

Appendix A: Validation Test Plots

Date/Time: 4/4/2006 1:17:45 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; $\sigma = 0.9$ mho/m; $\epsilon_r = 42$; $\rho = 1000$ 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

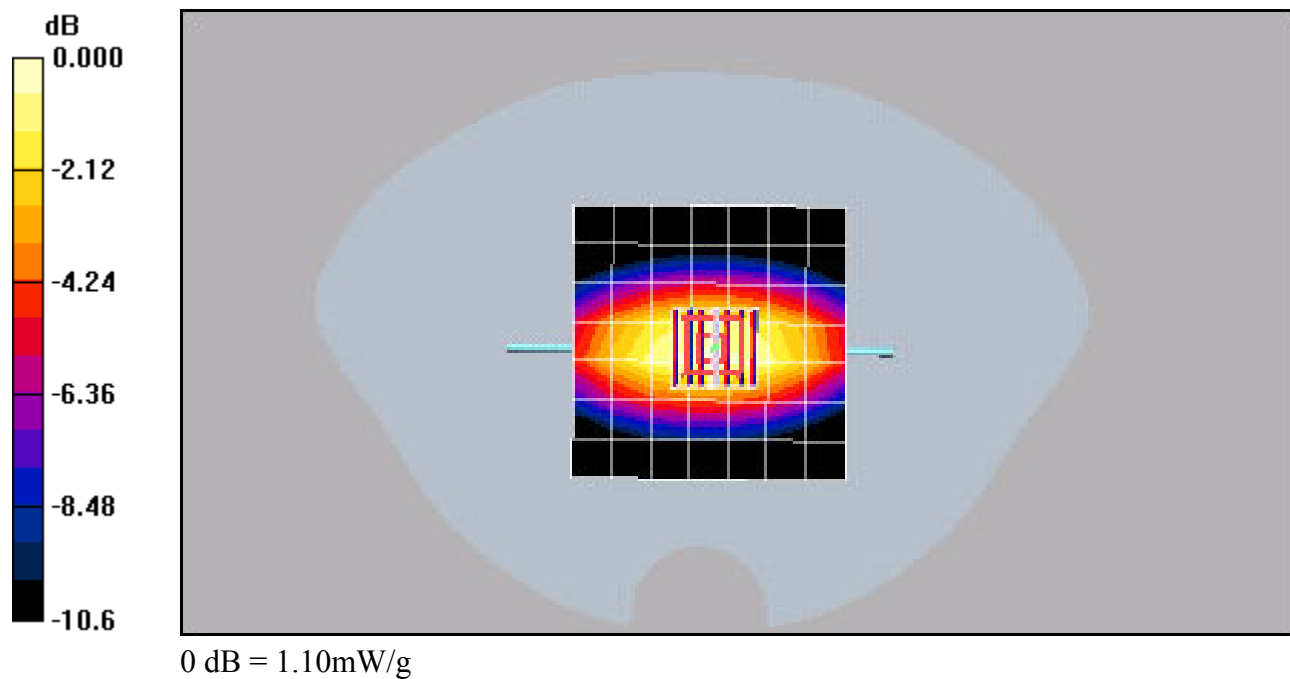
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.4 V/m; Power Drift = 0.003 dB

Peak SAR (extrapolated) = 1.51 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.659 mW/g

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



Date/Time: 4/17/2006 7:46:28 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; $\sigma = 0.894$ mho/m; $\epsilon_r = 42.4$; $\rho = 1000$ 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

