

Appendix A: Validation test printout

Date/Time: 11/13/03 23:19:52

Test Laboratory: Kyocera Wireless Corporation

File Name: [1900MHz Validation for FCC, Probe 1618, DAE 322, Dipole #5d005, @20dBm 11-13-03,1.da4](#)

1900MHz Validation, Probe 1618, DAE 322, Dipole #5d005, @20dBm

DUT: Dipole 1900 MHz

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

Medium: Head 1900 MHz, ($\sigma = 1.39$ mho/m, $\epsilon_r = 39.44$, $\rho = 1000$ kg/m³)

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 Sn322, Calibrated: 7/17/2003

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 (7x7x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 64.8 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 5.21 mW/g

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

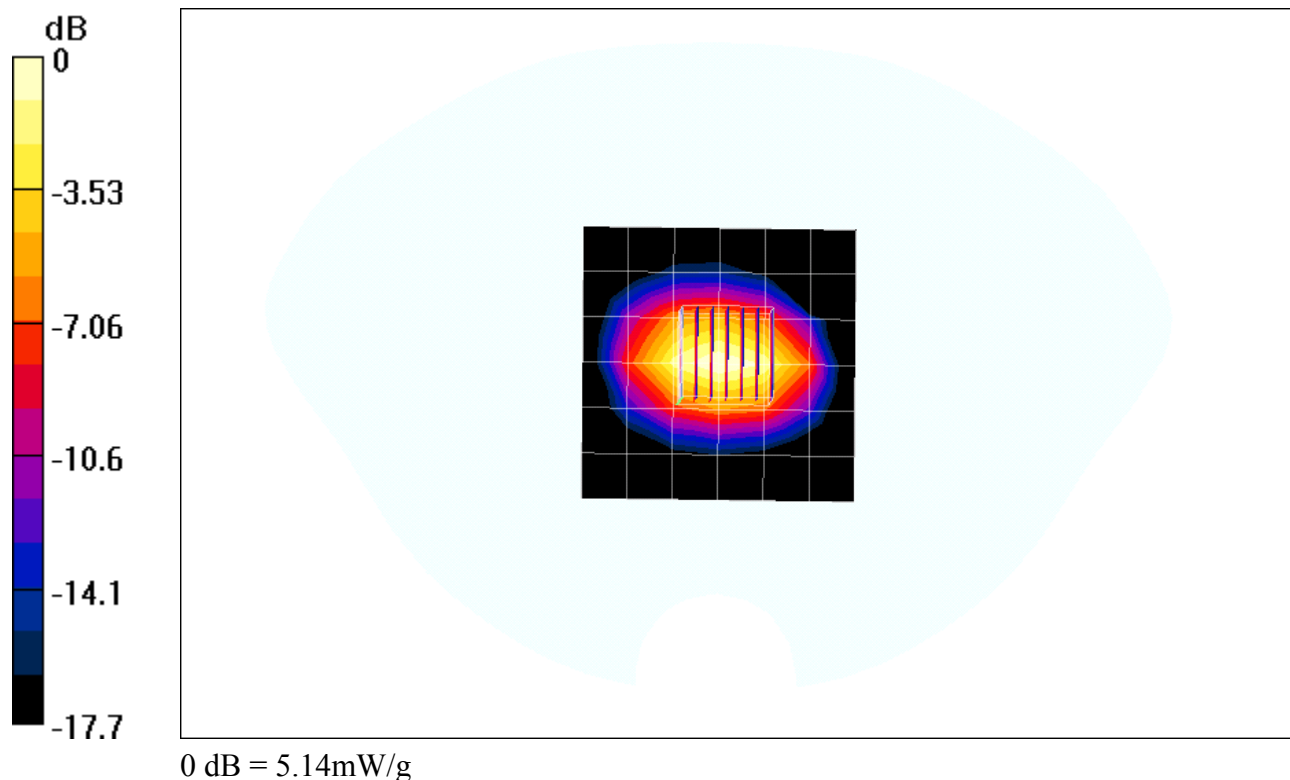
Peak SAR (extrapolated) = 7.96 W/kg

SAR(1 g) = 4.6 mW/g; SAR(10 g) = 2.39 mW/g

Reference Value = 64.8 V/m

Power Drift = -0.05 dB

Maximum value of SAR = 5.14 mW/g



Date/Time: 11/14/03 13:08:09

Test Laboratory: Kyocera Wireless Corporation

File Name: [1900MHz Validation for FCC, Probe 1618, DAE 322, Dipole #5d005, @20dBm 11-14-03,1.da4](#)

1900MHz Validation, Probe 1618, DAE 322, Dipole #5d005, @20dBm

DUT: Dipole 1900 MHz

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

Medium: Head 1900 MHz, ($\sigma = 1.44$ mho/m, $\epsilon_r = 39.44$, $\rho = 1000$ kg/m³)

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 (7x7x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 54.7 V/m

