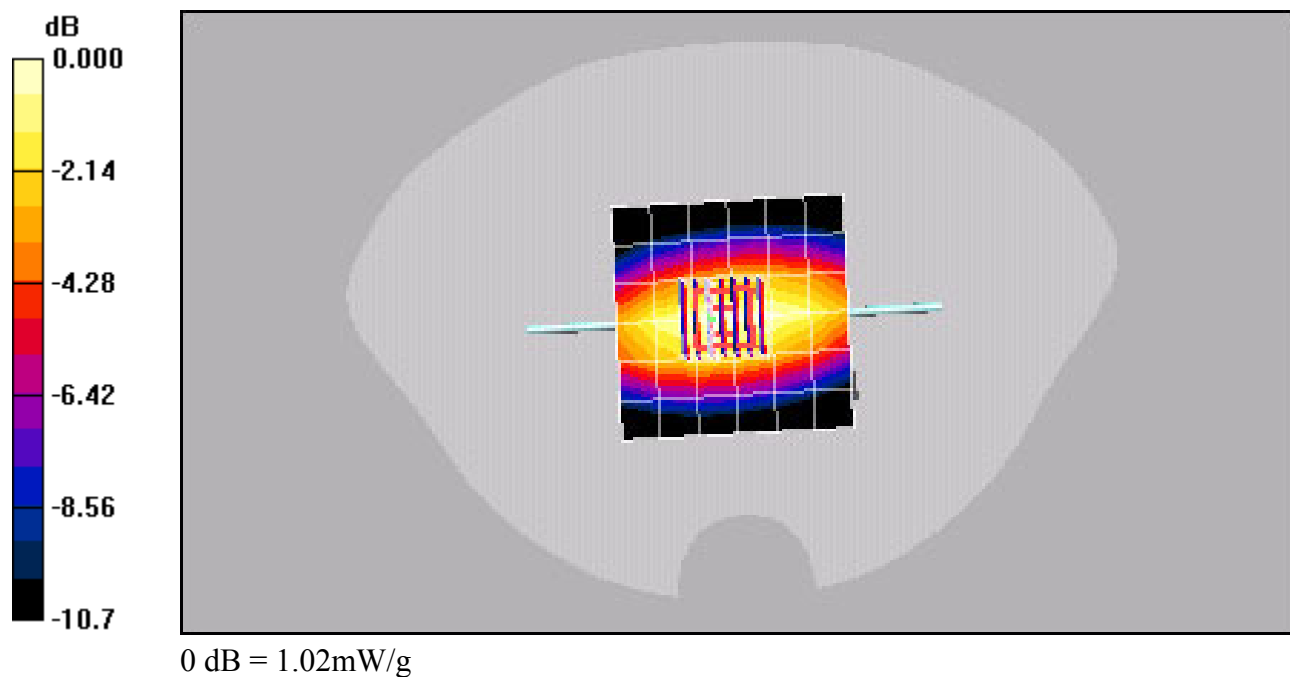
20 dbm validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 1.45 W/kg

SAR(1 g) = 0.939 mW/g; SAR(10 g) = 0.603 mW/g

Maximum value of SAR (measured) = 1.02 mW/g



Date/Time: 4/24/2006 1:15:44 AM

Test Laboratory: Kyocera

835Mhz Validation Probe 1664, DAE 602, Dipole 495

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.924$ mho/m; $\epsilon_r = 43$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.77, 6.77, 6.77), Calibrated: 6/15/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/30/2005

Measurement SW: DASY4, V4.6 Build 19

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

20 dbm validation/Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 1.04 mW/g

