APPENDIX A:

Validation Plots

For

Model KX2

Date/Time: 12/08/03 10:00:43

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation(Muscle) for FCC, Probe 1618, DAE 527, Dipole #453, 12-08-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-08-03

DUT: Dipole 835 MHz

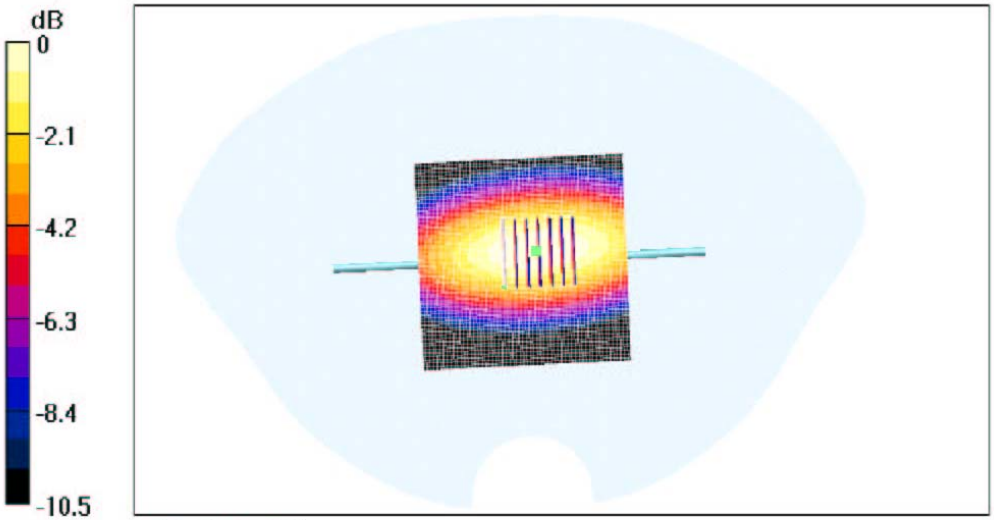
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.904 mho/m, ε_r = 42.68, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.1 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.09 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 0.994 mW/g; SAR(10 g) = 0.648 mW/g
Reference Value = 35.1 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.08 mW/g



0 dB = 1.08mW/g

Date/Time: 12/09/03 08:23:51

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation(Muscle) for FCC, Probe 1618, DAE 527, Dipole #453, 12-09-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-09-03

DUT: Dipole 835 MHz

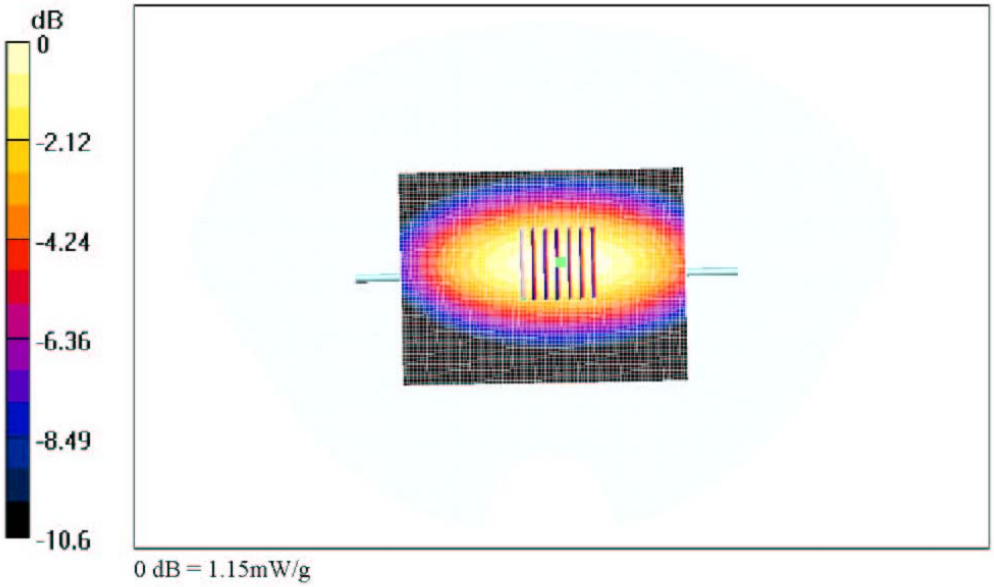
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.908 mho/m, ε_r = 42.01, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.8 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.15 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.52 W/kg
SAR(1 g) = 1.07 mW/g, SAR(10 g) = 0.695 mW/g
Reference Value = 35.8 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.15 mW/g