Power Drift = 0.007 dB

Maximum value of SAR = 3.81 mW/g

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

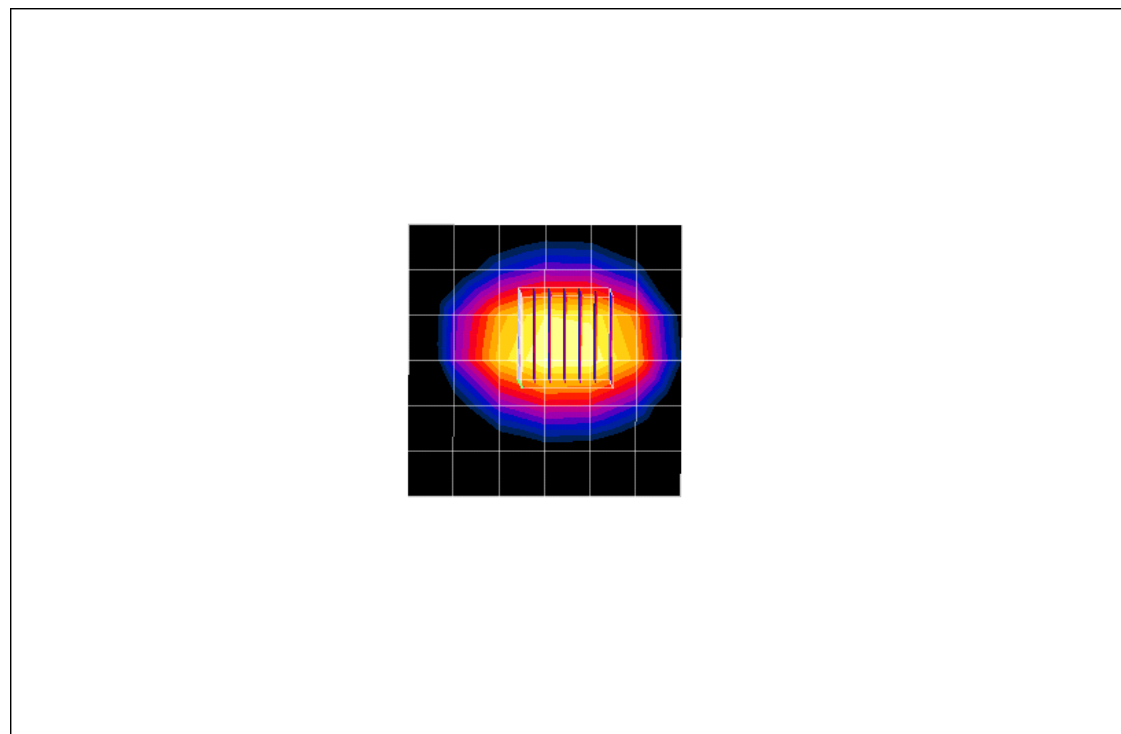
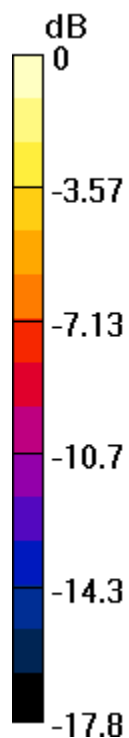
Peak SAR (extrapolated) = 7.74 W/kg

SAR(1 g) = 4.42 mW/g; SAR(10 g) = 2.29 mW/g

Reference Value = 54.7 V/m

Power Drift = 0.007 dB

Maximum value of SAR = 4.92 mW/g



0 dB = 4.92mW/g

Date/Time: 11/15/03 15:18:38

Test Laboratory: Kyocera Wireless Corporation

File Name: [1900MHz Validation\(Muscle\) for FCC, Probe 1618, DAE 322, Dipole #5d005, @20dBm 11-15-03,1.da4](#)

1900MHz Validation, Probe 1618, DAE 322, Dipole #5d005, @20dBm

DUT: Dipole 1900 MHz

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

Medium: Head 1900 MHz, ($\sigma = 1.46$ mho/m, $\epsilon_r = 39.15$, $\rho = 1000$ kg/m³)

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 (7x7x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 51.9 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 3.46 mW/g

