

Appendix A:

Validation Test Plots

Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe #1713, DAE #530, Dipole #454

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.91$ mho/m; $\epsilon_r = 43.2$; $\rho = 1000$ 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 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

Temperature:

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

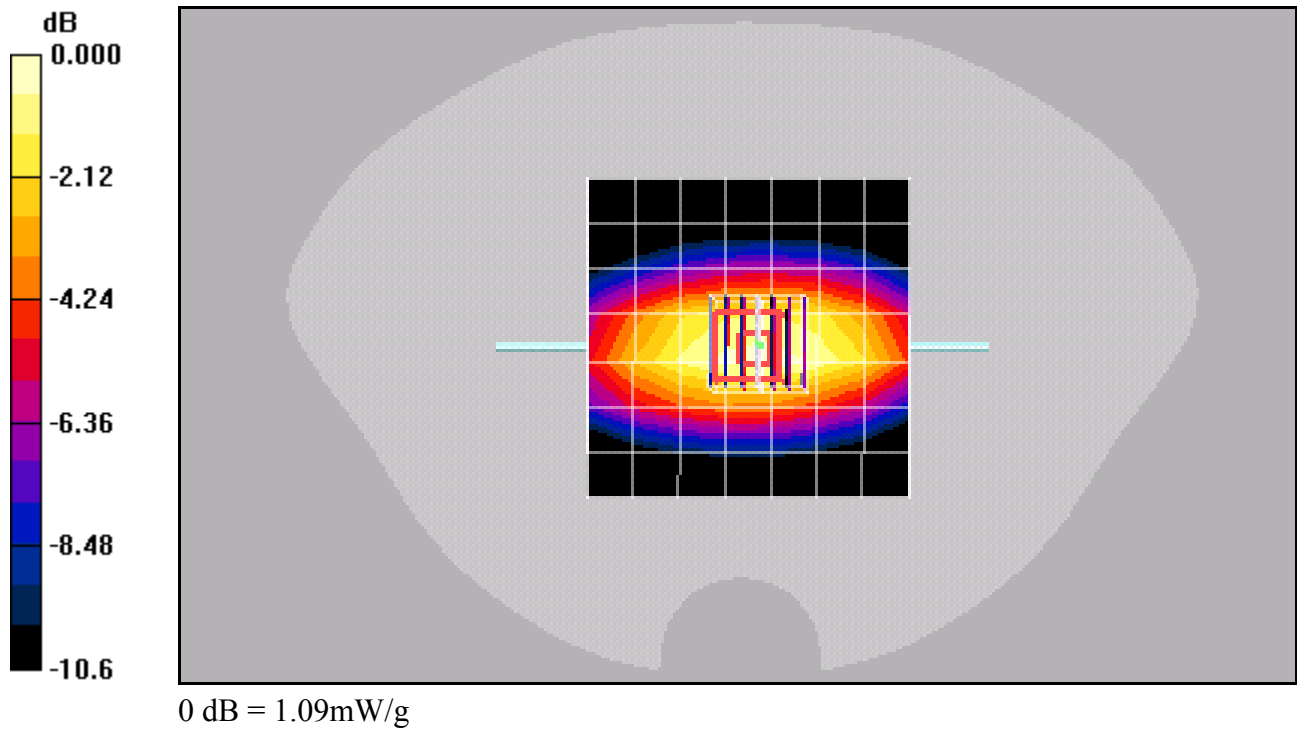
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.2 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 1.51 W/kg

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

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



Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe #1713, DAE #530, 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; $\epsilon_r = 42.9$; $\rho = 1000$ 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 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

Temperature:

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

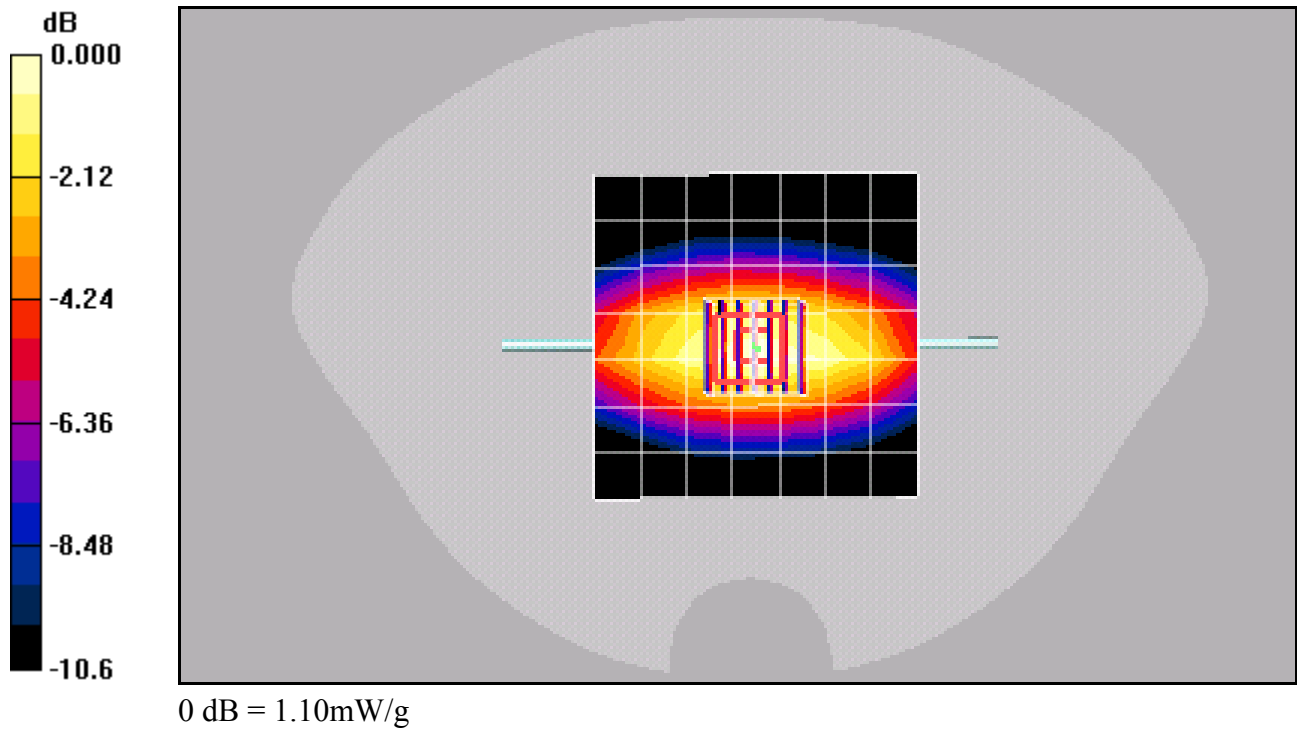
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.0 V/m; Power Drift = 0.054 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.02 mW/g; SAR(10 g) = 0.662 mW/g

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



Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe #1713, DAE #530, 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; $\epsilon_r = 43.3$; $\rho = 1000$ 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 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

Temperature:

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

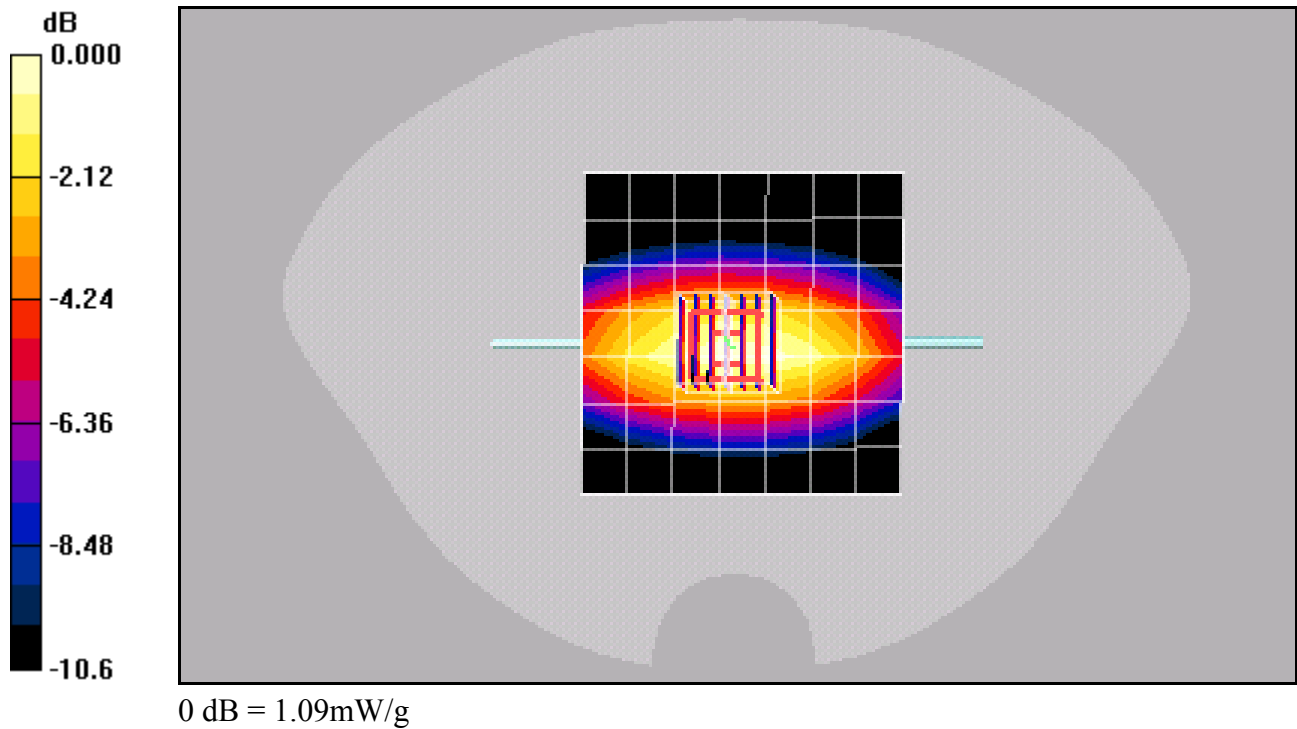
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.8 V/m; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.655 mW/g