0 dB = 1.15mW/g

Date/Time: 12/04/03 12:51:28

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, 12-04-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-04-03

DUT: Dipole 835 MHz

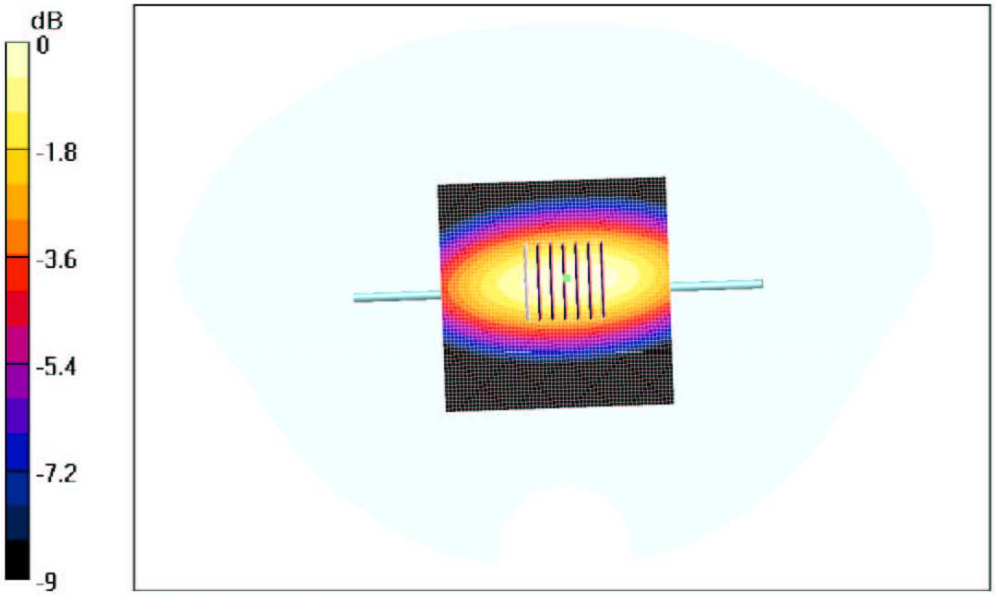
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.908 mho/m, ϵ_r = 42.89, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 34.4 V/m
Power Drift = 0.009 dB
Maximum value of SAR = 1.06 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.45 W/kg
SAR(1 g) = 1 mW/g, SAR(10 g) = 0.649 mW/g
Reference Value = 34.4 V/m
Power Drift = 0.009 dB
Maximum value of SAR = 1.08 mW/g



0 dB = 1.08mW/g

Date/Time: 12/05/03 00:36:01

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, 12-05-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-05-03

DUT: Dipole 835 MHz

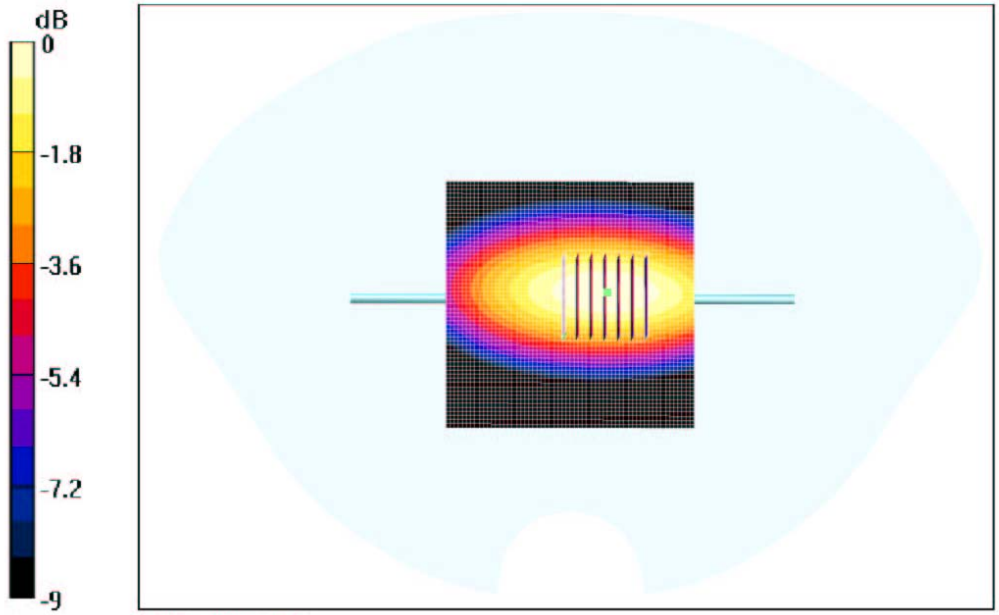
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.884 mho/m, ε_r = 41.6, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.4 V/m
Power Drift = -0.3 dB
Maximum value of SAR = 1.09 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.43 W/kg
SAR(1 g) = 0.997 mW/g; SAR(10 g) = 0.649 mW/g
Reference Value = 35.4 V/m
Power Drift = -0.3 dB
Maximum value of SAR = 1.08 mW/g



