Date/Time: 12/22/03 13:39:36

Test Laboratory: Compliance Certification Services

1_L-Touch

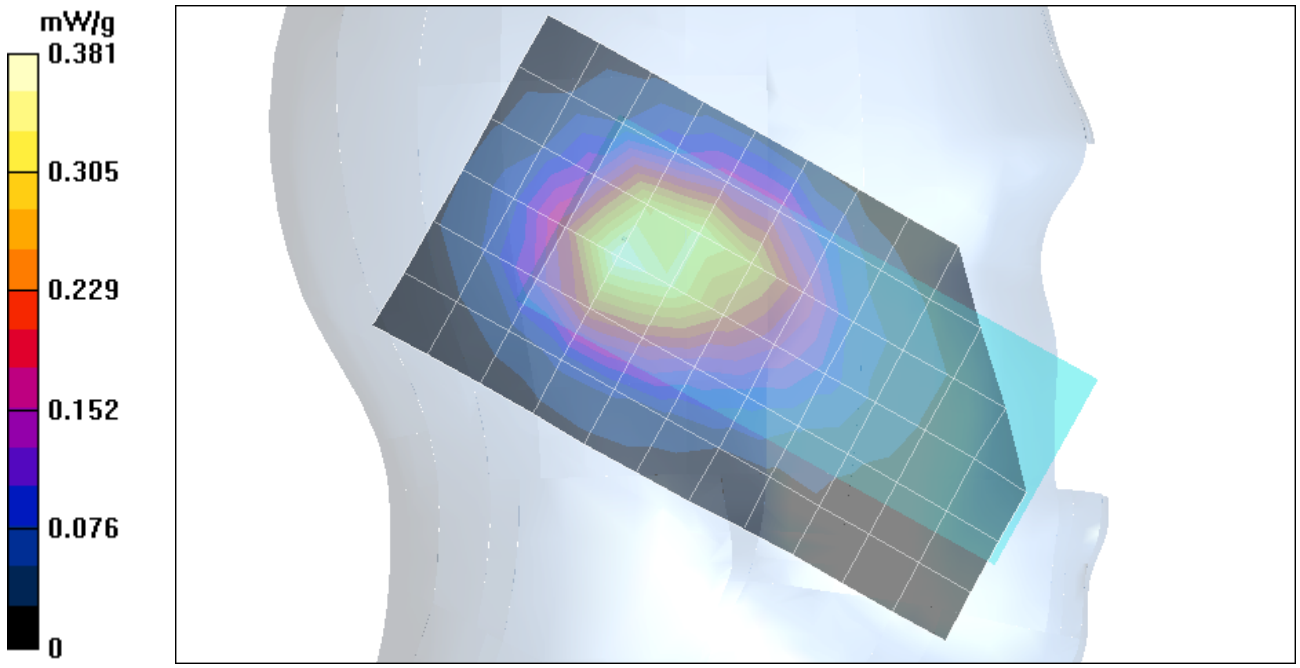
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: Left Head
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1874.2 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.469 mho/m, ε_r = 40.2541, ρ = 1000 kg/m^3)
Phantom section: Left Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Touch position, Middle/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 16.6 V/m
Power Drift = 0.004 dB
Maximum value of SAR = 0.381 mW/g

Touch position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.564 W/kg
SAR(1 g) = 0.369 mW/g; SAR(10 g) = 0.230 mW/g
Reference Value = 16.6 V/m
Power Drift = 0.004 dB
Maximum value of SAR = 0.406 mW/g



Date/Time: 12/22/03 13:39:36

Test Laboratory: Compliance Certification Services

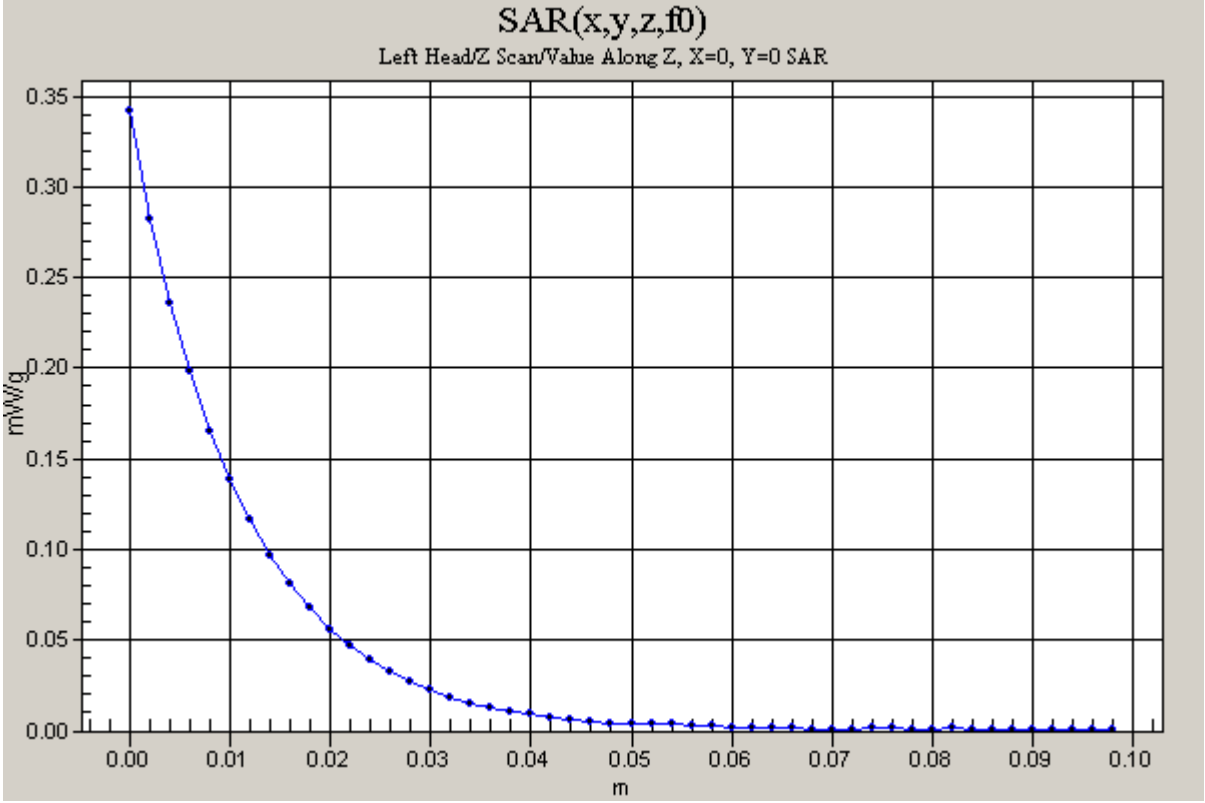
1_L-Touch

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Touch position, Middle/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 16.6 V/m
Power Drift = -0.0006 dB
Maximum value of SAR = 0.342 mW/g