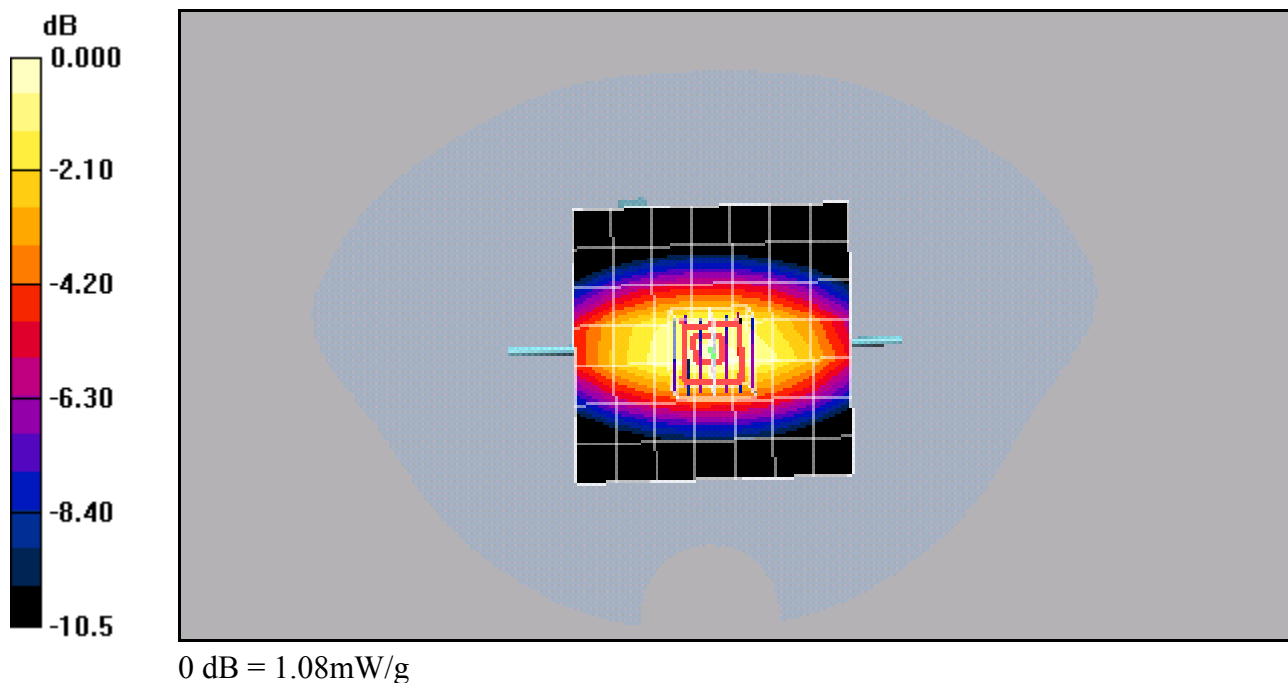
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.3 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 1.50 W/kg

SAR(1 g) = 0.999 mW/g; SAR(10 g) = 0.650 mW/g

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



Date/Time: 4/18/2006 12:42:51 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; $\sigma = 0.89$ mho/m; $\epsilon_r = 42.2$; $\rho = 1000$ 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

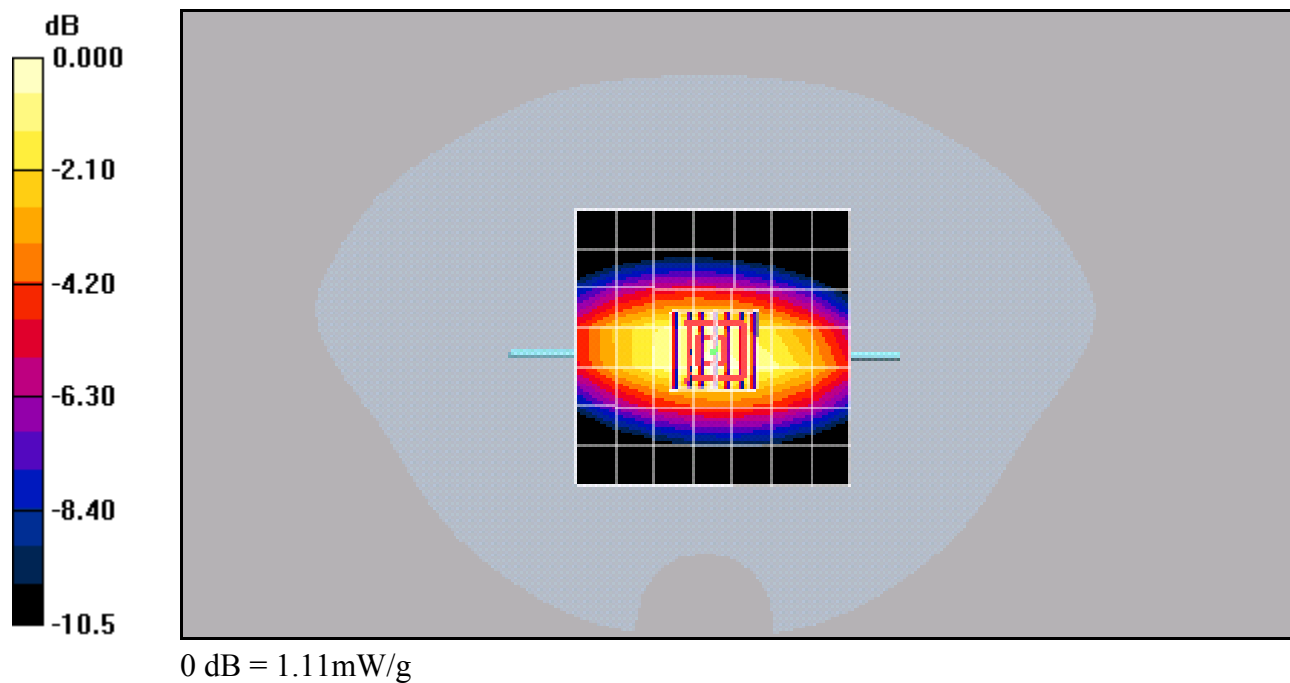
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 1.54 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