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



Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe #1713, DAE #530, Dipole #454

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

Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.92 \text{ mho/m}$; $\epsilon_r = 43.2$; $\rho = 1000 \text{ kg/m}^3$

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 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

Temperature:

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

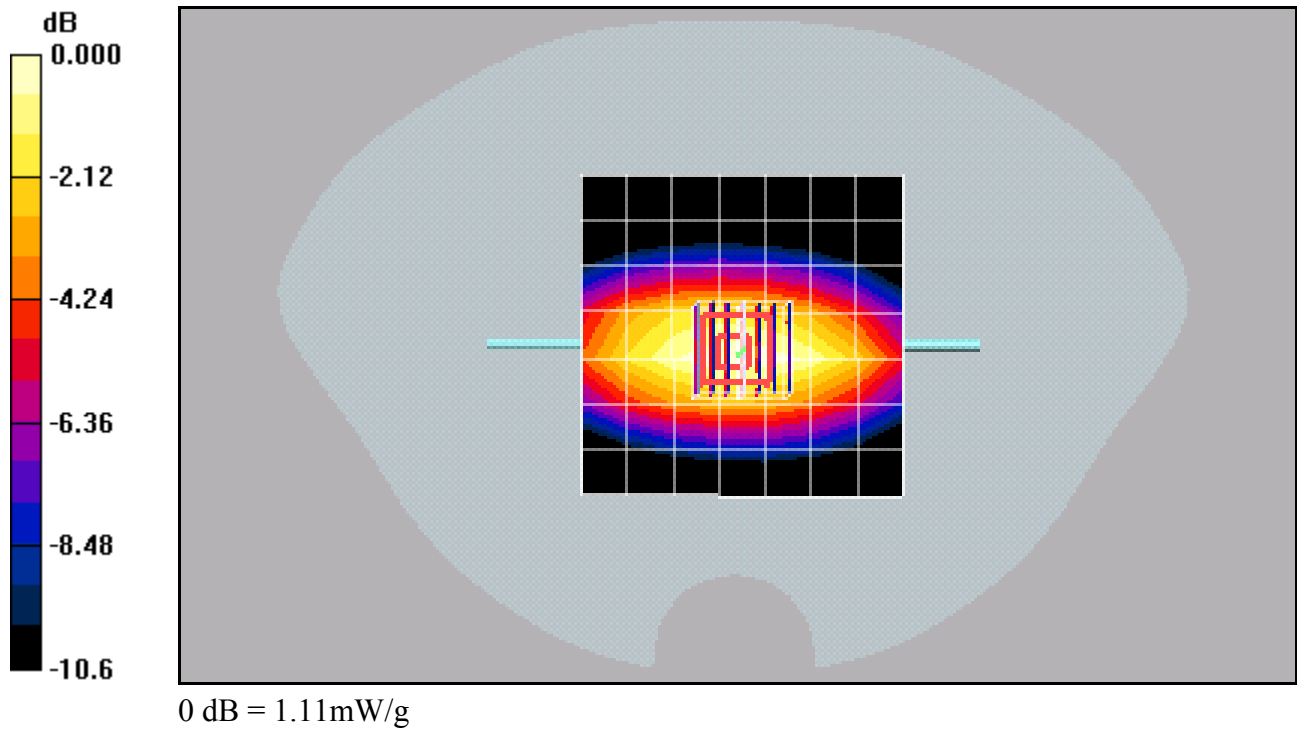
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

