

Appendix A: Validation Test Plots

Test Laboratory: Kyocera

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

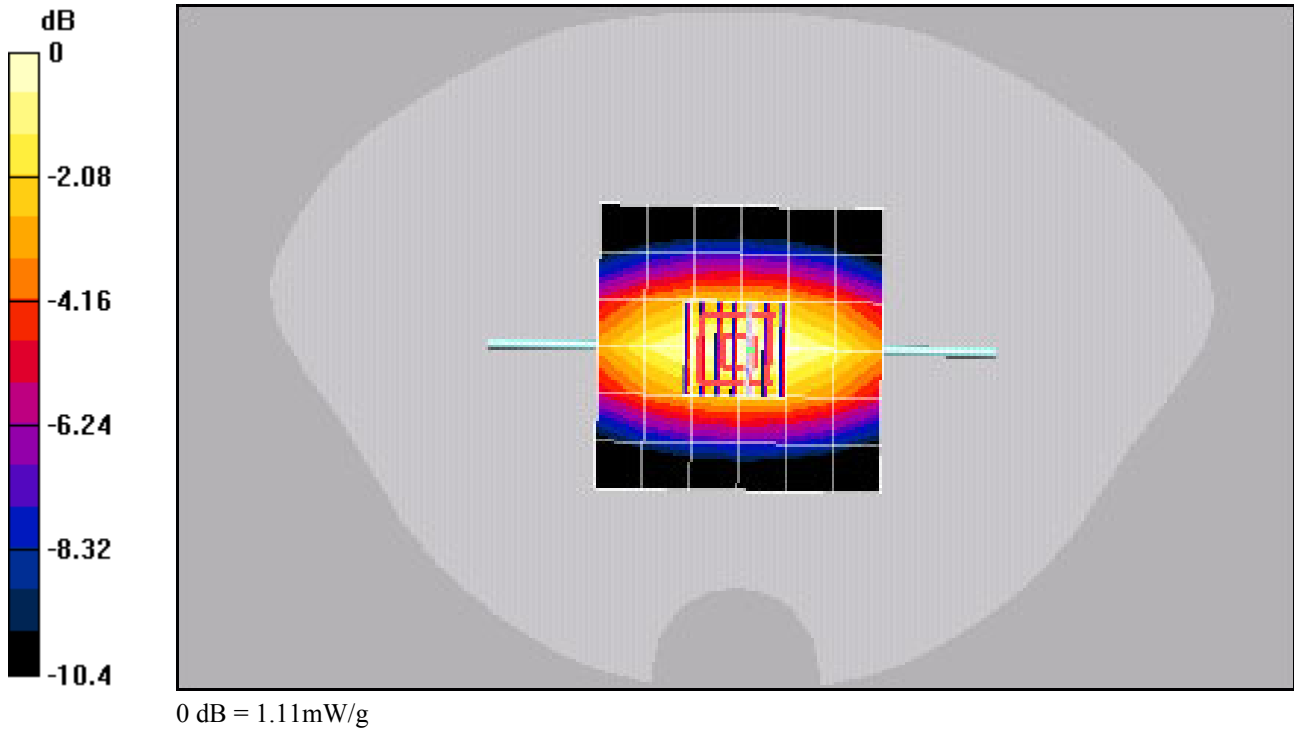
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: HSL900,Medium parameters used: f = 835 MHz; $\sigma = 0.916$ mho/m; $\epsilon_r = 43$; $\rho = 1000$ kg/m³
Phantom: SAM 12,Phantom section: Flat Section

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 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 = -0.0 dB
Peak SAR (extrapolated) = 1.53 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.667 mW/g