0 dB = 1.08mW/g

Date/Time: 12/06/03 00:31:01

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, 12-06-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-06-03

DUT: Dipole 835 MHz

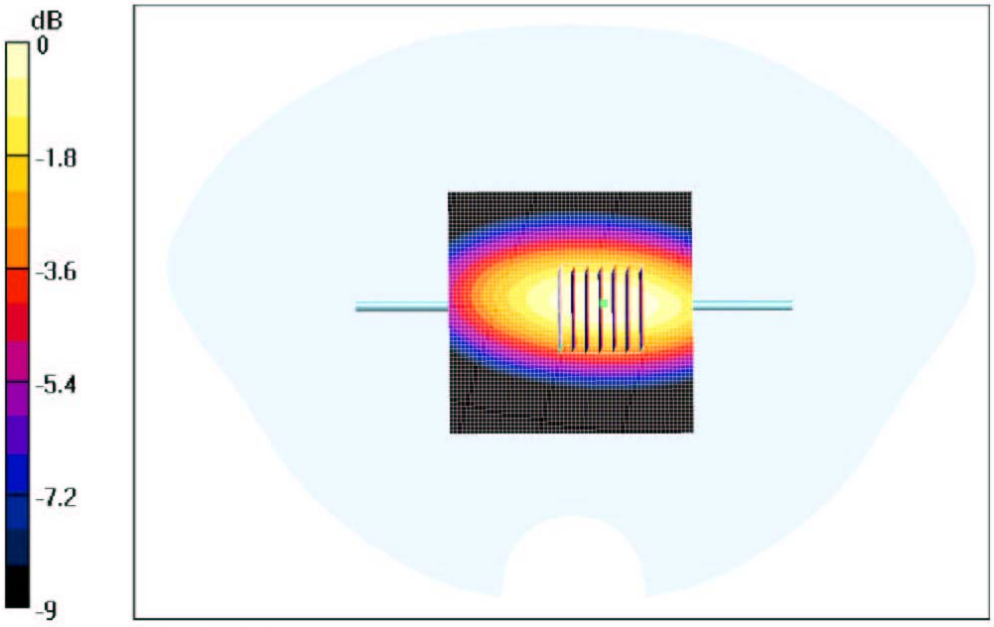
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.893 mho/m, ε_r = 41.6, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 34.8 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.09 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.42 W/kg
SAR(1 g) = 0.992 mW/g, SAR(10 g) = 0.645 mW/g
Reference Value = 34.8 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.07 mW/g



0 dB = 1.07mW/g

Date/Time: 12/07/03 08:04:43

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, 12-07-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-07-03