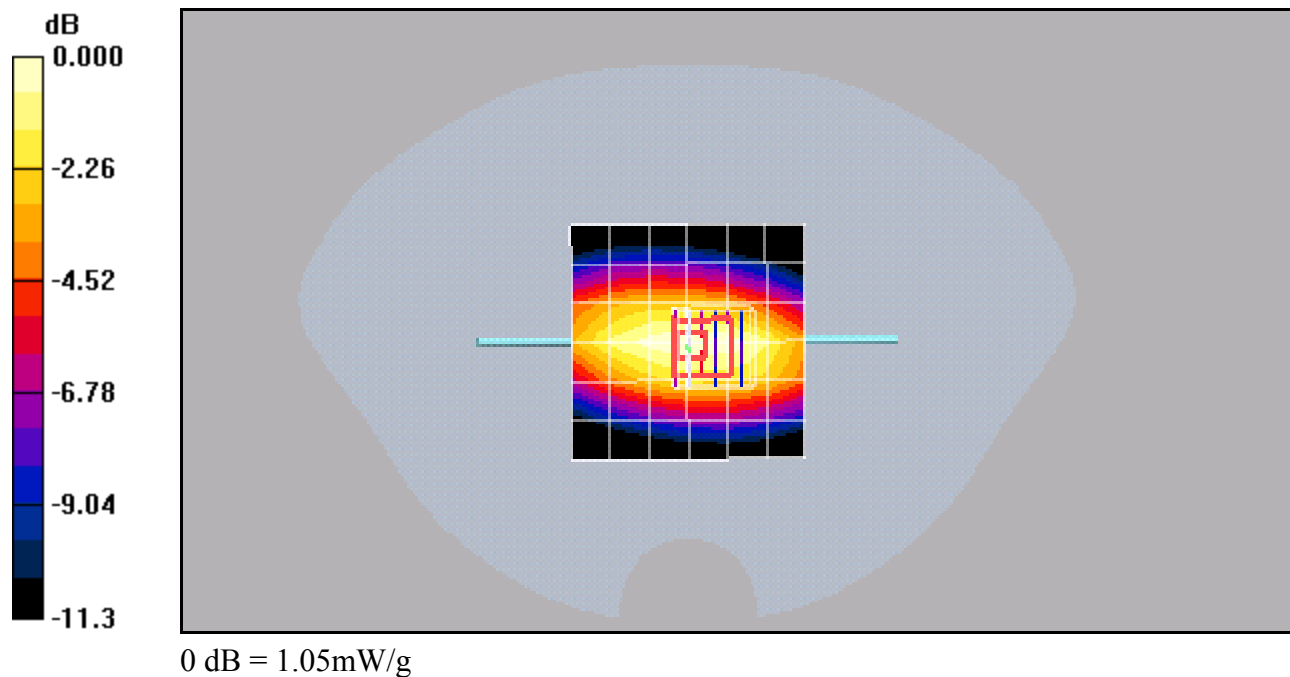
20 dbm validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.1 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 0.983 mW/g; SAR(10 g) = 0.621 mW/g

Maximum value of SAR (measured) = 1.05 mW/g



Date/Time: 4/25/2006 12:46:39 AM

Test Laboratory: Kyocera

835Mhz Validation, Probe 1664, DAE 602, Dipole 495

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: ET3DV6 - SN1664, ConvF(6.77, 6.77, 6.77), Calibrated: 6/15/2005