Date/Time: 4/19/2006 12:42:51 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; $\sigma = 0.89$ mho/m; $\epsilon_r = 41.9$; $\rho = 1000$ 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, V4.6 Build 23

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

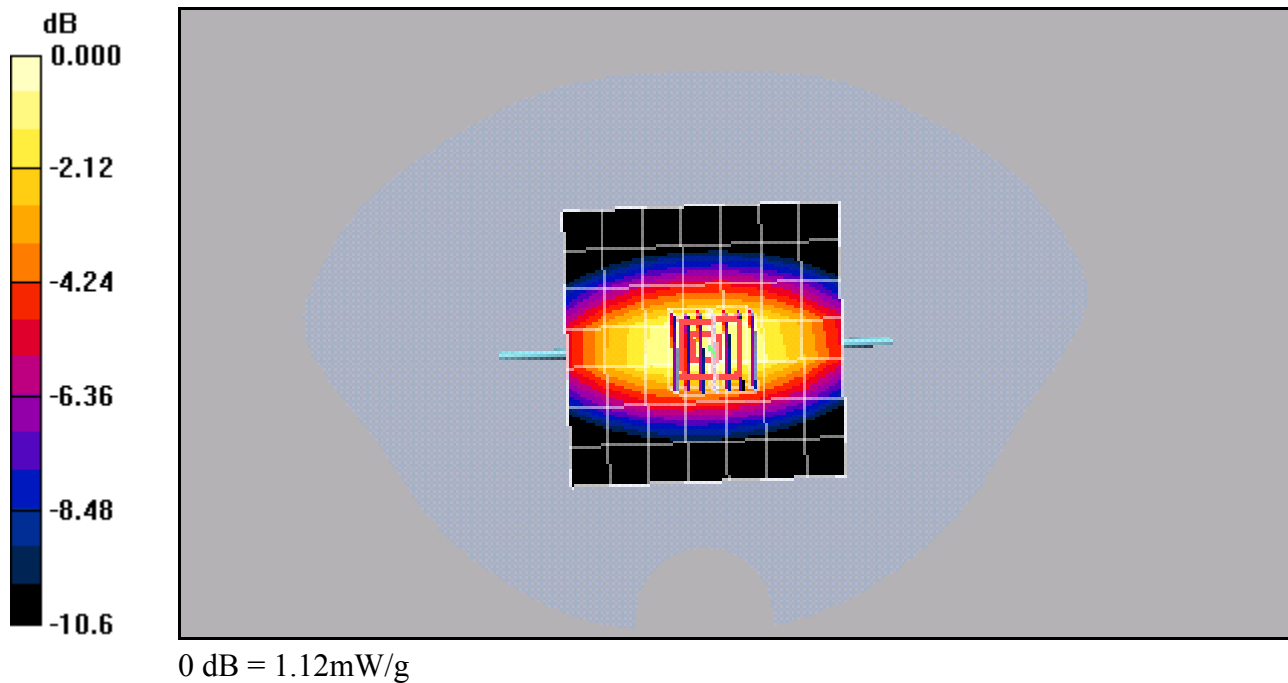
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.8 V/m; Power Drift = -0.007 dB

Peak SAR (extrapolated) = 1.53 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.670 mW/g

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



Date/Time: 4/22/2006 12:53:45 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; $\sigma = 0.9$ mho/m; $\epsilon_r = 42.5$; $\rho = 1000$ 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