Test Laboratory: Kyocera

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

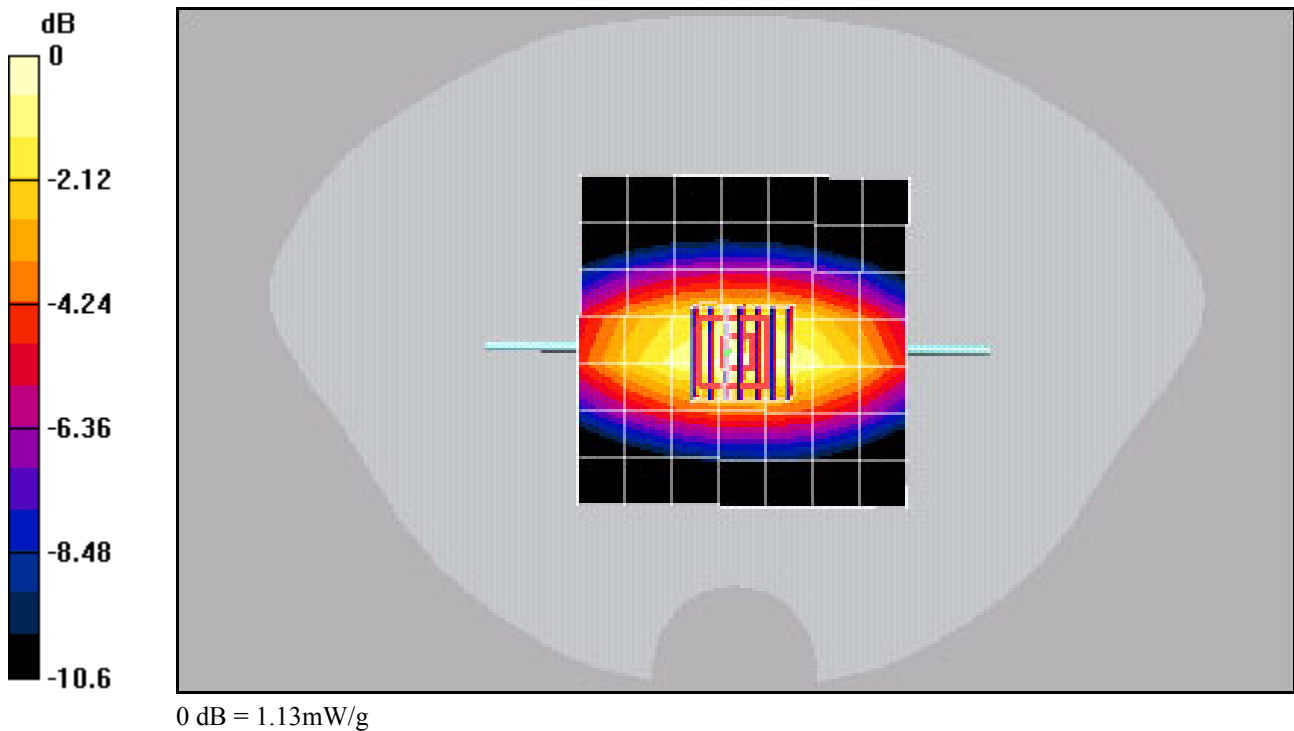
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
 Medium: HSL900, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$
 Phantom: SAM 12, Phantom section: Flat Section

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 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 = 35.9 V/m; Power Drift = 0.005 dB
 Peak SAR (extrapolated) = 1.57 W/kg
SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.666 mW/g
 Maximum value of SAR (measured) = 1.13 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: $f = 835 \text{ MHz}$; $\sigma = 0.909 \text{ mho/m}$; $\epsilon_r = 42.5$; $\rho = 1000 \text{ kg/m}^3$

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 130

Temperature:

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

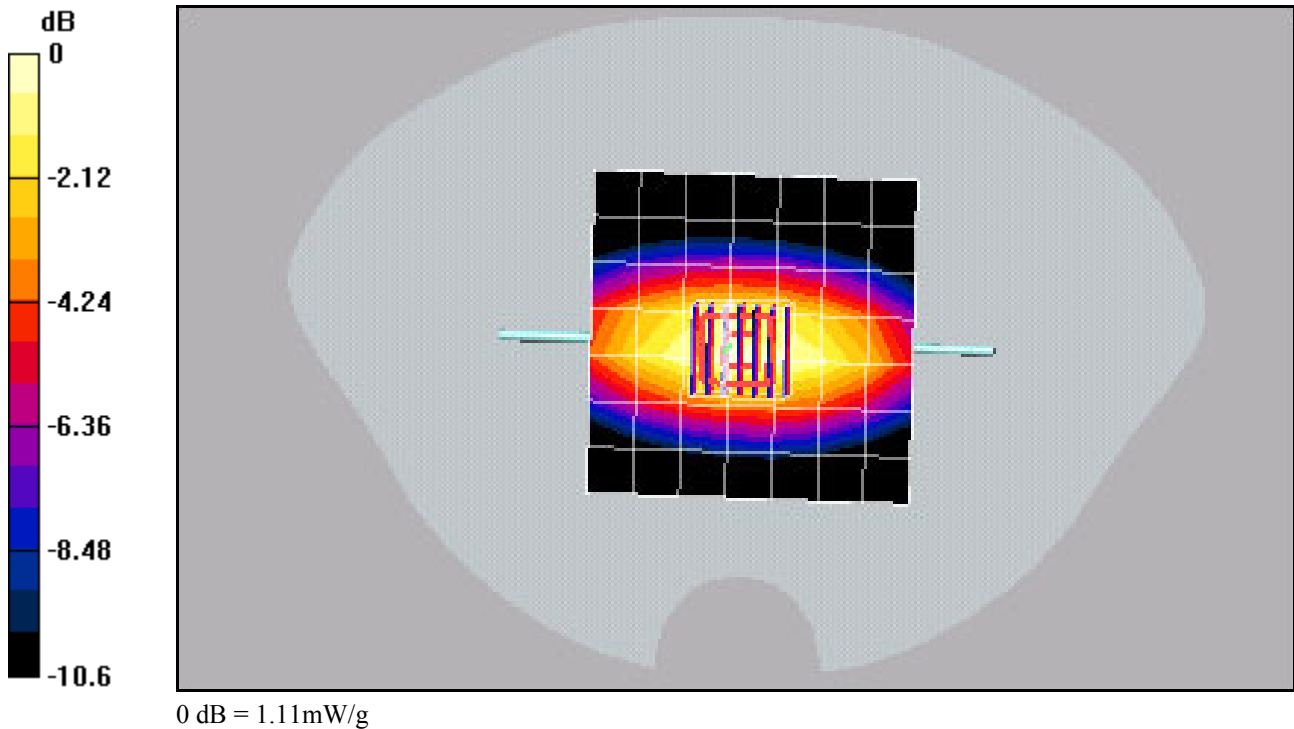
Validation Flat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 36.2 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 1.54 W/kg

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

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



Test Laboratory: Kyocera

1900MHz Validation, Probe 1713, DAE 530, Dipole #5d005

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

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.43$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