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

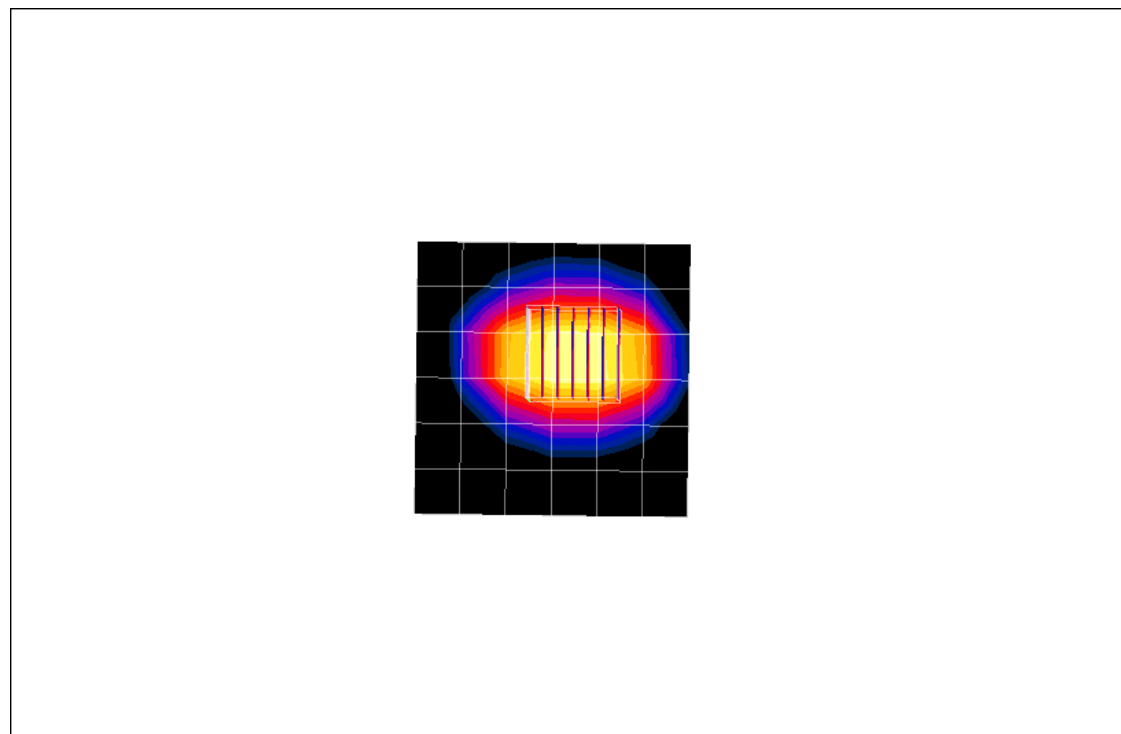
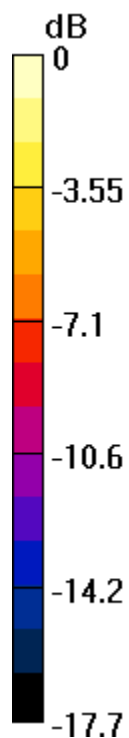
Peak SAR (extrapolated) = 7.77 W/kg

SAR(1 g) = 4.4 mW/g; SAR(10 g) = 2.28 mW/g

Reference Value = 51.9 V/m

Power Drift = -0.1 dB

Maximum value of SAR = 4.94 mW/g



0 dB = 4.94mW/g

Date/Time: 11/19/03 17:06:05

Test Laboratory: Kyocera Wireless Corporation

File Name: [1900MHz Validation\(Muscle\) for FCC, Probe 1618, DAE 327, Dipole #5d005, @20dBm 11-19-03,1.da4](#)

1900MHz Validation, Probe 1618, DAE 327, Dipole #5d005, @20dBm

DUT: Dipole 1900 MHz

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

Medium: Head 1900 MHz, ($\sigma = 1.46$ mho/m, $\epsilon_r = 39.75$, $\rho = 1000$ kg/m³)

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 (7x7x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 54.4 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 3.82 mW/g