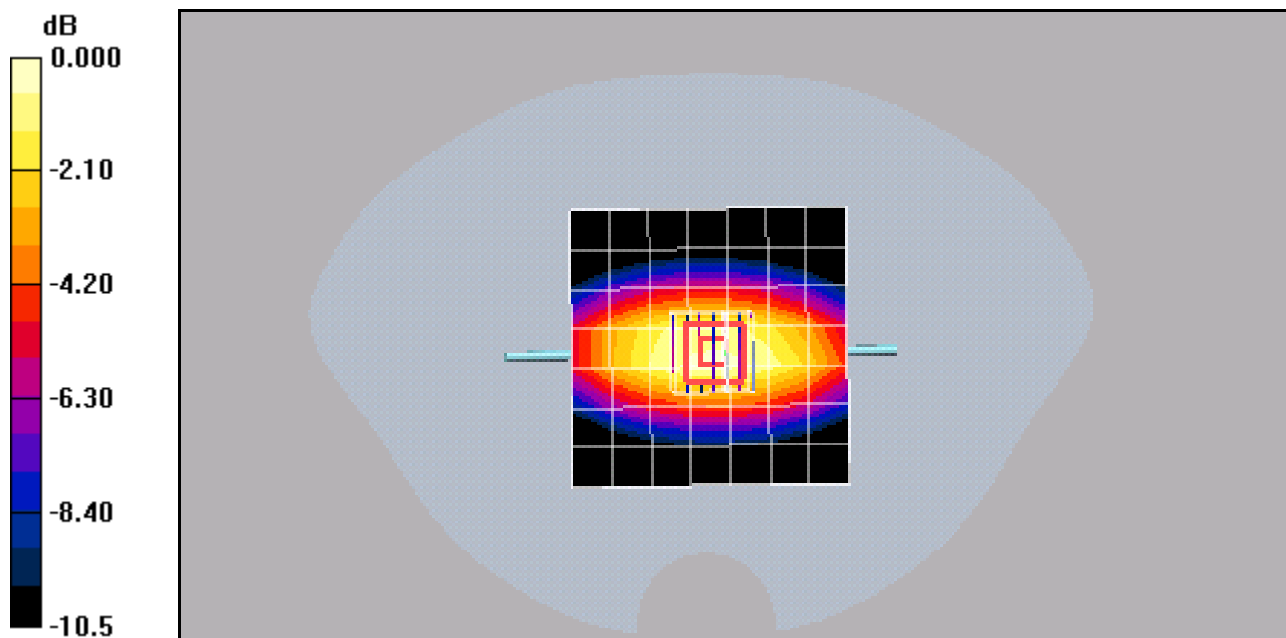
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.5 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.54 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.668 mW/g

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



0 dB = 1.11mW/g

Date/Time: 4/5/2006 12:55:05 AM

Test Laboratory: Kyocera

K322 #2180 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; $\sigma = 1.37$ mho/m; $\epsilon_r = 41.1$; $\rho = 1000$ 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

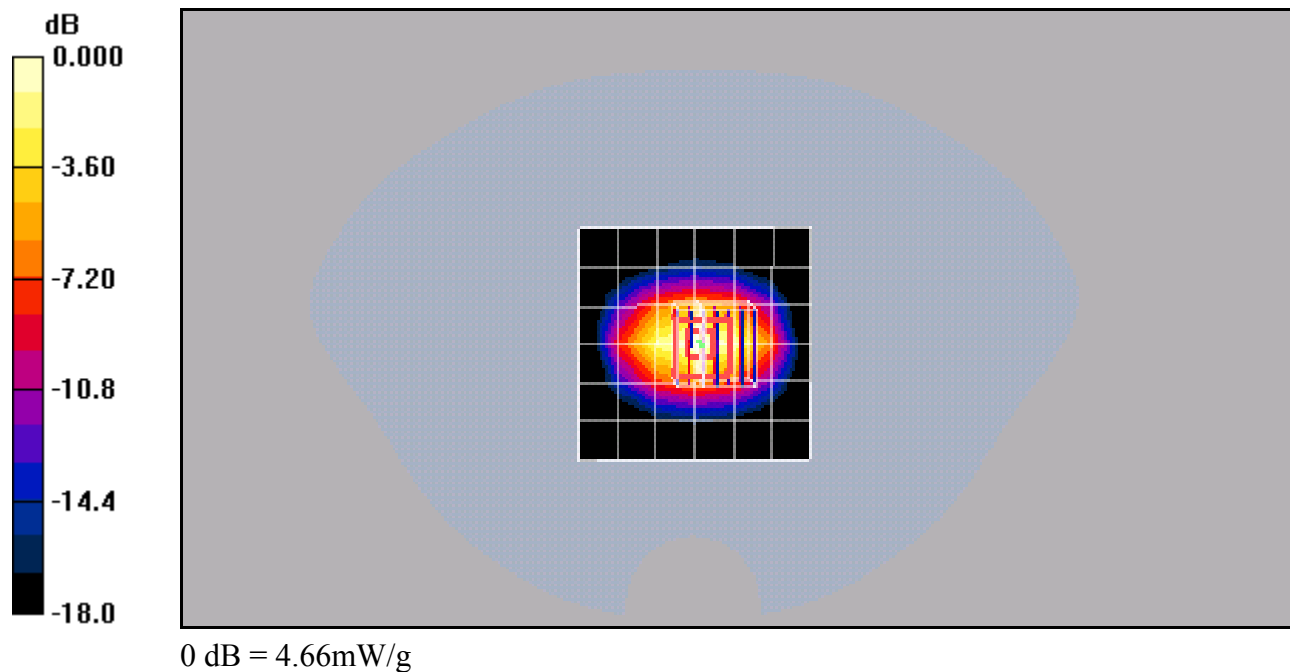
1900Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 60.1 V/m; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 7.31 W/kg