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 Sn530,Calibrated: 1/4/2005

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

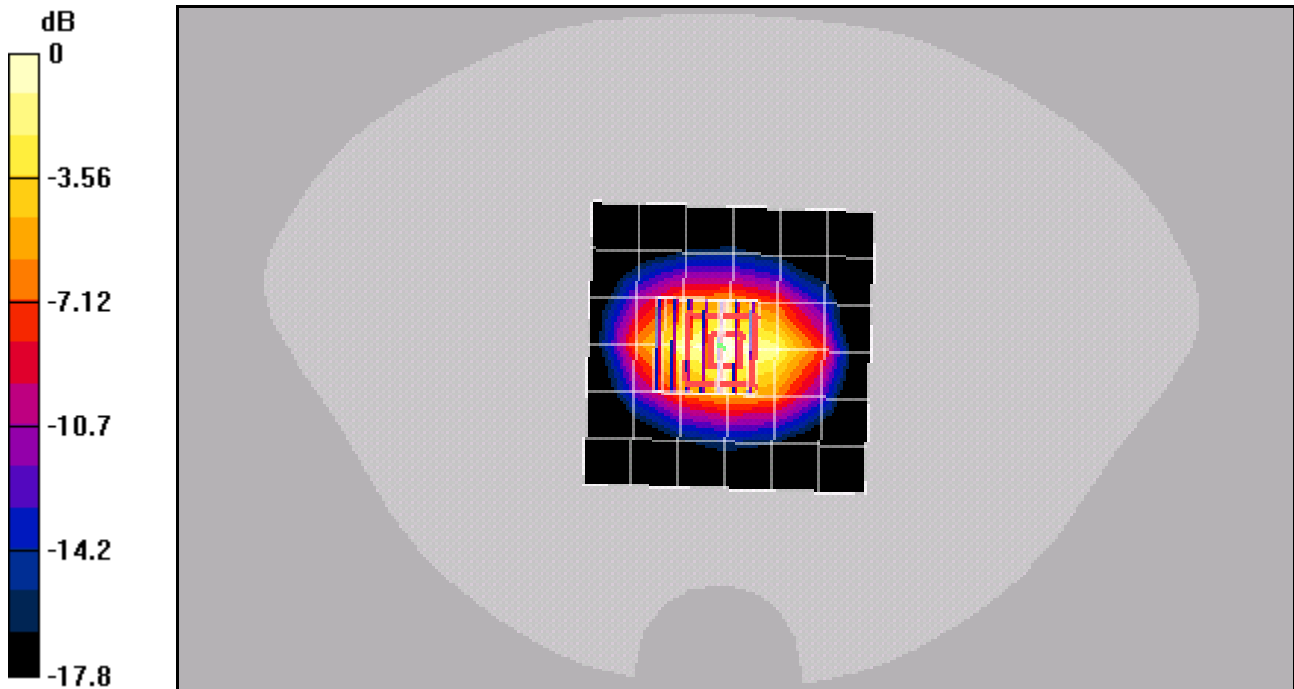
Reference Value = 61.3 V/m; Power Drift = -0.001 dB

Peak SAR (extrapolated) = 7.58 W/kg

SAR(1 g) = 4.29 mW/g; SAR(10 g) = 2.26 mW/g

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

Maximum value of SAR (measured) = 4.83 mW/g



0 dB = 4.83mW/g

Test Laboratory: Kyocera

1900MHz Validation, Probe 1713, DAE 530, Dipole #5d005

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

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.37$ mho/m; $\epsilon_r = 41.2$; $\rho = 1000$ kg/m³

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 Sn530,Calibrated: 1/4/2005

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

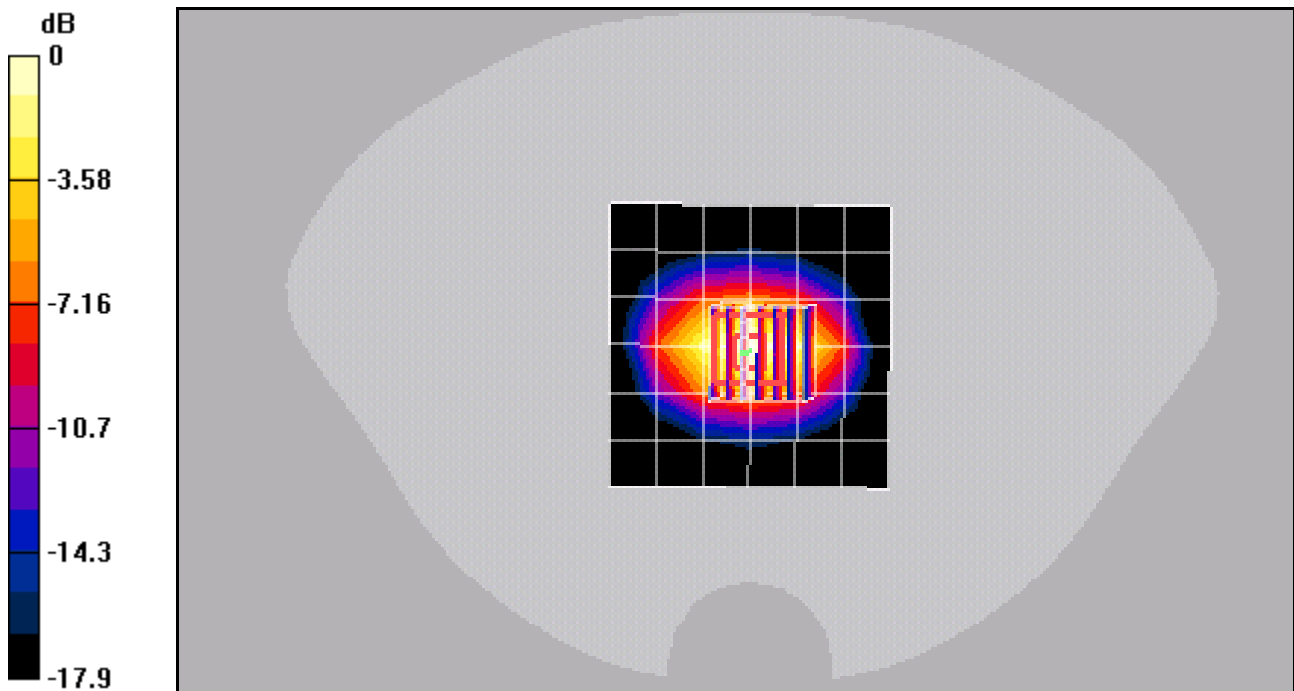
Reference Value = 62.5 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 7.25 W/kg