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

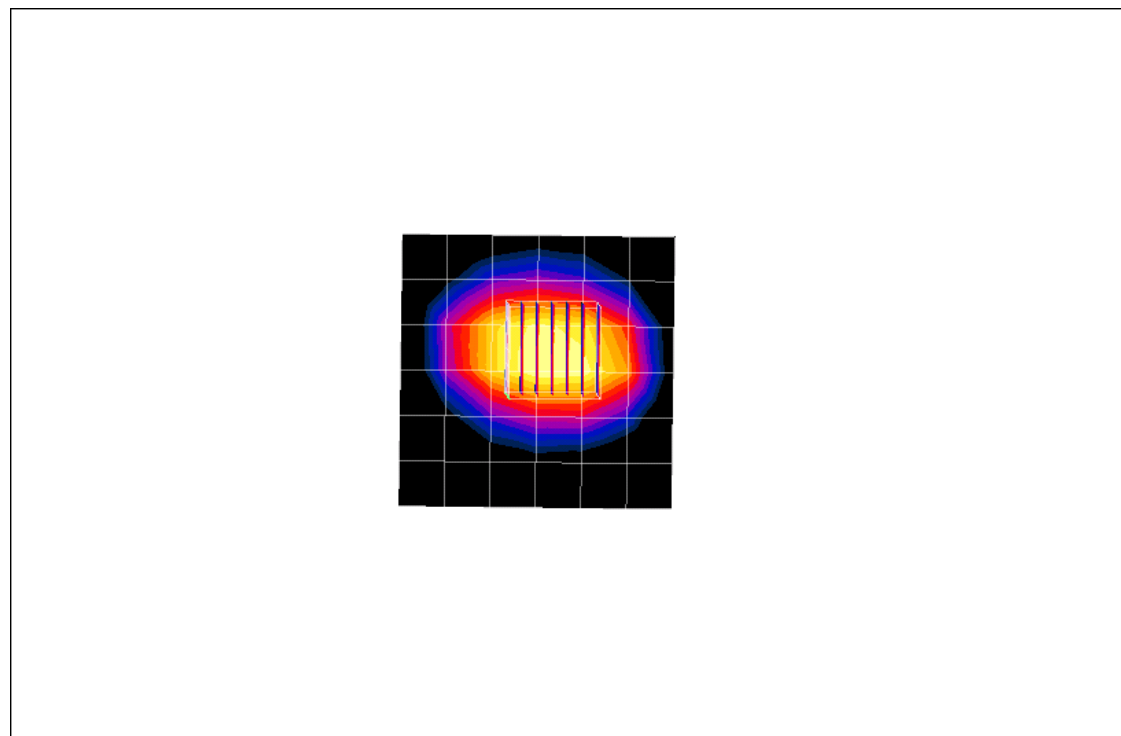
Peak SAR (extrapolated) = 8.07 W/kg

SAR(1 g) = 4.54 mW/g; SAR(10 g) = 2.34 mW/g

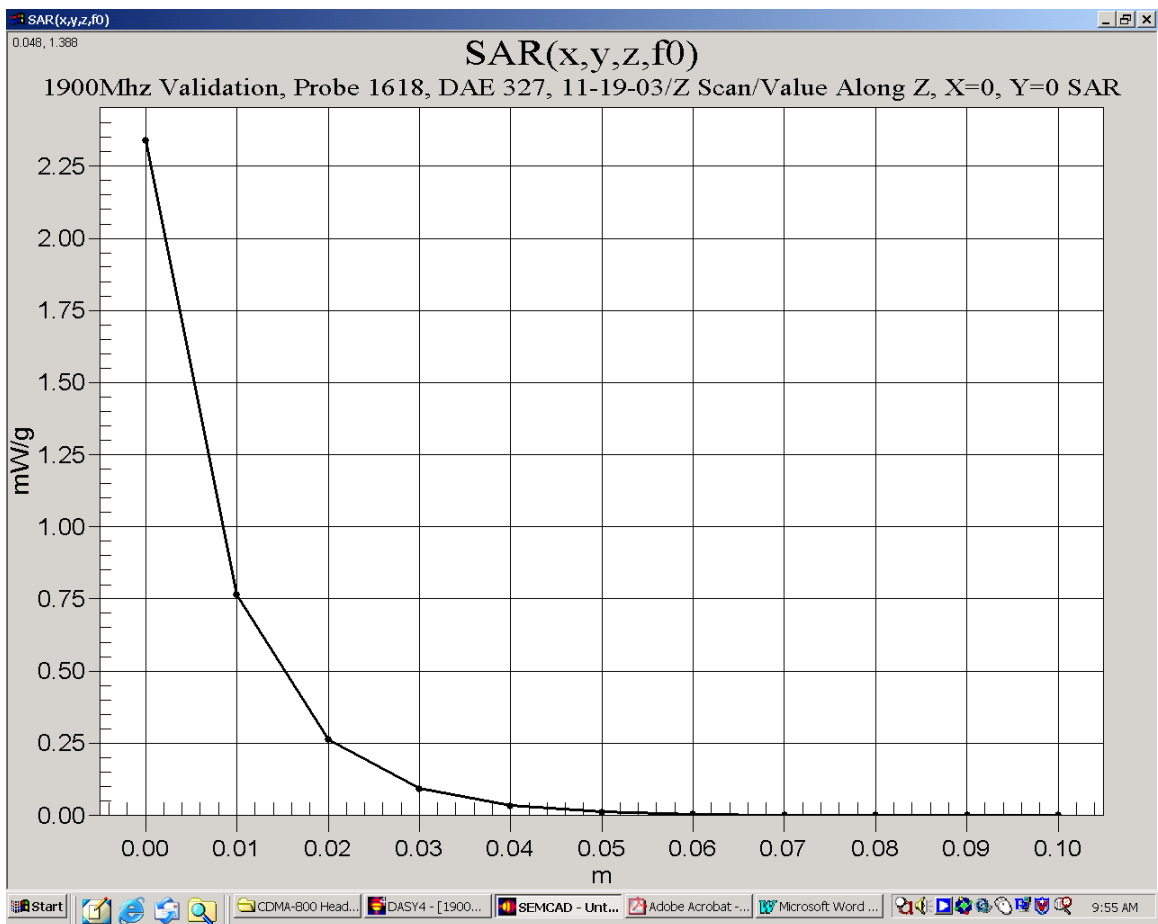
Reference Value = 54.4 V/m

Power Drift = -0.04 dB

Maximum value of SAR = 5.1 mW/g



0 dB = 5.1mW/g



Date/Time: 11/16/03 00:28:31

Test Laboratory: Kyocera Wireless Corporation

File Name: [835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, @20dBm 11-16-03.da4](#)