Date/Time: 12/22/03 15:11:44

Test Laboratory: Compliance Certification Services

2_L-Tilt

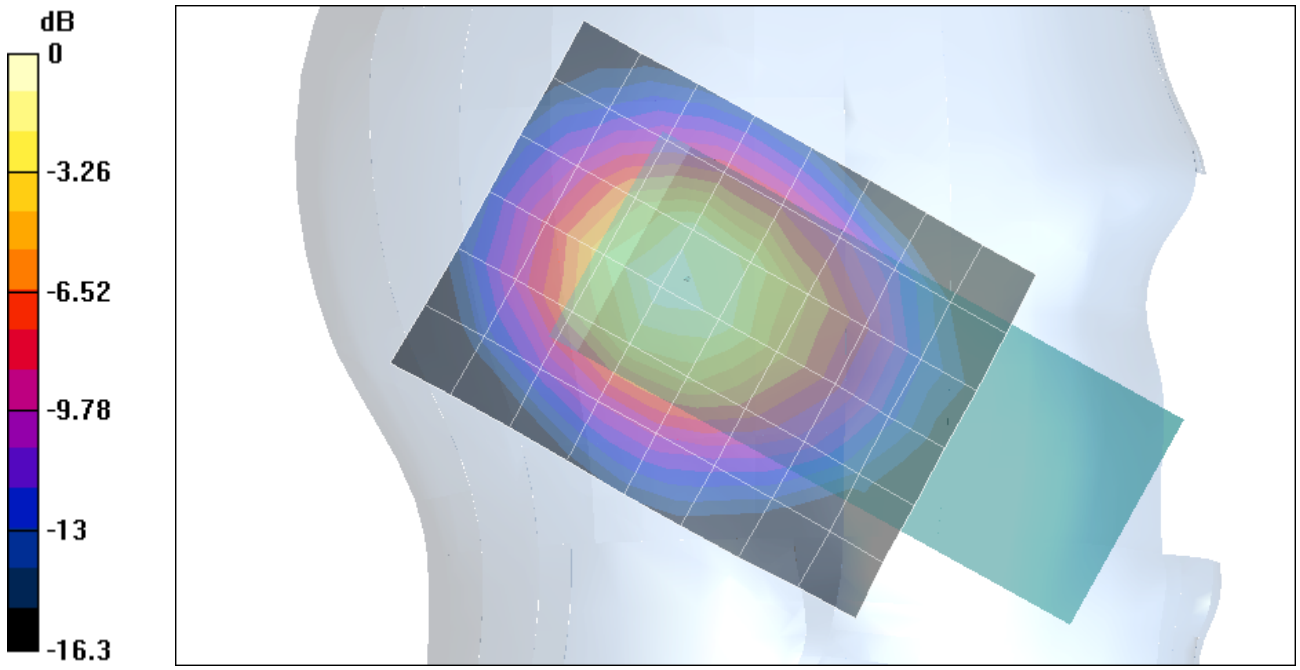
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: Left Head
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1850.2 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.469 mho/m, ε_r = 40.2541, ρ = 1000 kg/m^3)
Phantom section: Left Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Low/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 20 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.526 mW/g

Tilt position, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.799 W/kg
SAR(1 g) = 0.504 mW/g; SAR(10 g) = 0.295 mW/g
Reference Value = 20 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.559 mW/g



0 dB = 0.559mW/g

Date/Time: 12/22/03 15:11:44

Test Laboratory: Compliance Certification Services

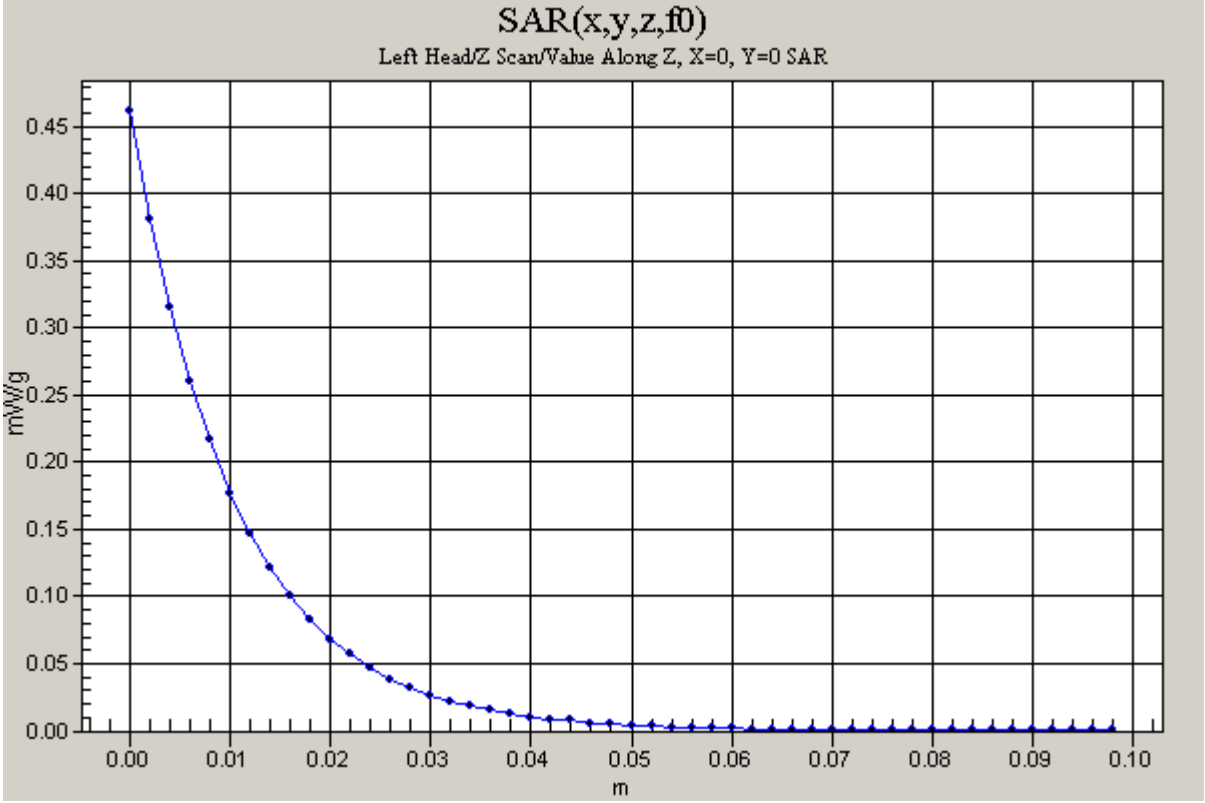
2_L-Tilt

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Low/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 20 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.461 mW/g



Date/Time: 12/22/03 14:01:56

Test Laboratory: Compliance Certification Services

2_L-Tilt

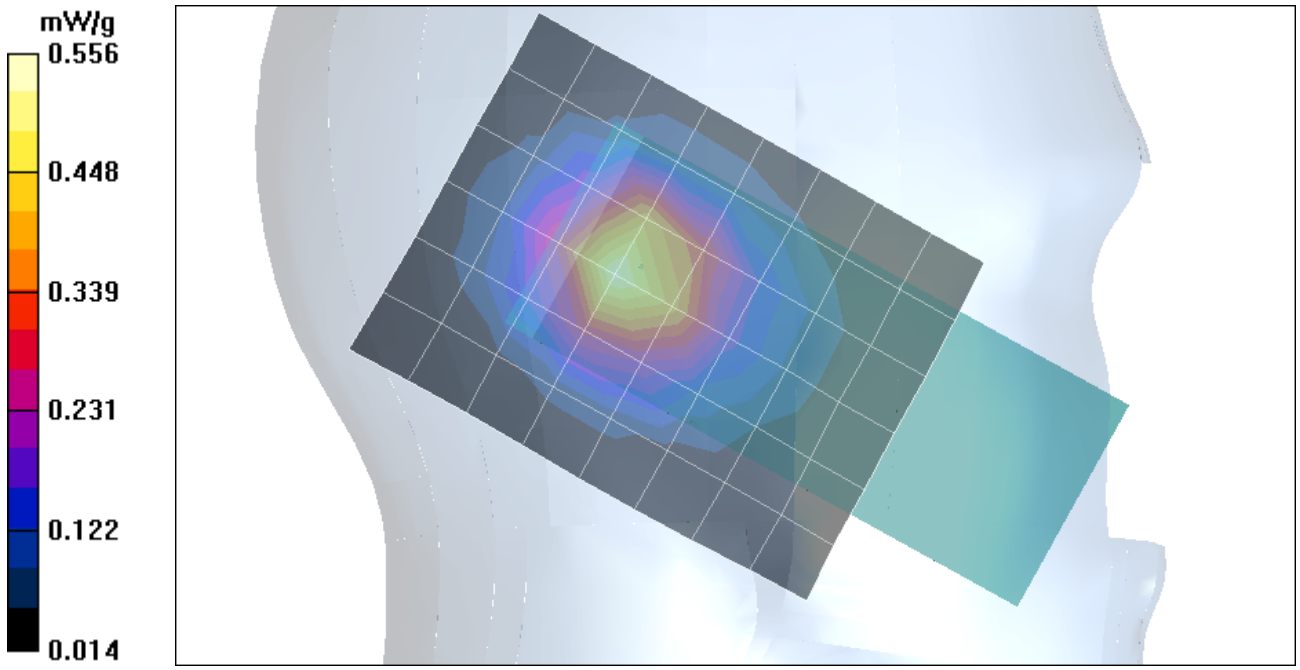
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: Left Head
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1874.2 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.469 mho/m, ε_r = 40.2541, ρ = 1000 kg/m^3)
Phantom section: Left Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Middle/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 19.9 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.534 mW/g