SAR(1 g) = 4.24 mW/g; SAR(10 g) = 2.26 mW/g

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

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



0 dB = 4.8mW/g

Test Laboratory: Kyocera

1900MHz Validation, Probe 1713, DAE 530, Dipole #5d005

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

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 40.9$; $\rho = 1000$ kg/m³

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 Sn530,Calibrated: 1/4/2005

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

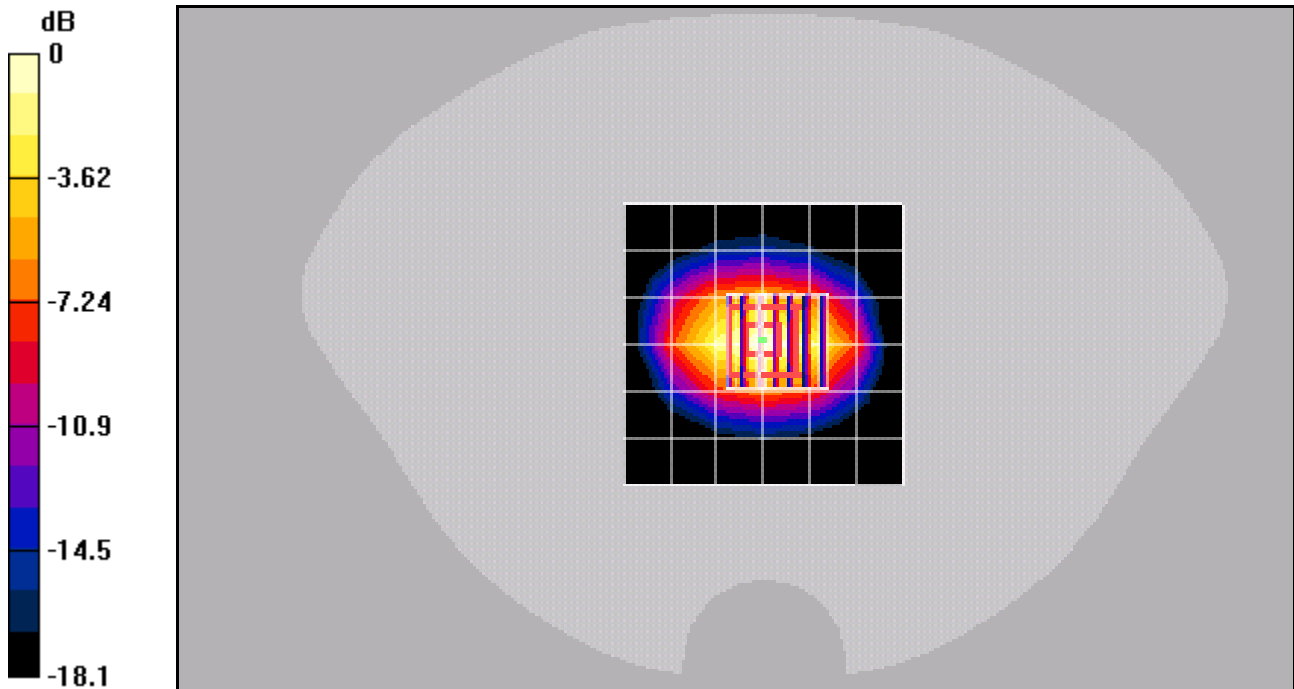
Reference Value = 61.7 V/m; Power Drift = -0.0 dB

Peak SAR (extrapolated) = 7.27 W/kg

SAR(1 g) = 4.19 mW/g; SAR(10 g) = 2.22 mW/g

Info: Interpolated medium parameters used for SAR evaluation!

