

Appendix A:

Validation Test Plots

Test Laboratory: Kyocera-Wireless Corp.

835Mhz Validation @ 20dBm Probe 1664, DAE 527 and Dipole 454

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

Medium: HSL900,Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.73, 6.73, 6.73), Calibrated: 7/16/2007

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

Electronics: DAE4 Sn527,Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 55

Postprocessing SW: SEMCAD, V1.8 Build 171

Temperature:

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

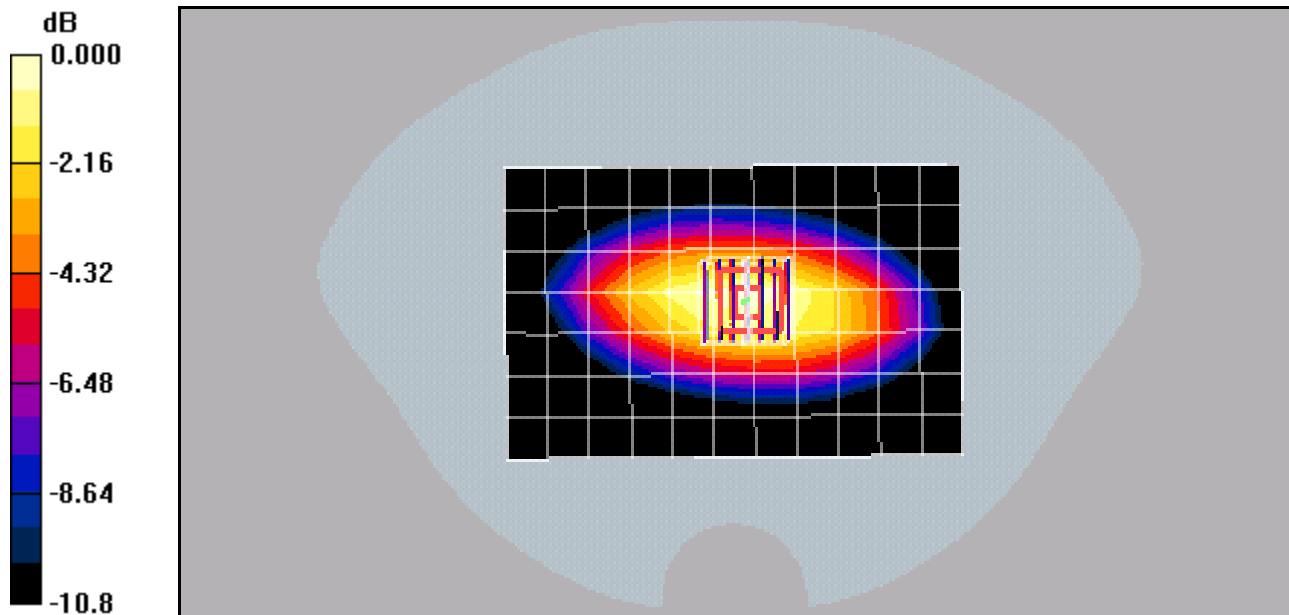
835MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 34.4 V/m; Power Drift = -0.051 dB

Peak SAR (extrapolated) = 1.49 W/kg

SAR(1 g) = 0.975 mW/g; SAR(10 g) = 0.629 mW/g

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



0 dB = 1.06mW/g

Test Laboratory: Kyocera-Wireless Corp.

835Mhz Validation (In Muscle) @ 20dBm Probe 1664, DAE 527 and Dipole 454

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

Medium: M900,Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.95 \text{ mho/m}$; $\epsilon_r = 56$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.49, 6.49, 6.49), Calibrated: 7/16/2007

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

Electronics: DAE4 Sn527,Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 55

Postprocessing SW: SEMCAD, V1.8 Build 171

Temperature:

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

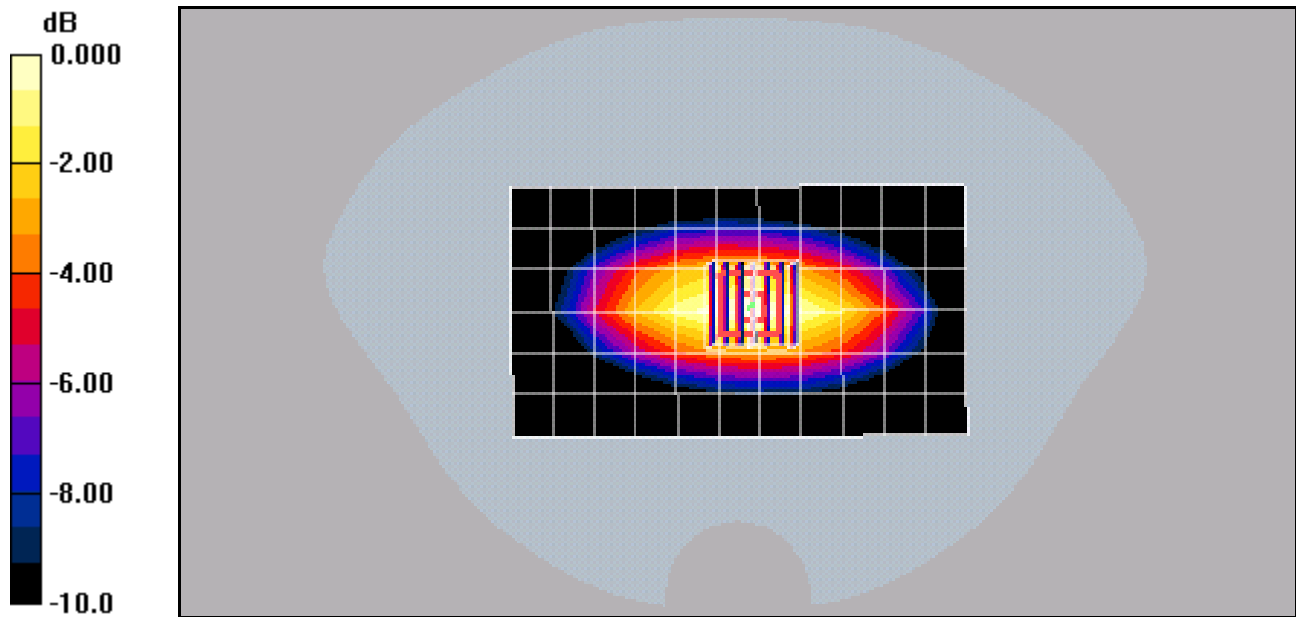
835MHz Validation (In Muscle) @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm

Reference Value = 34.7 V/m; Power Drift = 0.016 dB

Peak SAR (extrapolated) = 1.50 W/kg

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



0 dB = 1.08mW/g

Test Laboratory: Kyocera-Wireless Corp.

835Mhz Validation (In Muscle) @ 20dBm Probe 1664, DAE 527 and Dipole 454

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

Medium: M900, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.94 \text{ mho/m}$; $\epsilon_r = 55.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12, Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(6.49, 6.49, 6.49), Calibrated: 7/16/2007

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

Electronics: DAE4 Sn527, Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 55

Postprocessing SW: SEMCAD, V1.8 Build 171

Temperature:

Room T = $21.8 \pm 1 \text{ deg C}$, Liquid T = $22.0 \pm 1 \text{ deg C}$

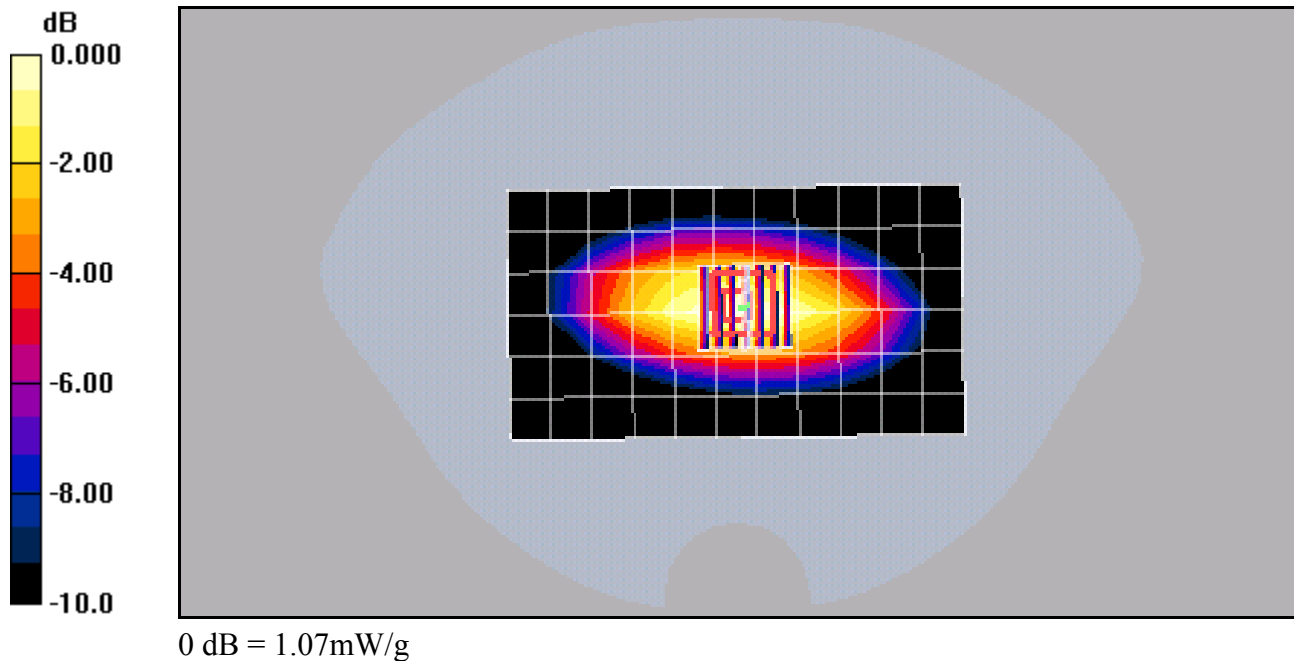
835MHz Validation (In Muscle) @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm,