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.790 W/kg
SAR(1 g) = 0.503 mW/g; SAR(10 g) = 0.295 mW/g
Reference Value = 19.9 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.556 mW/g



Test Laboratory: Compliance Certification Services

2_L-Tilt

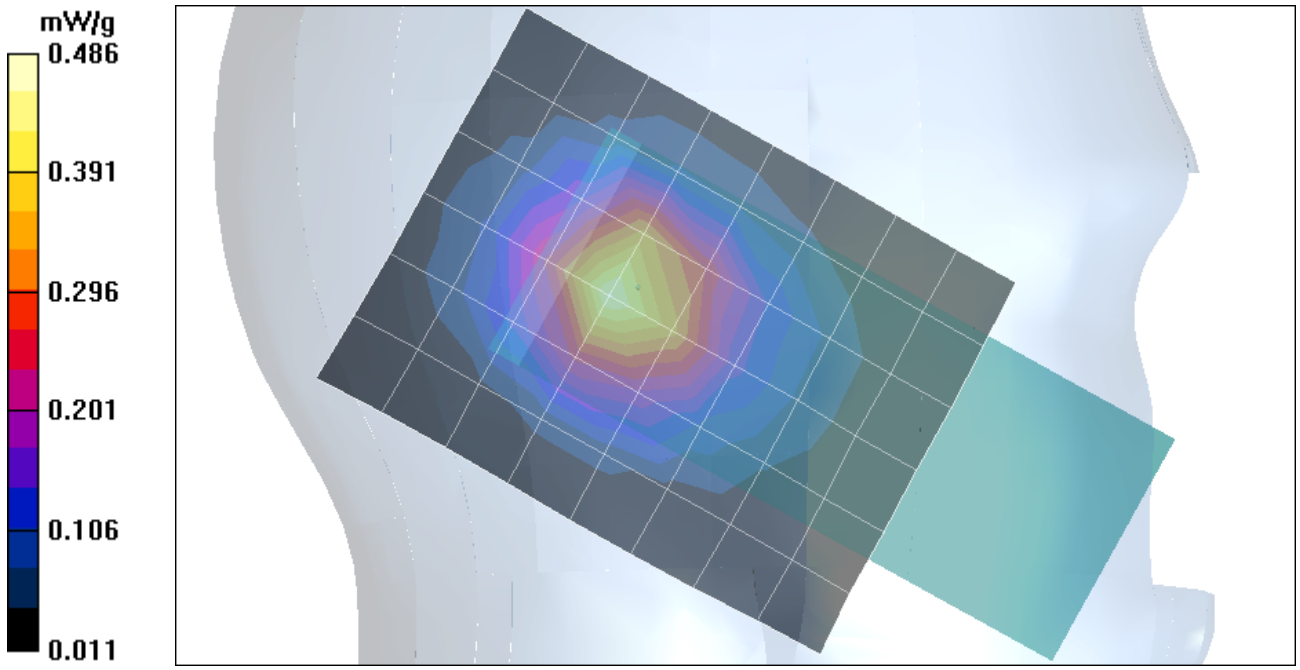
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: Left Head
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1909.9 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.469 mho/m, ε_r = 40.2541, ρ = 1000 kg/m^3)
Phantom section: Left Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, High/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 18.5 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.462 mW/g

Tilt position, High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.697 W/kg
SAR(1 g) = 0.436 mW/g; SAR(10 g) = 0.251 mW/g
Reference Value = 18.5 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.486 mW/g



Test Laboratory: Compliance Certification Services

2_L-Tilt_Keypad opened

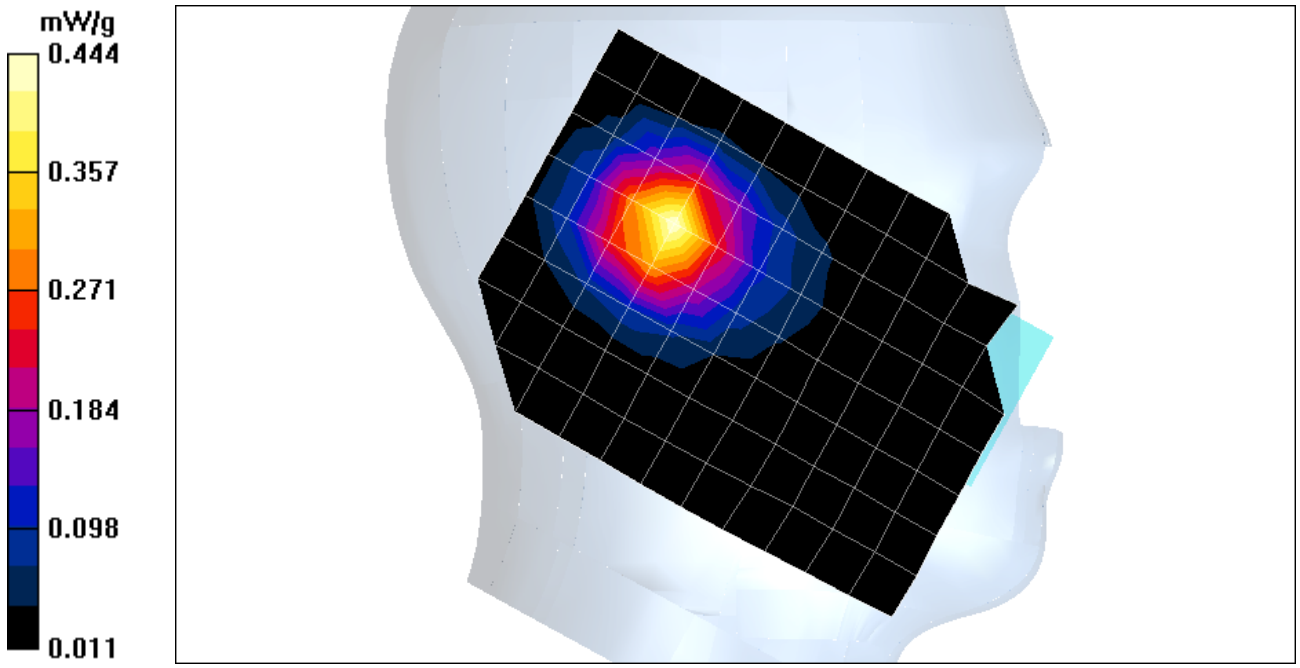
DUT: Sierra Wireless; Type: Voq A11; Serial: S0312030000500J
Program Name: Left Head
Ambient Temperature: 22.5 deg C; Liquid Temperature: 21.0 deg C

Communication System: GSM1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.4635 mho/m, ε_r = 39.805, ρ = 1000 kg/m^3)
Phantom section: Left Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Low/Area Scan (9x12x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 17.9 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.446 mW/g

Tilt position, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.642 W/kg
SAR(1 g) = 0.406 mW/g; SAR(10 g) = 0.237 mW/g
Reference Value = 17.9 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.444 mW/g