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

Electronics: DAE4 Sn602, Calibrated: 8/30/2005

Measurement SW: DASY4, V4.6 Build 19

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

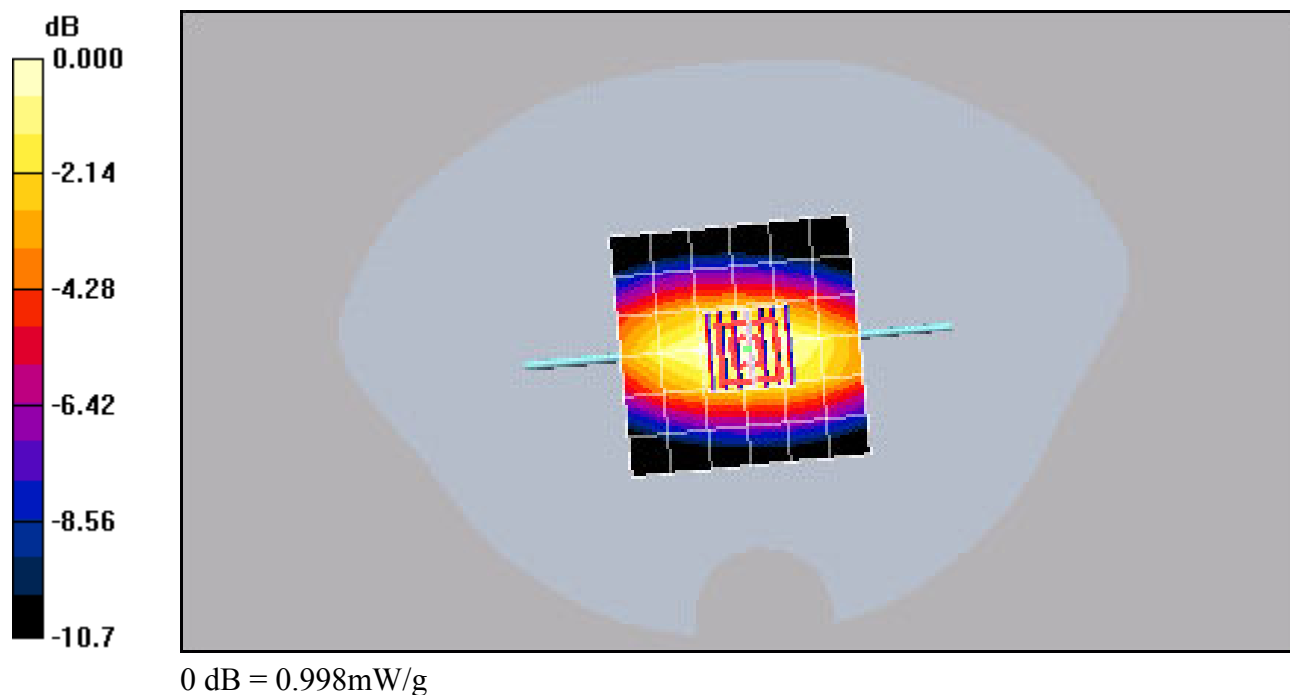
20 dbm validation/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.7 V/m; Power Drift = 0.028 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.926 mW/g; SAR(10 g) = 0.603 mW/g

Maximum value of SAR (measured) = 0.998 mW/g



Date/Time: 4/29/2006 1:14:22 AM

Test Laboratory: Kyocera

835MHz Validation, Probe #3036, DAE #493, Dipole #453

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ 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, V4.6 Build 23

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

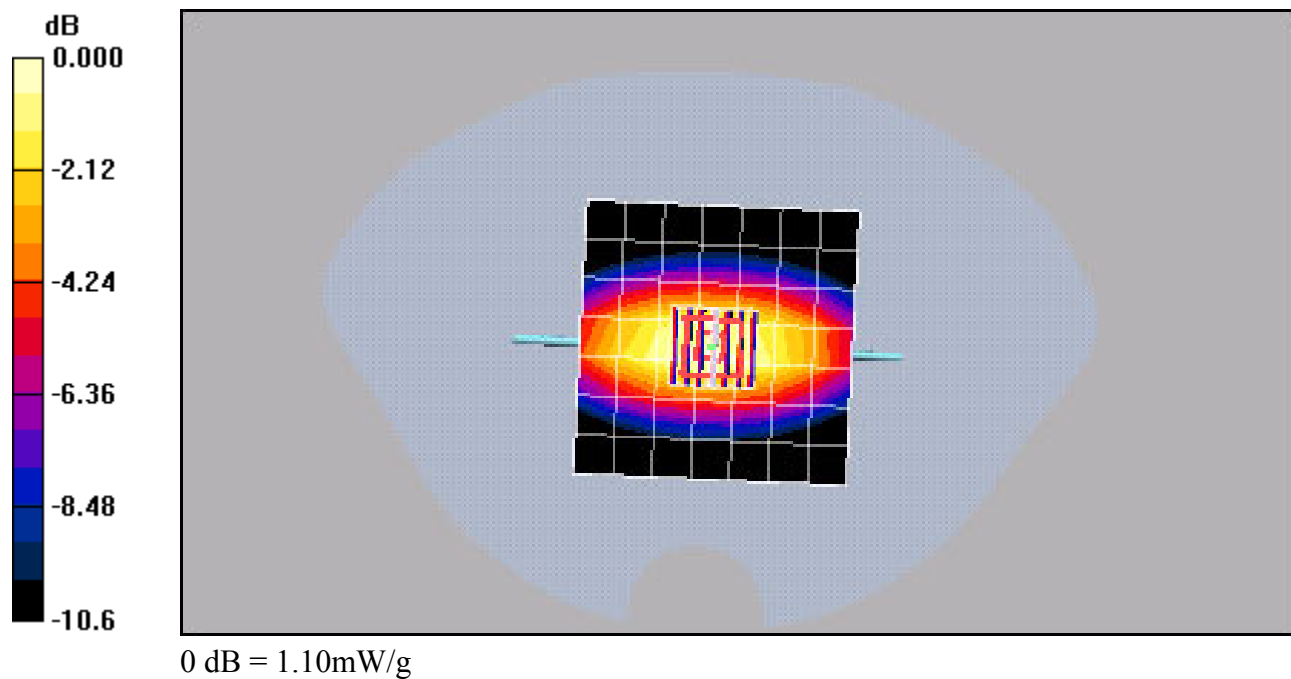
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.8 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.657 mW/g