835MHz Validation, Probe 1618, DAE 527, Dipole #453, @20dBm

DUT: Dipole 835 MHz

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

Medium: Head 835 MHz, ($\sigma = 0.911$ mho/m, $\epsilon_r = 42.44$, $\rho = 1000$ kg/m³)

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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 34.7 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 1.04 mW/g

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

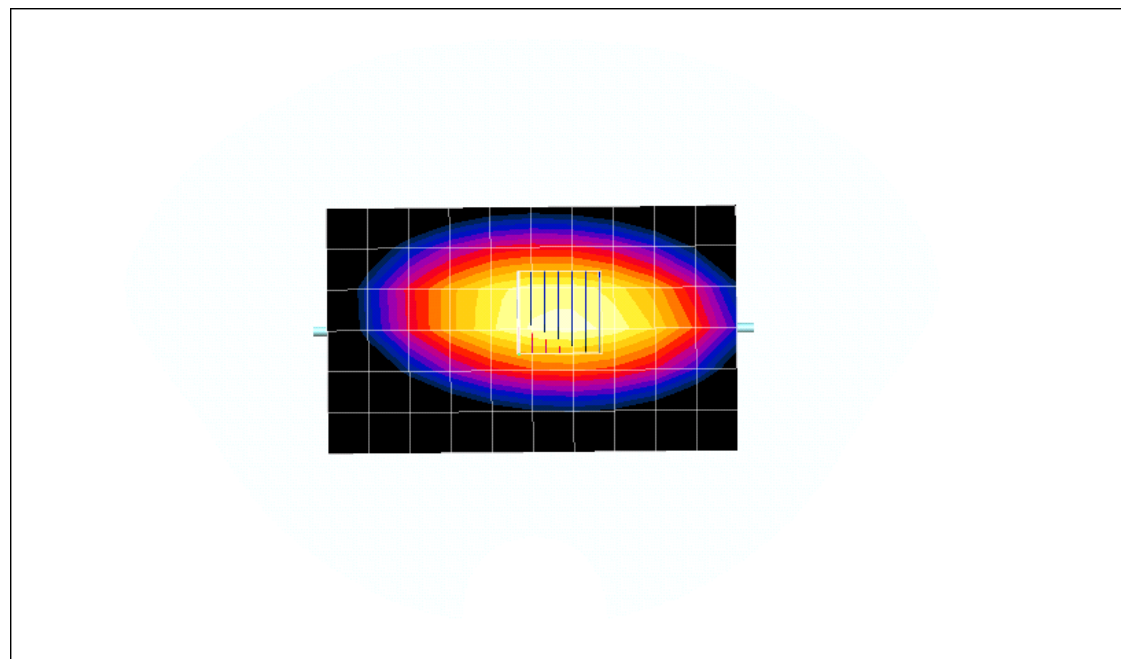
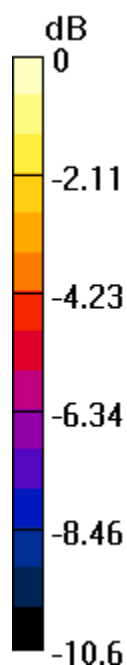
Peak SAR (extrapolated) = 1.52 W/kg

SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.689 mW/g

Reference Value = 34.7 V/m

Power Drift = -0.02 dB

Maximum value of SAR = 1.15 mW/g



0 dB = 1.15mW/g

Date/Time: 11/17/03 00:41:57

Test Laboratory: Kyocera Wireless Corporation

File Name: [835MHz Validation for FCC, Probe 1618, DAE 527, Dipole #453, @20dBm 11-17-03.da4](#)

835MHz Validation, Probe 1618, DAE 527, Dipole #453, @20dBm

DUT: Dipole 835 MHz

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

Medium: Head 835 MHz, ($\sigma = 0.886$ mho/m, $\epsilon_r = 42.25$, $\rho = 1000$ kg/m³)

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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 34.4 V/m