Date/Time: 01/09/04 17:10:12

Test Laboratory: Compliance Certification Services

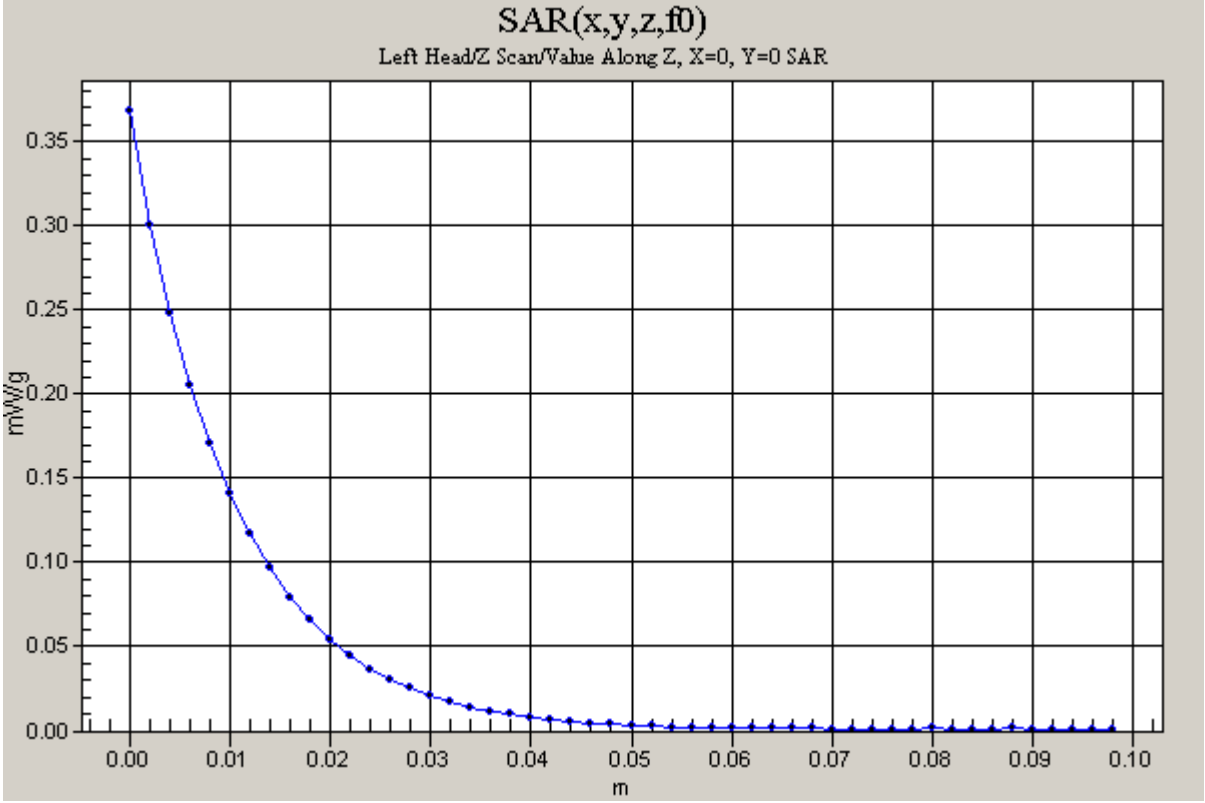
2_L-Tilt_Keypad opened

DUT: Sierra Wireless; Type: Voq A11; Serial: S0312030000500J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Low/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 17.9 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.368 mW/g



Date/Time: 12/22/03 14:49:06

Test Laboratory: Compliance Certification Services

3_R-Touch

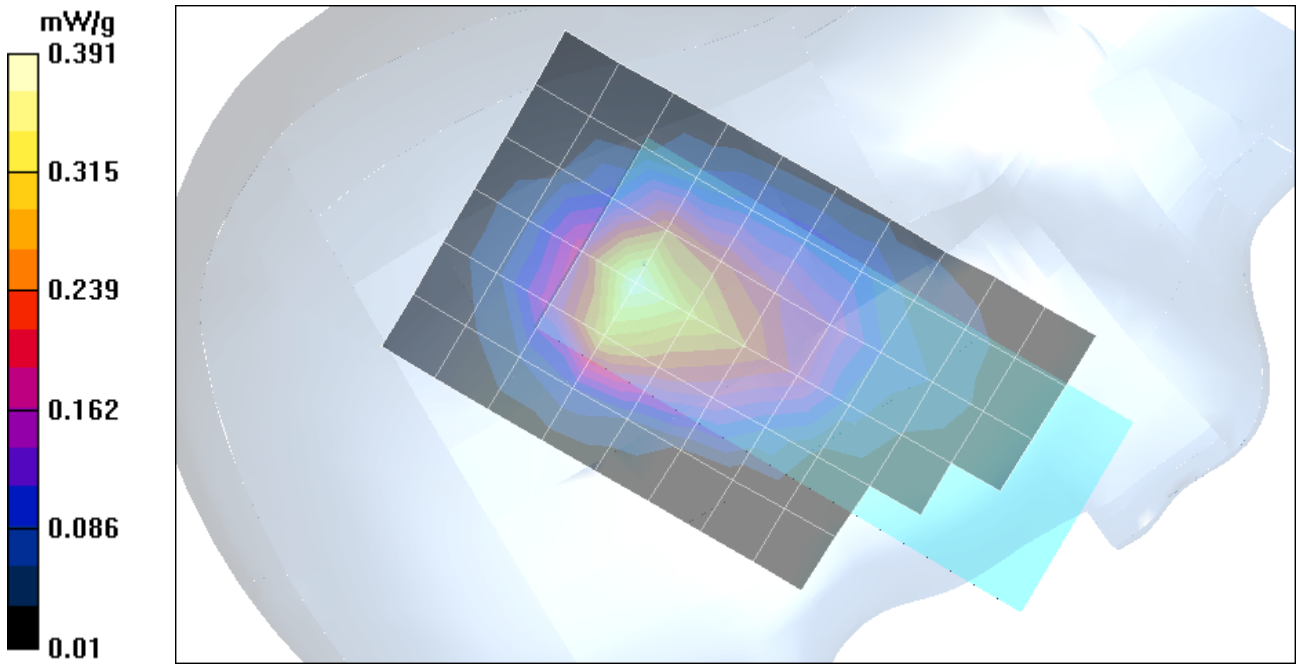
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: Right Head
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1874.2 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.469 mho/m, ε_r = 40.2541, ρ = 1000 kg/m^3)
Phantom section: Right Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Touch position, Middle/Area Scan (7x11x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 15.9 V/m
Power Drift = 0.1 dB
Maximum value of SAR = 0.389 mW/g

Touch position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.574 W/kg
SAR(1 g) = 0.360 mW/g; SAR(10 g) = 0.213 mW/g
Reference Value = 15.9 V/m
Power Drift = 0.1 dB
Maximum value of SAR = 0.391 mW/g