dy=5mm, dz=5mm

Reference Value = 34.9 V/m; Power Drift = -0.072 dB

Peak SAR (extrapolated) = 1.48 W/kg

SAR(1 g) = 0.999 mW/g; SAR(10 g) = 0.654 mW/g



Test Laboratory: Kyocera-Wireless Corp.

1900Mhz Validation @ 20dBm Probe 1664, DAE 527 and Dipole 5d003

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

Medium: HSL1800,Medium parameters used (interpolated): $f = 1900 \text{ MHz}$; $\sigma = 1.38 \text{ mho/m}$; $\epsilon_r = 40.6$; $\rho = 1000 \text{ kg/m}^3$

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(5.14, 5.14, 5.14), Calibrated: 7/16/2007

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

Electronics: DAE4 Sn527,Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 55

Postprocessing SW: SEMCAD, V1.8 Build 171

Temperature:

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

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

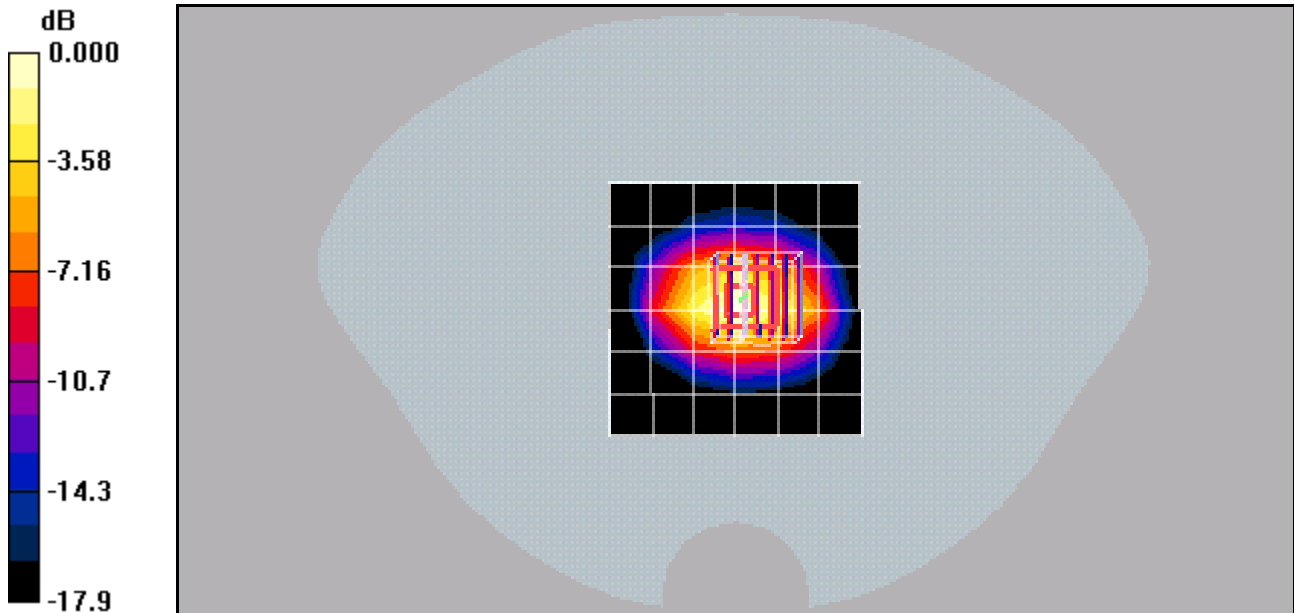
Reference Value = 58.4 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 6.40 W/kg