Power Drift = -0.009 dB

Maximum value of SAR = 1.02 mW/g

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

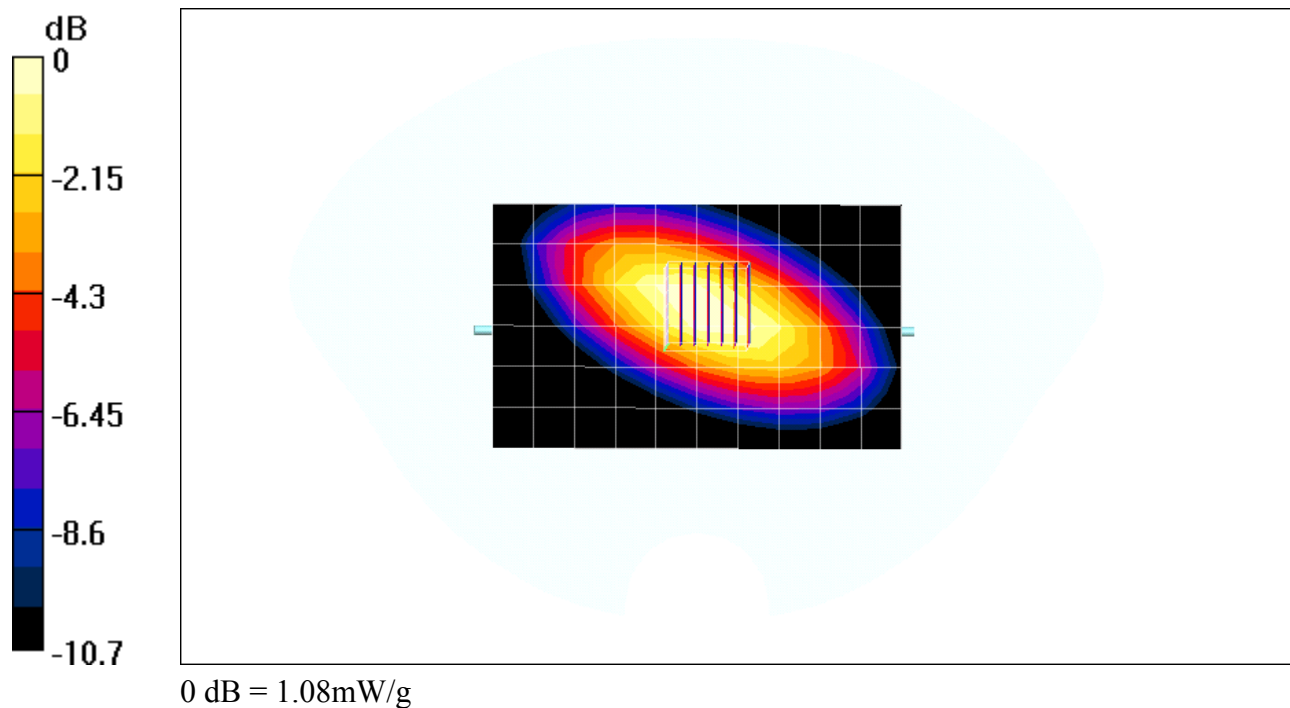
Peak SAR (extrapolated) = 1.43 W/kg

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

Reference Value = 34.4 V/m

Power Drift = -0.009 dB

Maximum value of SAR = 1.08 mW/g



Date/Time: 11/18/03 00:29:24

Test Laboratory: Kyocera Wireless Corporation

File Name: [835MHz Validation for FCC\(Muscle\), Probe 1618, DAE 527, Dipole #453, @20dBm 11-18-03.da4](#)

835MHz Validation, Probe 1618, DAE 527, Dipole #453, @20dBm

DUT: Dipole 835 MHz

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

Medium: Head 835 MHz, ($\sigma = 0.872$ mho/m, $\epsilon_r = 41$, $\rho = 1000$ kg/m³)

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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 34.8 V/m

Power Drift = -0.07 dB

Maximum value of SAR = 0.951 mW/g

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

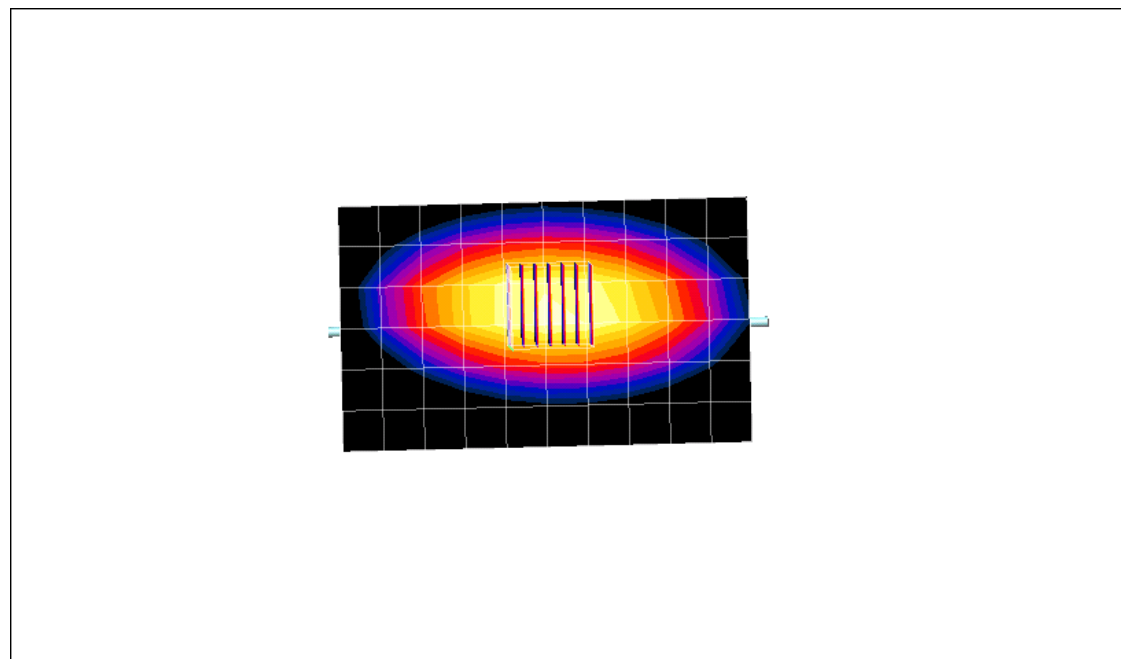
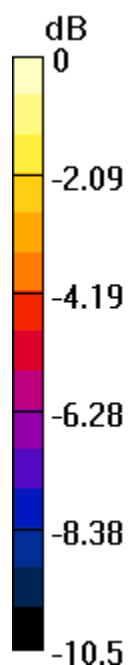
Peak SAR (extrapolated) = 1.42 W/kg