Date/Time: 12/22/03 14:49:06

Test Laboratory: Compliance Certification Services

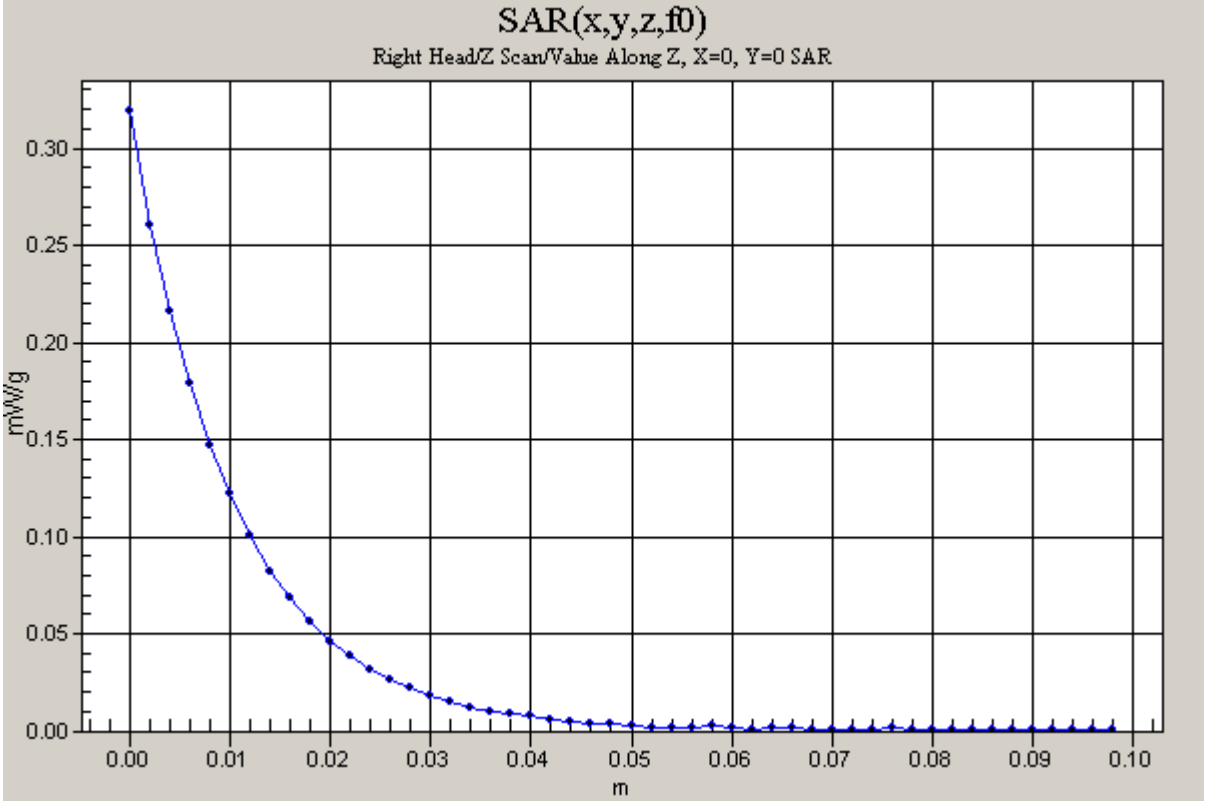
3_R-Touch

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Touch position, Middle/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 15.9 V/m
Power Drift = 0.1 dB
Maximum value of SAR = 0.319 mW/g



Date/Time: 12/22/03 14:26:04

Test Laboratory: Compliance Certification Services

4_R-Tilt

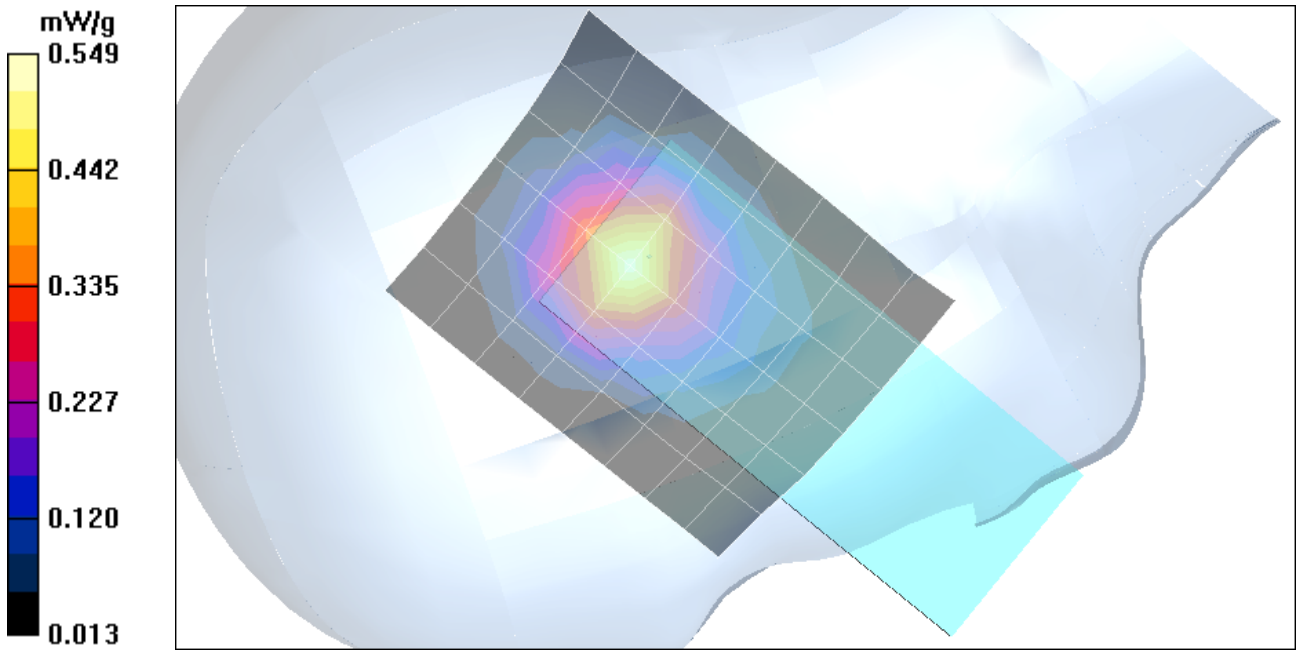
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: Right Head
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1874.2 MHz;Duty Cycle: 1:8
Medium: Head 1900MHz (σ = 1.469 mho/m, ε_r = 40.2541, ρ = 1000 kg/m^3)
Phantom section: Right Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Middle/Area Scan (7x9x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 20.6 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.544 mW/g

Tilt position, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.790 W/kg
SAR(1 g) = 0.496 mW/g; SAR(10 g) = 0.287 mW/g
Reference Value = 20.6 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.549 mW/g