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



Date/Time: 5/1/2006 7:57:22 AM

Test Laboratory: Kyocera

835MHz Validation, Probe #3036, DAE #493, Dipole #453

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.919$ mho/m; $\epsilon_r = 42.3$; $\rho = 1000$ 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, V4.6 Build 23

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

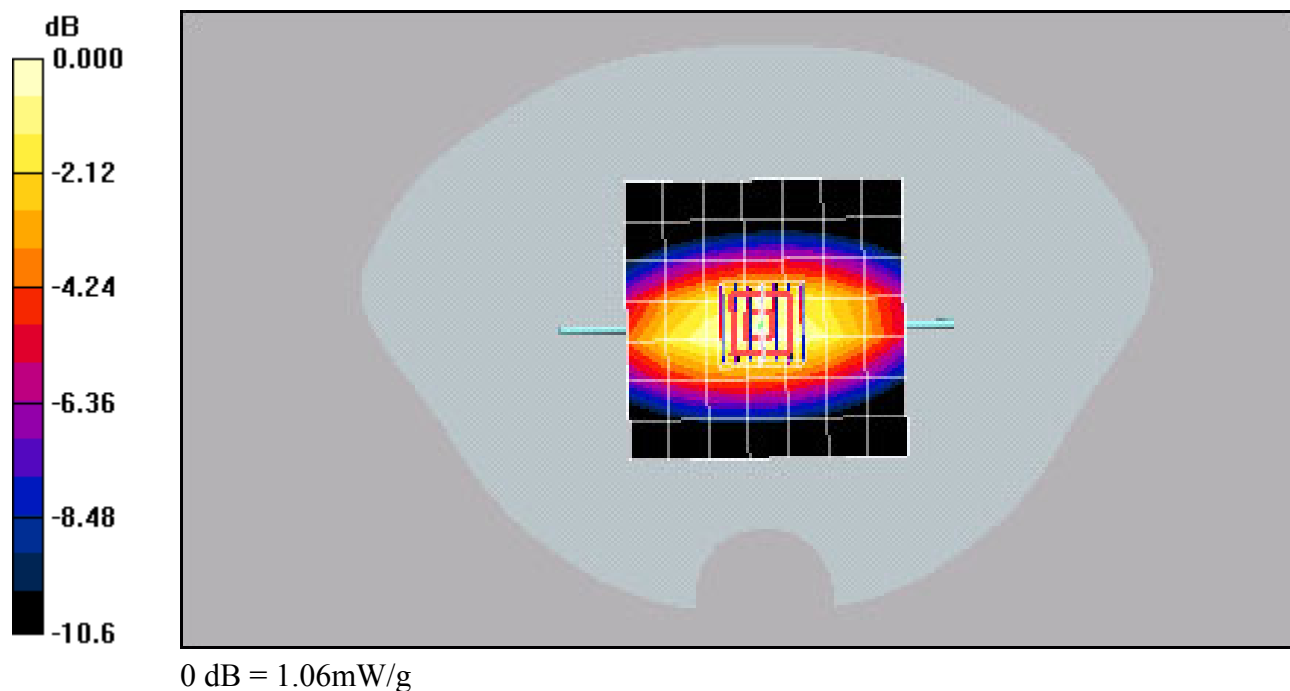
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.4 V/m; Power Drift = 0.015 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.982 mW/g; SAR(10 g) = 0.636 mW/g