Maximum value of SAR (measured) = 4.77 mW/g



0 dB = 4.77mW/g

Test Laboratory: Kyocera

1900MHz Validation, Probe 1713, DAE 530, Dipole #5d005

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

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 41$; $\rho = 1000$ kg/m³

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 Sn530,Calibrated: 1/4/2005

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

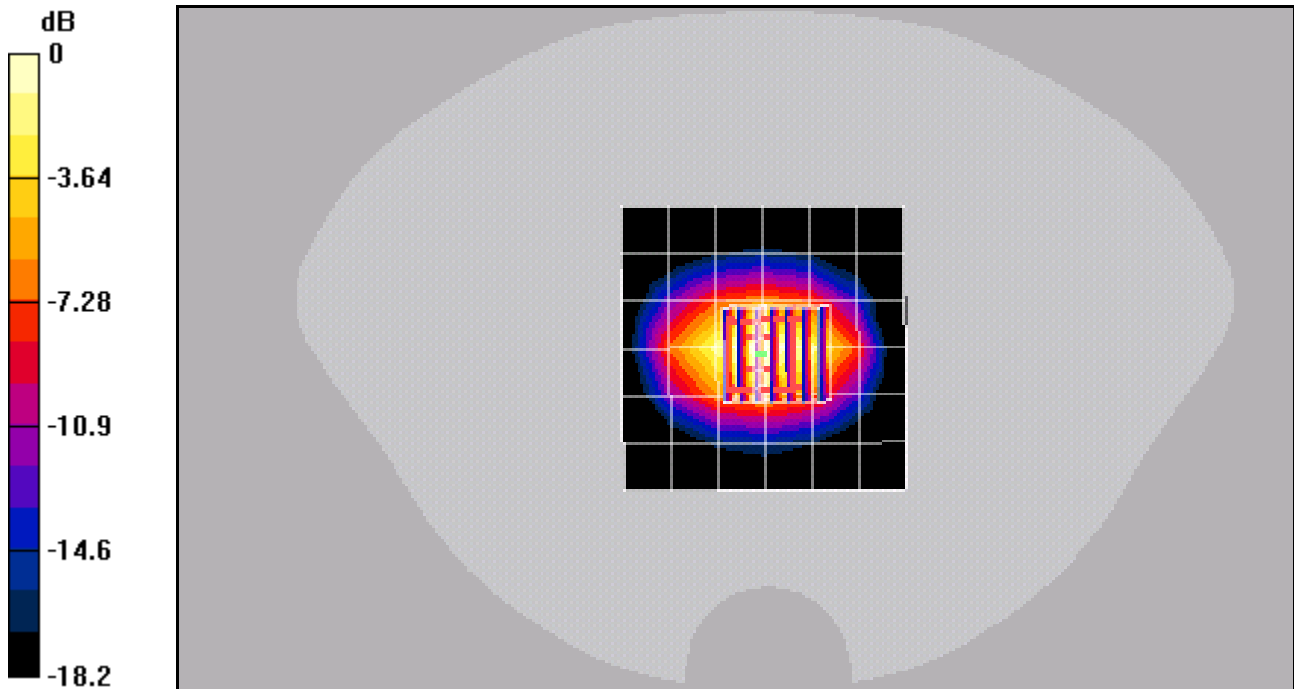
Reference Value = 60.7 V/m; Power Drift = -0.002 dB

Peak SAR (extrapolated) = 7.31 W/kg

SAR(1 g) = 4.17 mW/g; SAR(10 g) = 2.19 mW/g

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

Maximum value of SAR (measured) = 4.74 mW/g



0 dB = 4.74mW/g