Date/Time: 12/22/03 14:26:04

Test Laboratory: Compliance Certification Services

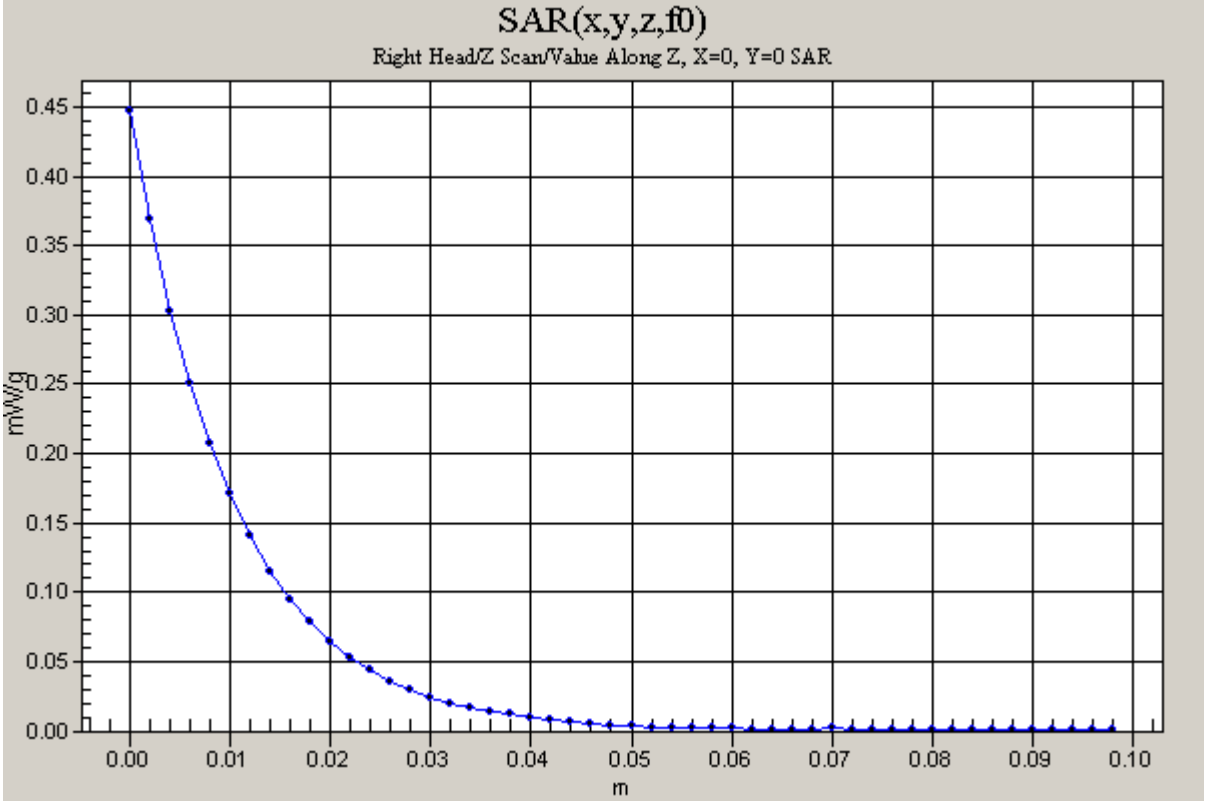
4_R-Tilt

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(5.1, 5.1, 5.1); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 2; Type: SAM 2; Serial: 1050
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Tilt position, Middle/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 20.6 V/m
Power Drift = 0.0 dB
Maximum value of SAR = 0.447 mW/g



Date/Time: 12/22/03 18:05:20

Test Laboratory: Compliance Certification Services

5_Body_PCS

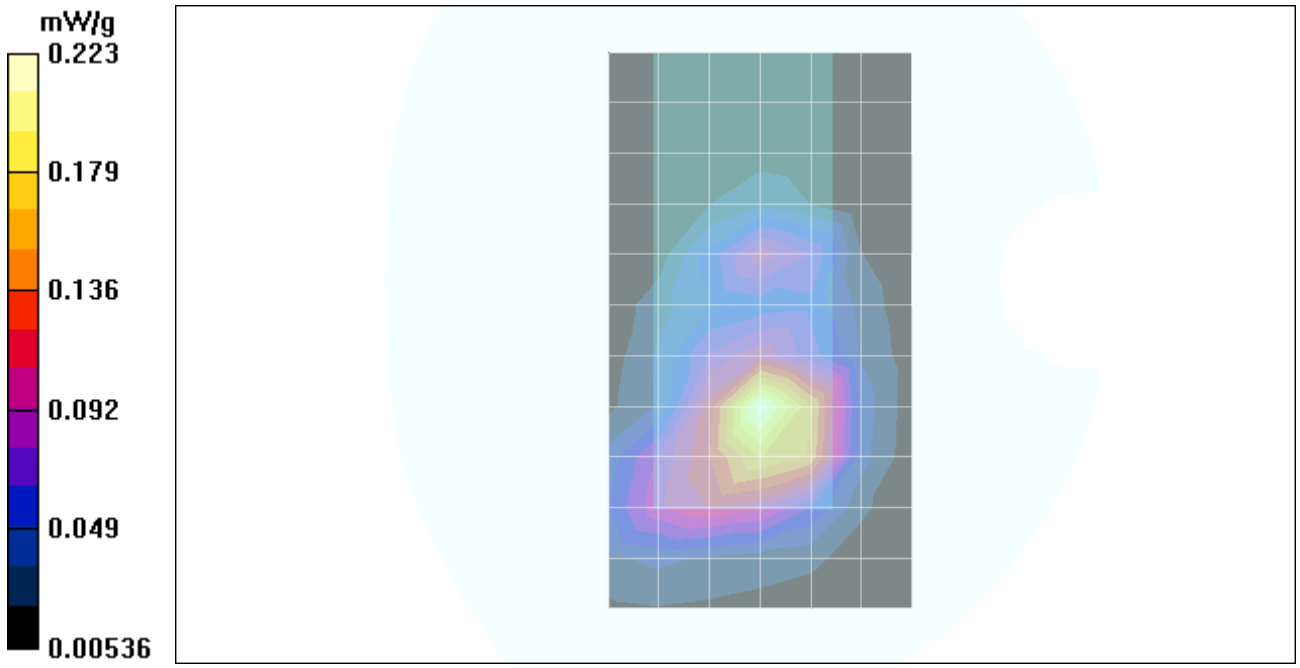
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: 5_Body_GPRS
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1874.2 MHz;Duty Cycle: 1:8
Medium: Muscle 1900 MHz (σ = 1.5949 mho/m, ε_r = 53.4377, ρ = 1000 kg/m^3)
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(4.8, 4.8, 4.8); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 1; Type: SAM 1; Serial: 1185
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Body, Middle/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 7.38 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.219 mW/g

Body, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.348 W/kg
SAR(1 g) = 0.205 mW/g; SAR(10 g) = 0.117 mW/g
Reference Value = 7.38 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.223 mW/g



Date/Time: 12/22/03 18:05:20

Test Laboratory: Compliance Certification Services

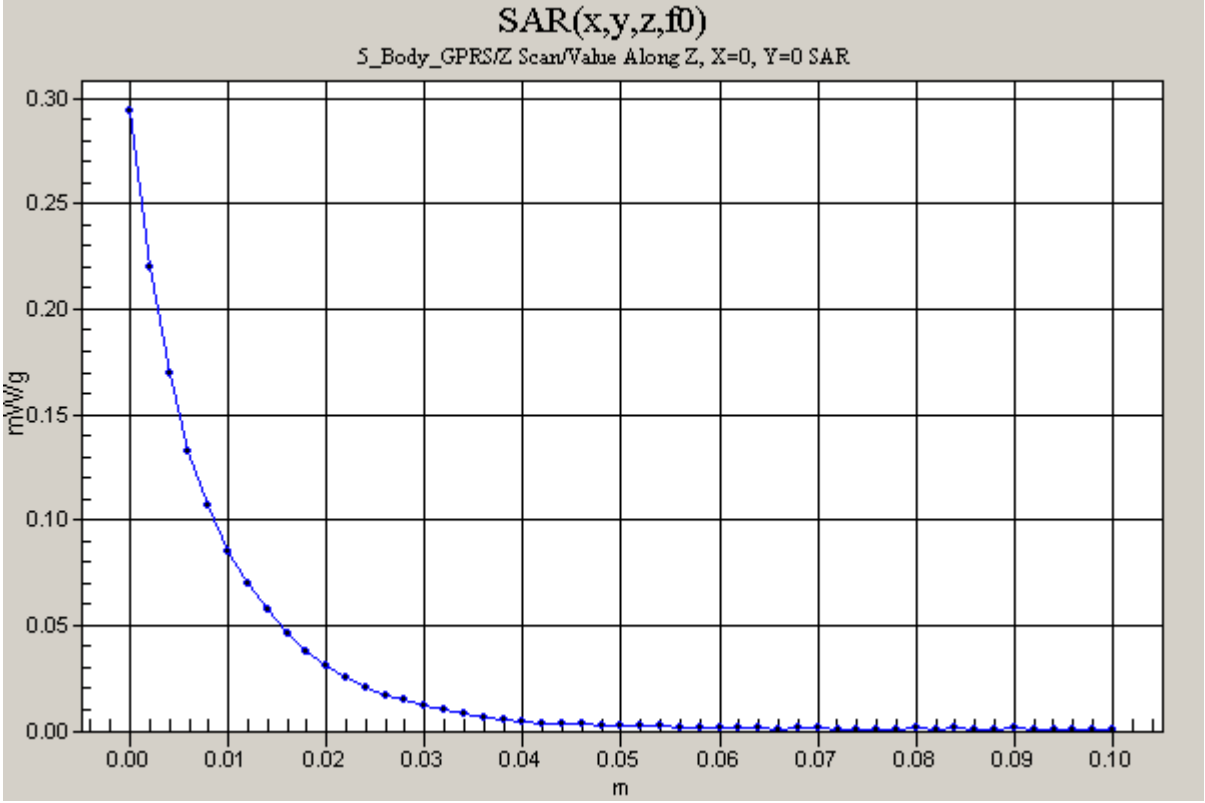
5_Body_PCS

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(4.8, 4.8, 4.8); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 1; Type: SAM 1; Serial: 1185
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Body, Middle/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 7.38 V/m
Power Drift = -0.12 dB
Maximum value of SAR = 0.294 mW/g