DUT: Dipole 835 MHz

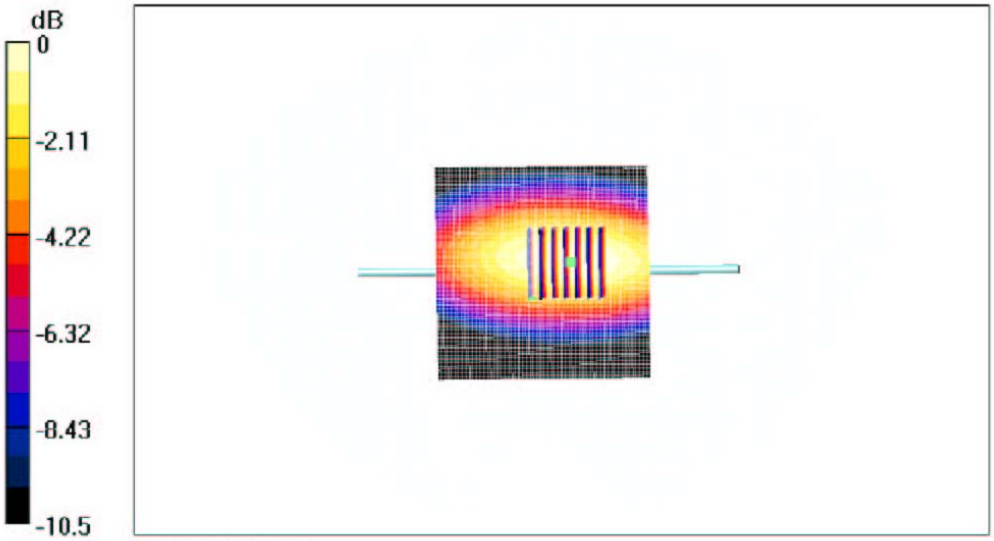
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.901 mho/m, ε_r = 40.91, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 34.2 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.09 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.41 W/kg
SAR(1 g) = 1 mW/g; SAR(10 g) = 0.652 mW/g
Reference Value = 34.2 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 1.08 mW/g



0 dB = 1.08mW/g

Date/Time: 12/12/03 15:02:04

Test Laboratory: Kyocera Wireless Corporation
File Name: 835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, 12-12-03.da4

835MHz Validation, Probe 1618, DAE 527, Dipole #453, 12-12-03

DUT: Dipole 835 MHz

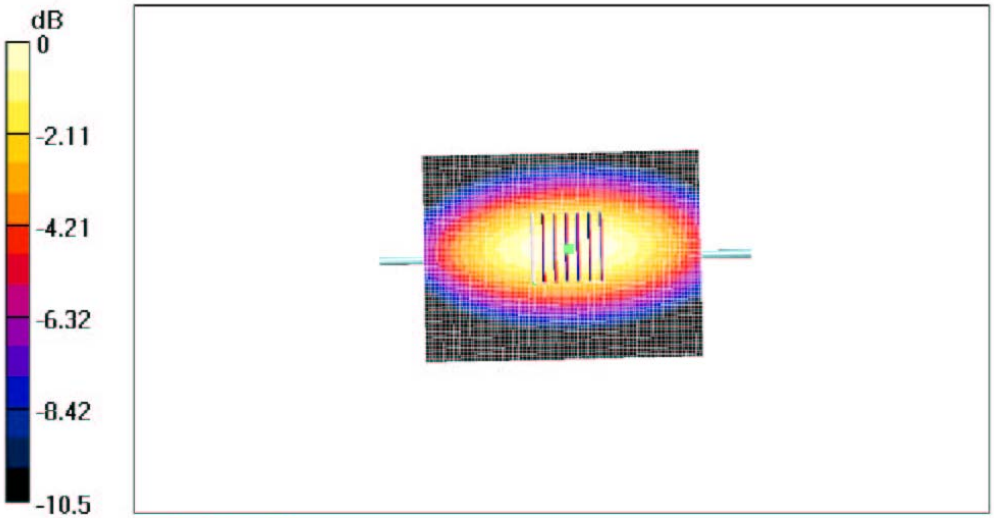
Communication System: CW, Frequency: 835 MHz, Duty Cycle: 1:1
Medium: Head 835 MHz, (σ = 0.917 mho/m, ε_r = 43.22, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(6.9, 6.9, 6.9), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

835MHz/Area Scan (61x81x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 35.8 V/m
Power Drift = 0.04 dB
Maximum value of SAR = 1.13 mW/g

835MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 1.51 W/kg
SAR(1 g) = 1.05 mW/g, SAR(10 g) = 0.684 mW/g
Reference Value = 35.8 V/m
Power Drift = 0.04 dB
Maximum value of SAR = 1.14 mW/g