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

Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.665 mW/g

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



Test Laboratory: Kyocera

835MHz Validation @ 20.00dBm, Probe #1712, DAE #530, Dipole #454

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

Medium: HSL900, Medium parameters used: $f = 835$ MHz; $\sigma = 0.93$ mho/m; $\epsilon_r = 43.4$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(6.35, 6.35, 6.35), Calibrated: 7/18/2005

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

Electronics: DAE4 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

Temperature:

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

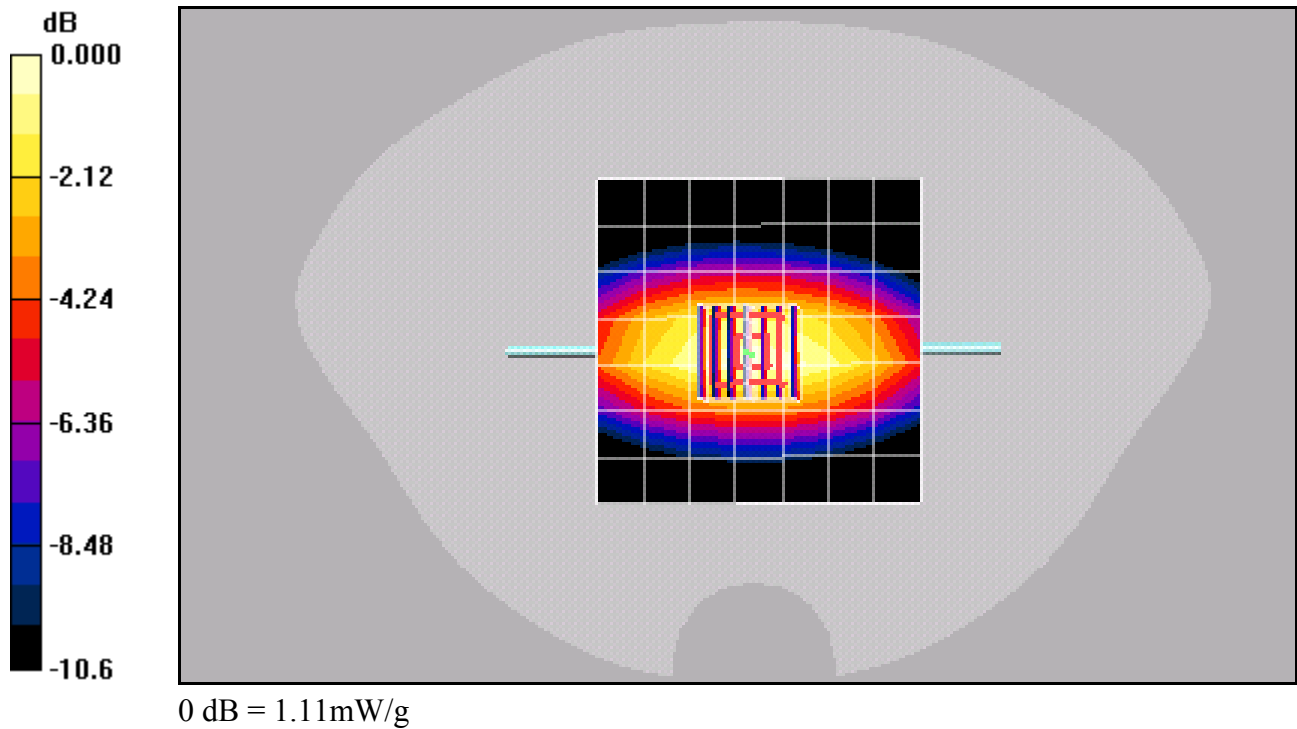
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 35.9 V/m; Power Drift = -0.042 dB

Peak SAR (extrapolated) = 1.55 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