Test Laboratory: Compliance Certification Services

6_Body_GPRS

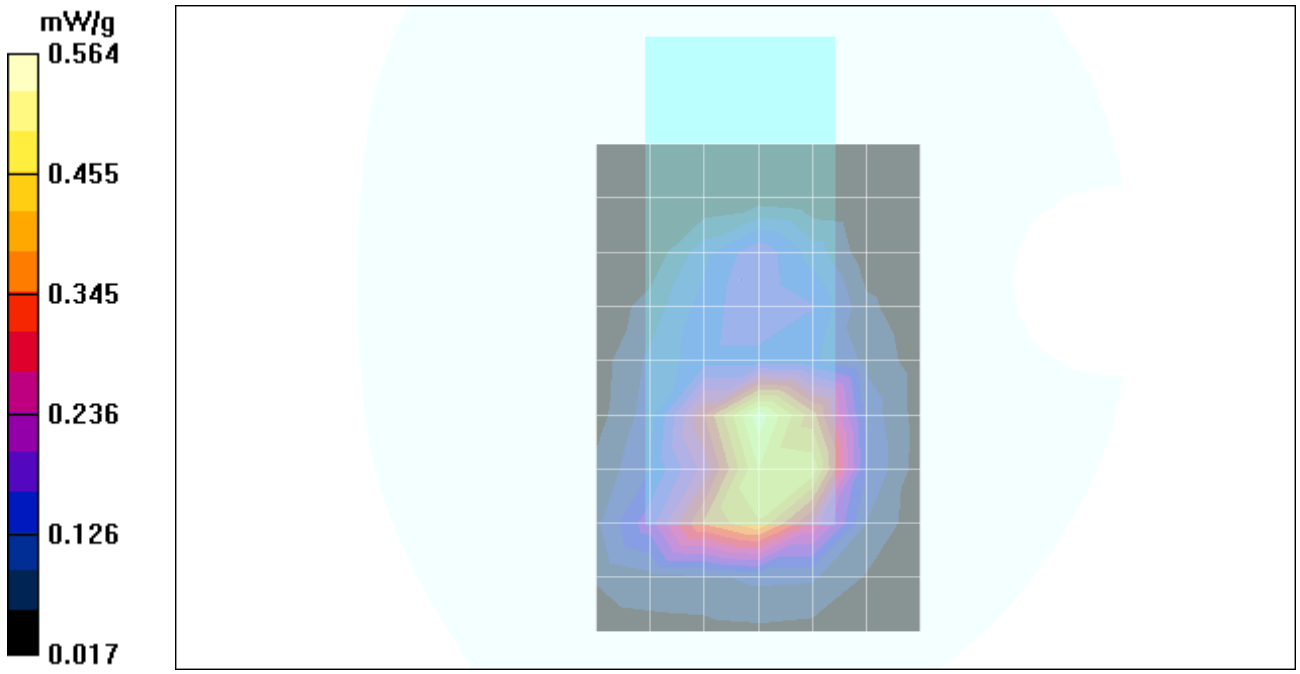
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: 6_Body_GPRS
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1850.2 MHz;Duty Cycle: 1:4
Medium: Muscle 1900 MHz (σ = 1.5949 mho/m, ε_r = 53.4377, ρ = 1000 kg/m^3)
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(4.8, 4.8, 4.8); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 1; Type: SAM 1; Serial: 1185
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Body, Low/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 12.7 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.514 mW/g

Body, Low/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.853 W/kg
SAR(1 g) = 0.509 mW/g; SAR(10 g) = 0.302 mW/g
Reference Value = 12.7 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.564 mW/g



Date/Time: 12/22/03 17:33:22

Test Laboratory: Compliance Certification Services

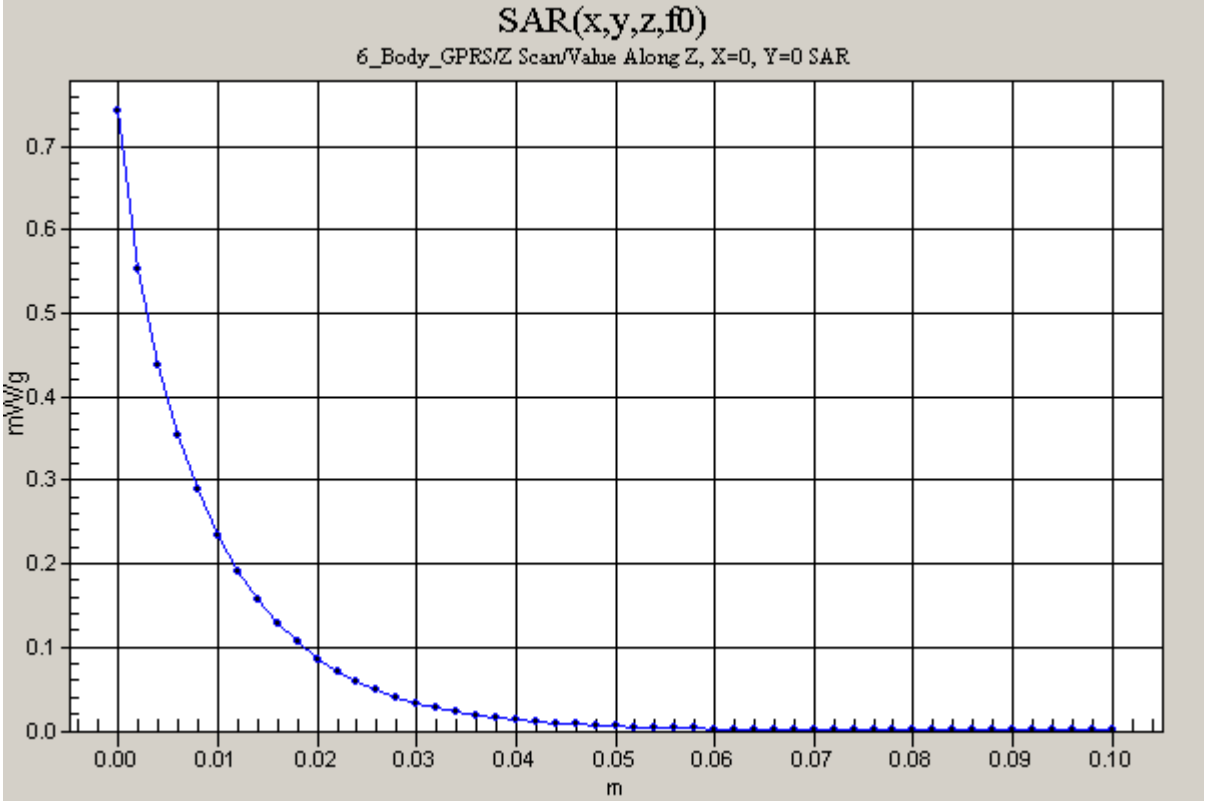
6_Body_GPRS

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J

DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(4.8, 4.8, 4.8); Calibrated: 7/29/2003
- Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 1; Type: SAM 1; Serial: 1185
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Body, Low/Z Scan (1x1x51): Measurement grid: dx=20mm, dy=20mm, dz=2mm
Reference Value = 12.7 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.743 mW/g