SAR(1 g) = 0.998 mW/g; SAR(10 g) = 0.652 mW/g

Reference Value = 34.8 V/m

Power Drift = -0.07 dB

Maximum value of SAR = 1.07 mW/g



0 dB = 1.07mW/g

Date/Time: 11/19/03 18:28:04

Test Laboratory: Kyocera Wireless Corporation

File Name: [835MHz Validation for FCC\(Muscle\), Probe 1618, DAE 527, Dipole #453, @20dBm 11-19-03.da4](#)

835MHz Validation for, Probe 1618, DAE 527, Dipole #453, @20dBm

DUT: Dipole 835 MHz

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

Medium: Head 835 MHz, ($\sigma = 0.903$ mho/m, $\epsilon_r = 42.25$, $\rho = 1000$ kg/m³)

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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 35.4 V/m

Power Drift = 0.008 dB

Maximum value of SAR = 1.07 mW/g

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

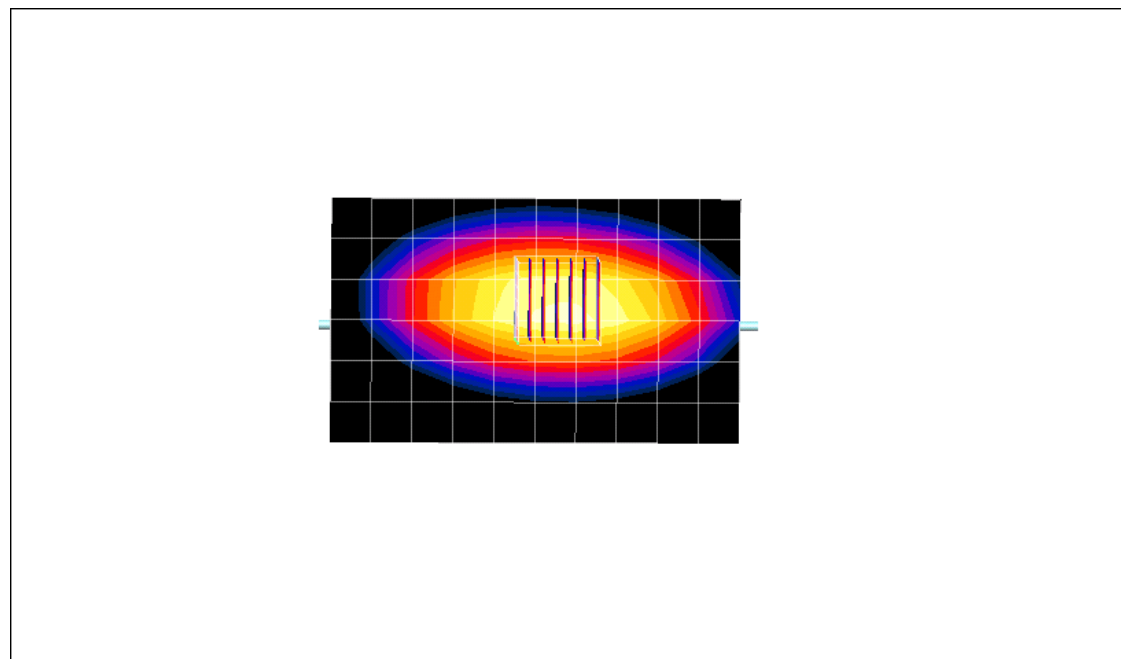
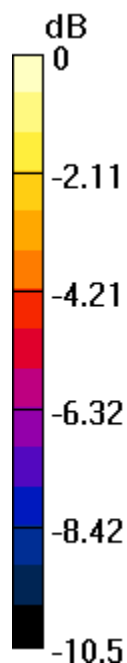
Peak SAR (extrapolated) = 1.55 W/kg

SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.714 mW/g

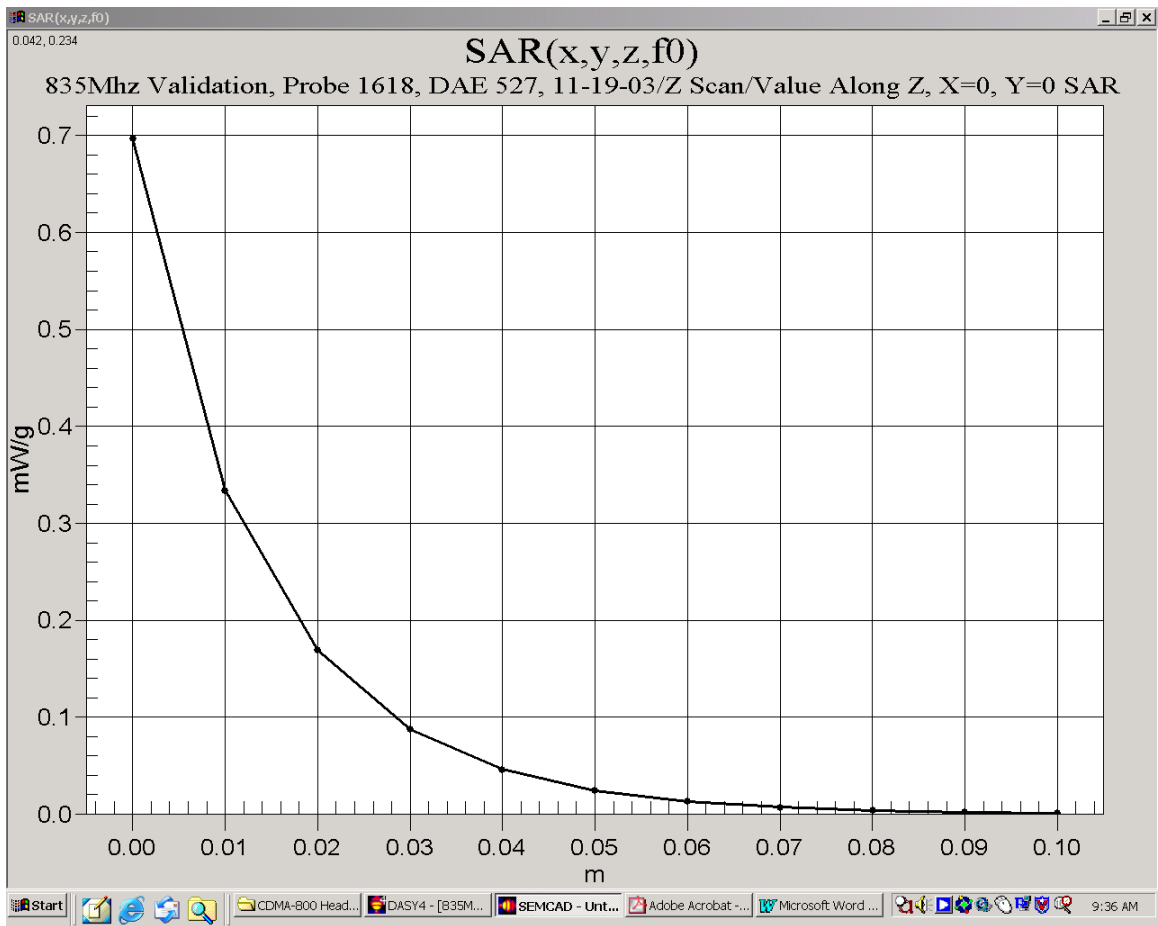
Reference Value = 35.4 V/m

Power Drift = 0.008 dB

Maximum value of SAR = 1.18 mW/g



0 dB = 1.18mW/g



Date/Time: 11/20/03 00:56:07

Test Laboratory: Kyocera Wireless Corporation

File Name: [835MHz Validation for FCC\(Muscle\), Probe 1618, DAE 527, Dipole #453, @20dBm 11-20-03.da4](#)

835MHz Validation, Probe 1618, DAE 527, Dipole #453, @20dBm

DUT: Dipole 835 MHz

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

Medium: Head 835 MHz, ($\sigma = 0.891$ mho/m, $\epsilon_r = 42.12$, $\rho = 1000$ kg/m³)

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 (7x11x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 36.2 V/m

Power Drift = -0.2 dB

Maximum value of SAR = 1.07 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) = 1.06 mW/g; SAR(10 g) = 0.692 mW/g

Reference Value = 36.2 V/m

Power Drift = -0.2 dB

Maximum value of SAR = 1.14 mW/g