0 dB = 1.14mW/g

Date/Time: 12/09/03 12:49:51

Test Laboratory: Kyocera Wireless Corporation
File Name: 1900MHz Validation for FCC, Probe 1618, DAE 527, Dipole #5d003, 12-09-03.da4

1900MHz Validation, Probe 1618, DAE 527, Dipole #5d003, 12-09-03

DUT: Dipole 1900 MHz

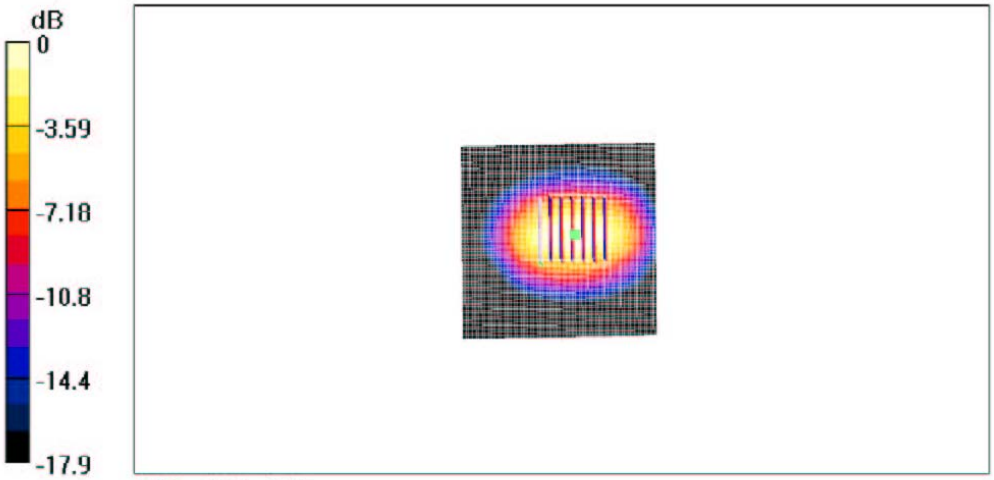
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: Head 1900 MHz, (σ = 1.44 mho/m, ε_r = 40.18, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(5.3, 5.3, 5.3), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

1900MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 59.4 V/m
Power Drift = 0.0008 dB
Maximum value of SAR = 5.17 mW/g

1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 7.92 W/kg
SAR(1 g) = 4.47 mW/g, SAR(10 g) = 2.3 mW/g
Reference Value = 59.4 V/m
Power Drift = 0.0008 dB
Maximum value of SAR = 5.03 mW/g



0 dB = 5.03mW/g

Date/Time: 12/10/03 00:56:06

Test Laboratory: Kyocera Wireless Corporation
File Name: 1900MHz Validation for FCC, Probe 1618, DAE 527, Dipole #5d003, 12-10-03.da4

1900MHz Validation Probe 1618, DAE 527, Dipole #5d003, 12-10-03

DUT: Dipole 1900 MHz

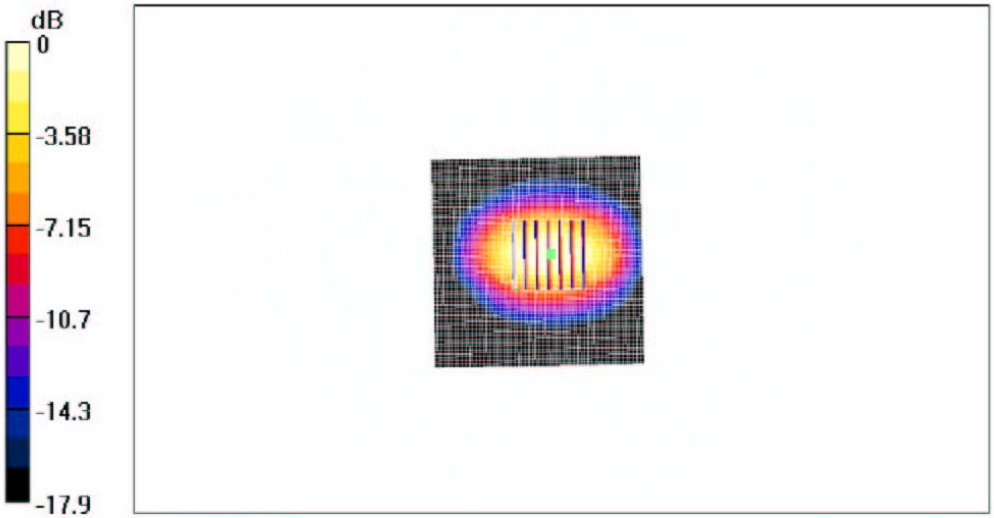
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: Head 1900 MHz, (σ = 1.47 mho/m, ε_r = 39.54, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(5.3, 5.3, 5.3), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