Date/Time: 12/22/03 17:33:22

Test Laboratory: Compliance Certification Services

6_Body_GPRS

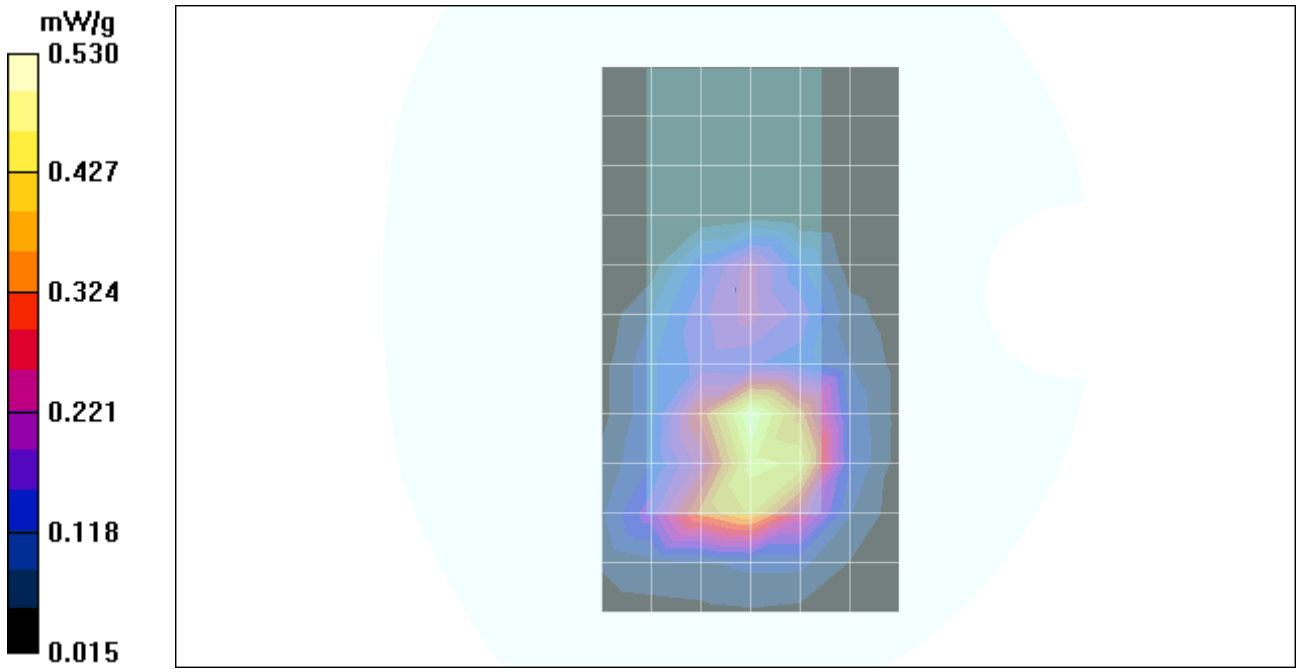
DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: 6_Body_GPRS
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1874.2 MHz;Duty Cycle: 1:4
Medium: Muscle 1900 MHz (σ = 1.5949 mho/m, ε_r = 53.4377, ρ = 1000 kg/m^3)
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(4.8, 4.8, 4.8); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 1; Type: SAM 1; Serial: 1185
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Body, Middle/Area Scan (7x12x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 14.1 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.497 mW/g

Body, Middle/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.807 W/kg
SAR(1 g) = 0.479 mW/g; SAR(10 g) = 0.286 mW/g
Reference Value = 14.1 V/m
Power Drift = -0.1 dB
Maximum value of SAR = 0.530 mW/g



Date/Time: 12/22/03 17:33:22

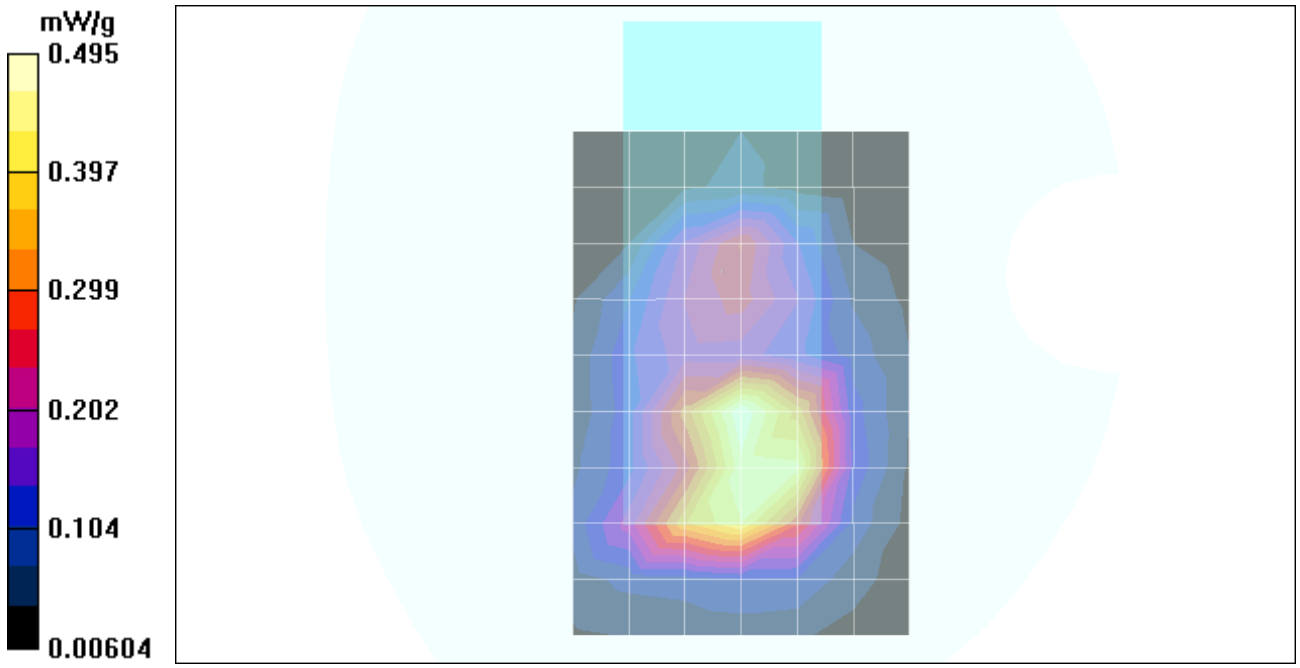
Test Laboratory: Compliance Certification Services

6_Body_GPRS

DUT: Sierra Wireless; Type: Voq A10; Serial: S0312030001000J
Program Name: 6_Body_GPRS
Ambient Temperature: 24.0 deg C; Liquid Temperature: 22.5 deg C

Communication System: GSM PCS Band; Frequency: 1909.9 MHz;Duty Cycle: 1:4
Medium: Muscle 1900 MHz (σ = 1.5949 mho/m, ε_r = 53.4377, ρ = 1000 kg/m^3)
Phantom section: Flat Section
DASY4 Configuration:

- Probe: ES3DV2 - SN3021; ConvF(4.8, 4.8, 4.8); Calibrated: 7/29/2003
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 2/4/2003
- Phantom: SAM 1; Type: SAM 1; Serial: 1185
- Measurement SW: DASY4, V4.1 Build 47; Postprocessing SW: SEMCAD, V1.8 Build 62

Body, High/Area Scan (7x10x1): Measurement grid: dx=15mm, dy=15mm
Reference Value = 15.1 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.495 mW/g

Body, High/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Peak SAR (extrapolated) = 0.840 W/kg
SAR(1 g) = 0.497 mW/g; SAR(10 g) = 0.301 mW/g
Reference Value = 15.1 V/m
Power Drift = -0.0 dB
Maximum value of SAR = 0.540 mW/g