Test Laboratory: Kyocera

1900MHz Validation @ 20.00dBm, Probe #1712, DAE #530, Dipole #5d005

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

Medium: HSL1800, Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 40.8$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.01, 5.01, 5.01), Calibrated: 7/18/2005

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

Electronics: DAE4 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

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

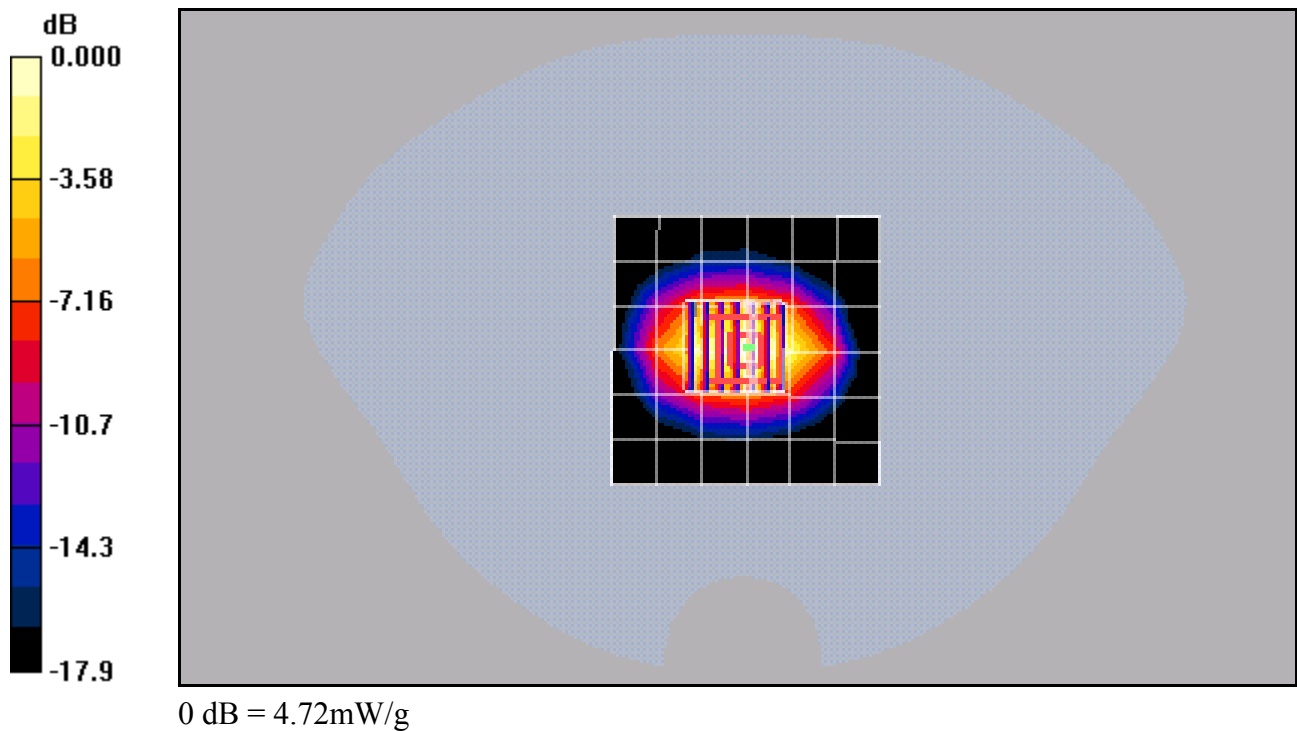
Reference Value = 60.5 V/m; Power Drift = 0.127 dB

Peak SAR (extrapolated) = 7.28 W/kg

SAR(1 g) = 4.15 mW/g; SAR(10 g) = 2.19 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 4.72 mW/g



Test Laboratory: Kyocera

1900MHz Validation @ 20.00dBm, Probe #1712, DAE #530, Dipole #5d005

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

Medium: HSL1800, Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.41$ mho/m; $\epsilon_r = 40.7$; $\rho = 1000$ kg/m³

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1712, ConvF(5.01, 5.01, 5.01), Calibrated: 7/18/2005

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

Electronics: DAE4 Sn530, Calibrated: 1/4/2005

Measurement SW: DASY4, V4.4 Build 3

Postprocessing SW: SEMCAD, V1.8 Build 159

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 = 61.5 V/m; Power Drift = -0.035 dB

Peak SAR (extrapolated) = 7.25 W/kg

SAR(1 g) = 4.15 mW/g; SAR(10 g) = 2.19 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)