1900MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 60 V/m
Power Drift = -0.004 dB
Maximum value of SAR = 5.3 mW/g

1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 8.34 W/kg
SAR(1 g) = 4.65 mW/g, SAR(10 g) = 2.37 mW/g
Reference Value = 60 V/m
Power Drift = -0.004 dB
Maximum value of SAR = 5.22 mW/g



0 dB = 5.22mW/g

Date/Time: 12/12/03 09:56:57

Test Laboratory: Kyocera Wireless Corporation
File Name: 1900MHz Validation@20dB for FCC, Probe 1618, DAE 527, Dipole #5d003, 12-12-03.da4

1900MHz Validation, Probe 1618, DAE 527, Dipole #5d003, 12-12-03

DUT: Dipole 1900 MHz

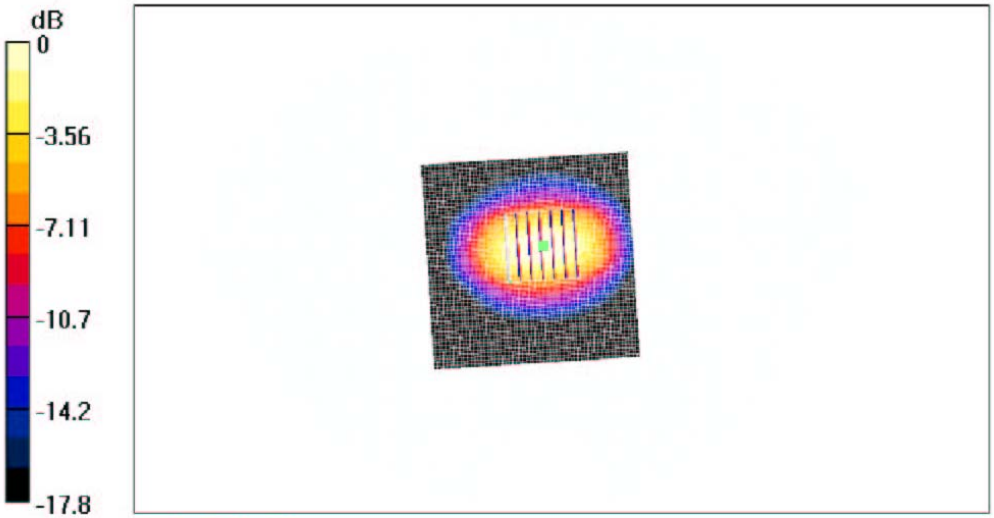
Communication System: CW, Frequency: 1900 MHz, Duty Cycle: 1:1
Medium: Head 1900 MHz, (σ = 1.46 mho/m, ε_r = 40.45, ρ = 1000 kg/m^3)
Phantom: SAM 12,Phantom section: Flat Section

DASY4 Configuration:
Probe: ET3DV6 - SN1618, ConvF(5.3, 5.3, 5.3), Calibrated: 10/10/2003
Sensor-Surface: 4mm (Mechanical And Optical Surface Detection),
Electronics: DAE3 Sn527,Calibrated: DAE not calibrated
Measurement SW: DASY4, V4.1 Build 47
Postprocessing SW: SEMCAD, V1.6 Build 115

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

1900MHz/Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 55.7 V/m
Power Drift = 0.009 dB
Maximum value of SAR = 5.16 mW/g

1900MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Peak SAR (extrapolated) = 7.93 W/kg
SAR(1 g) = 4.44 mW/g, SAR(10 g) = 2.28 mW/g
Reference Value = 55.7 V/m
Power Drift = 0.009 dB
Maximum value of SAR = 5.03 mW/g



0 dB = 5.03mW/g