SAR(1 g) = 3.8 mW/g; SAR(10 g) = 2.03 mW/g

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

Maximum value of SAR (measured) = 4.30 mW/g



0 dB = 4.30mW/g

Test Laboratory: Kyocera-Wireless Corp.

1900Mhz Validation (In Muscle) @ 20dBm Probe 1664, DAE 527 and Dipole 5d003

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

Medium: M1800,Medium parameters used (interpolated): $f = 1900$ MHz; $\sigma = 1.49$ mho/m; $\epsilon_r = 54.8$; $\rho = 1000$ kg/m³

Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:

Probe: ET3DV6 - SN1664, ConvF(4.66, 4.66, 4.66), Calibrated: 7/16/2007

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

Electronics: DAE4 Sn527,Calibrated: 9/14/2007

Measurement SW: DASY4, V4.7 Build 55

Postprocessing SW: SEMCAD, V1.8 Build 171

Temperature:

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

1900MHz Validation @20dBm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

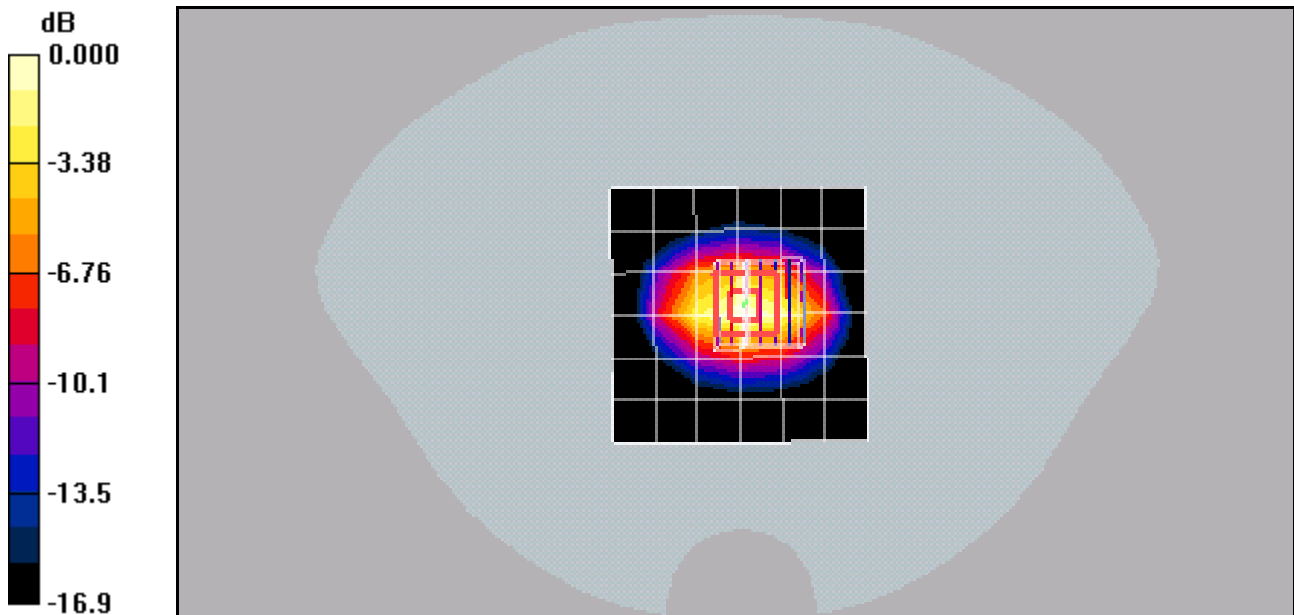
Reference Value = 57.8 V/m; Power Drift = -0.004 dB

Peak SAR (extrapolated) = 6.68 W/kg

SAR(1 g) = 4 mW/g; SAR(10 g) = 2.17 mW/g

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

Maximum value of SAR (measured) = 4.51 mW/g



0 dB = 4.51mW/g