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



Date/Time: 4/27/2006 2:06:42 AM

Test Laboratory: Kyocera

CDMA1900MHz Validation, Probe #3036, DAE #493, Dipole #5d005

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

Medium: HSL1800, Medium parameters used: $f = 1900$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 40.3$; $\rho = 1000$ 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, V4.6 Build 23

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

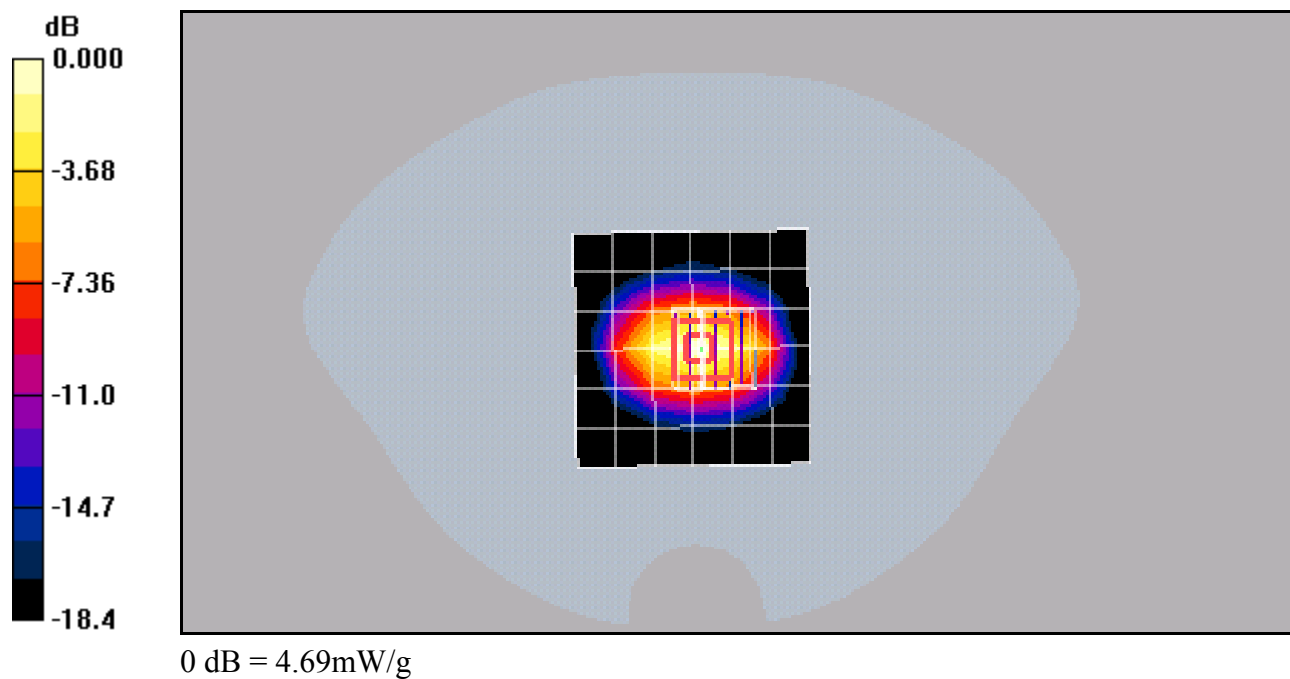
1900Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 59.6 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 7.37 W/kg

SAR(1 g) = 4.13 mW/g; SAR(10 g) = 2.17 mW/g

Maximum value of SAR (measured) = 4.69 mW/g



Date/Time: 4/28/2006 1:46:36 AM

Test Laboratory: Kyocera

1900MHz Validation, Probe #3036, DAE #493, Dipole #5d005

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

Medium: HSL1800, Medium parameters used: $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 40.2$; $\rho = 1000$ 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, V4.6 Build 23

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 = 59.7 V/m; Power Drift = 0.004 dB

Peak SAR (extrapolated) = 7.63 W/kg

SAR(1 g) = 4.3 mW/g; SAR(10 g) = 2.26 mW/g

Maximum value of SAR (measured) = 4.90 mW/g