SAR(1 g) = 4.13 mW/g; SAR(10 g) = 2.18 mW/g

Maximum value of SAR (measured) = 4.66 mW/g



Date/Time: 4/22/2006 2:34:37 PM

Test Laboratory: Kyocera

K322 #2180 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; $\sigma = 1.35$ mho/m; $\epsilon_r = 40.7$; $\rho = 1000$ 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, V4.6 Build 23

Postprocessing SW: SEMCAD, V1.8 Build 160

Temperature:

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

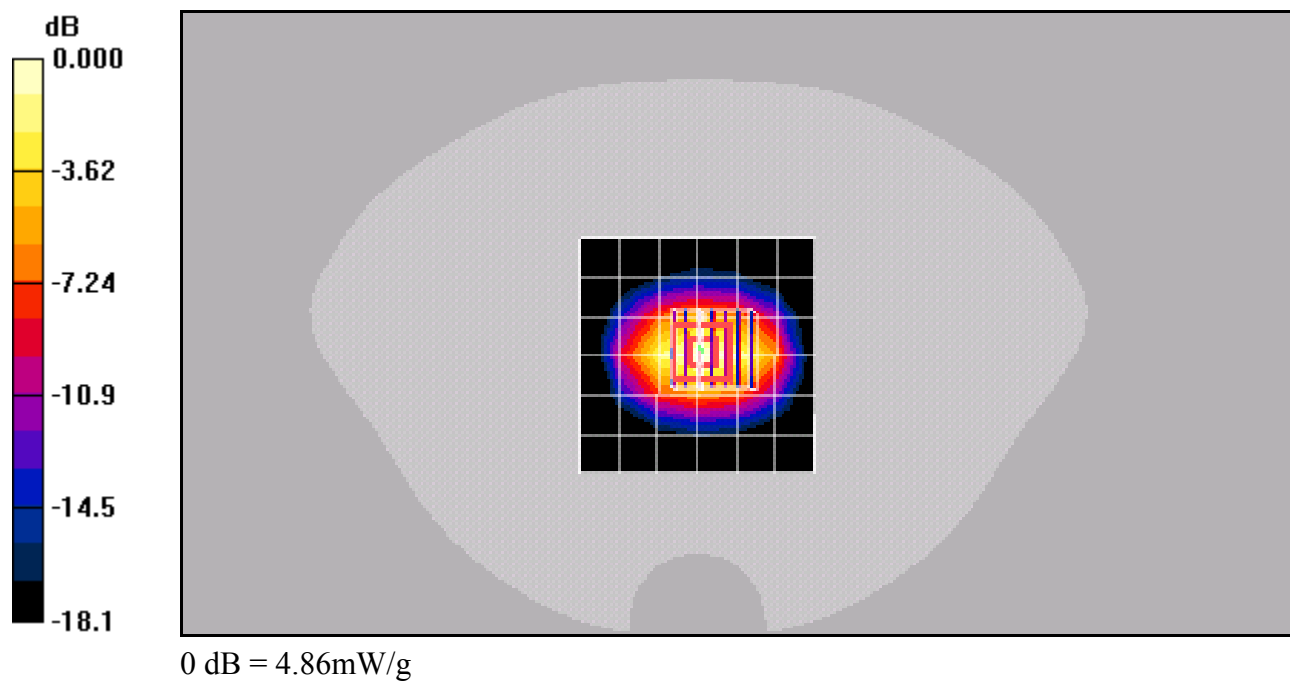
1900Mhz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 61.0 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 7.66 W/kg

SAR(1 g) = 4.31 mW/g; SAR(10 g) = 2.27 mW/g

Maximum value of SAR (measured) = 4.86 mW/g



Date/Time: 4/26/2006 7:16:33 PM

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; $\sigma = 1.46$ 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 = 58.3 V/m; Power Drift = -0.017 dB

Peak SAR (extrapolated) = 7.73 W/kg

SAR(1 g) = 4.28 mW/g; SAR(10 g) = 2.22 mW/g

Maximum value of SAR (measured) = 4.87 mW/g

