Appendix 1 – System Validation Plots

Date/Time: 2012/10/25 10:05:24

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

System Validation (Head)

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d081

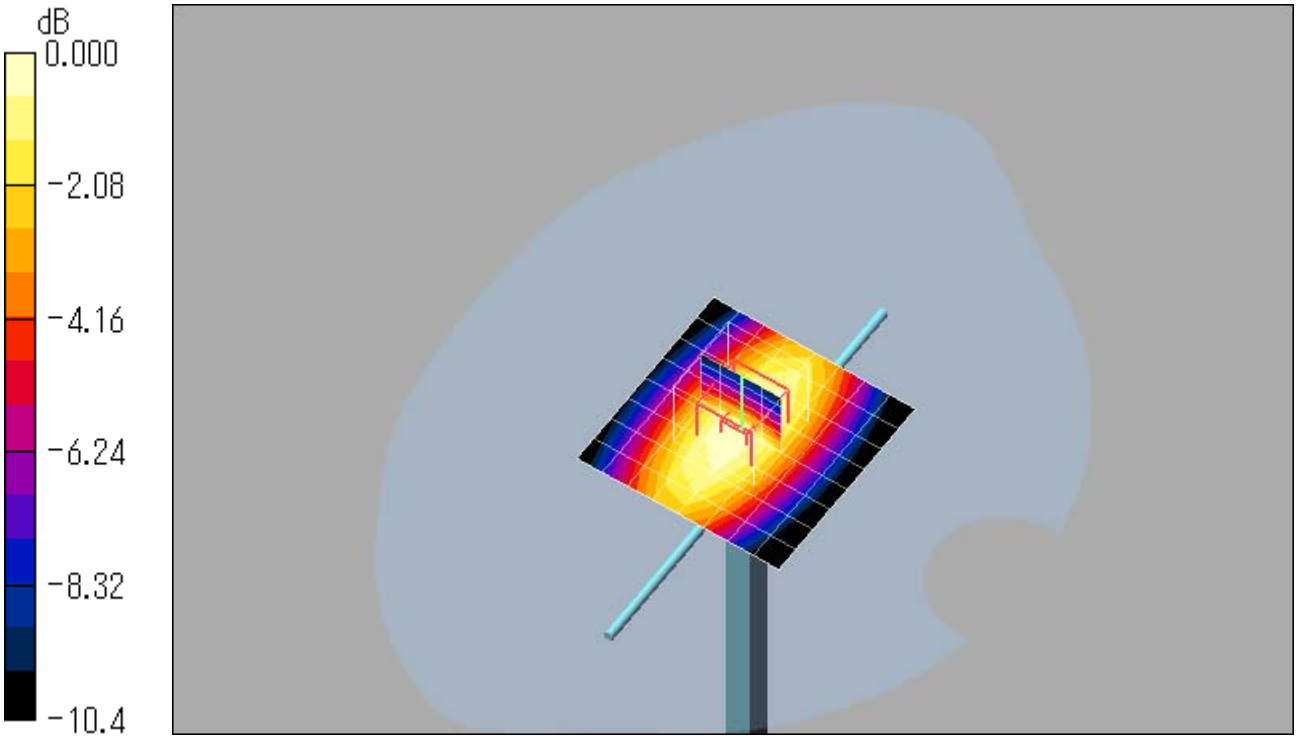
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.904 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Antenna Input Power 250 mW/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.51 mW/g

Antenna Input Power 250 mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 55.1 V/m; Power Drift = -0.010 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 2.31 mW/g; SAR(10 g) = 1.53 mW/g
Maximum value of SAR (measured) = 2.52 mW/g



0 dB = 2.52mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

System Validation (Body)

DUT: Dipole 835 MHz; Type: D835V2; Serial: 4d081

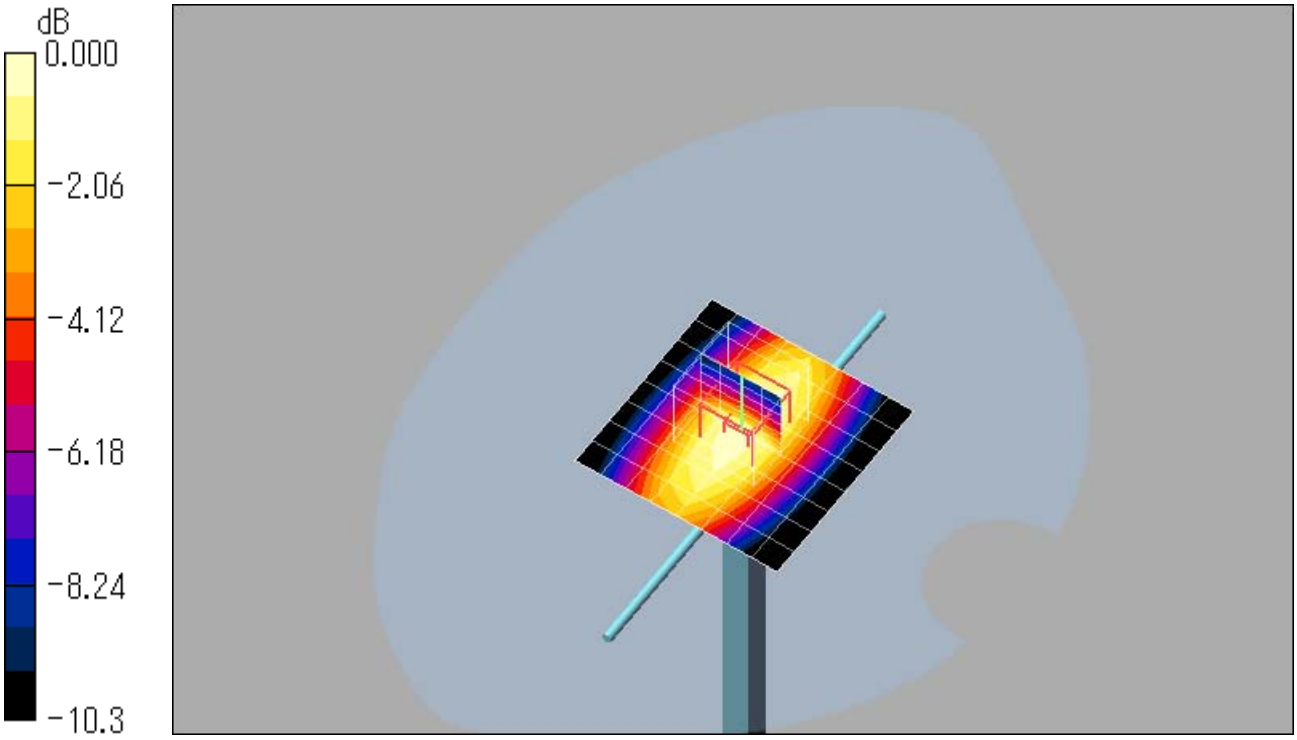
Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1
Medium parameters used: f = 835 MHz; σ = 0.976 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Antenna Input Power 250 mW/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.59 mW/g

Antenna Input Power 250 mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 53.5 V/m; Power Drift = 0.015 dB
Peak SAR (extrapolated) = 3.45 W/kg
SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.63 mW/g



0 dB = 2.63mW/g

Date/Time: 2012/10/24 10:30:21

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

System Validation (Head)

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d112

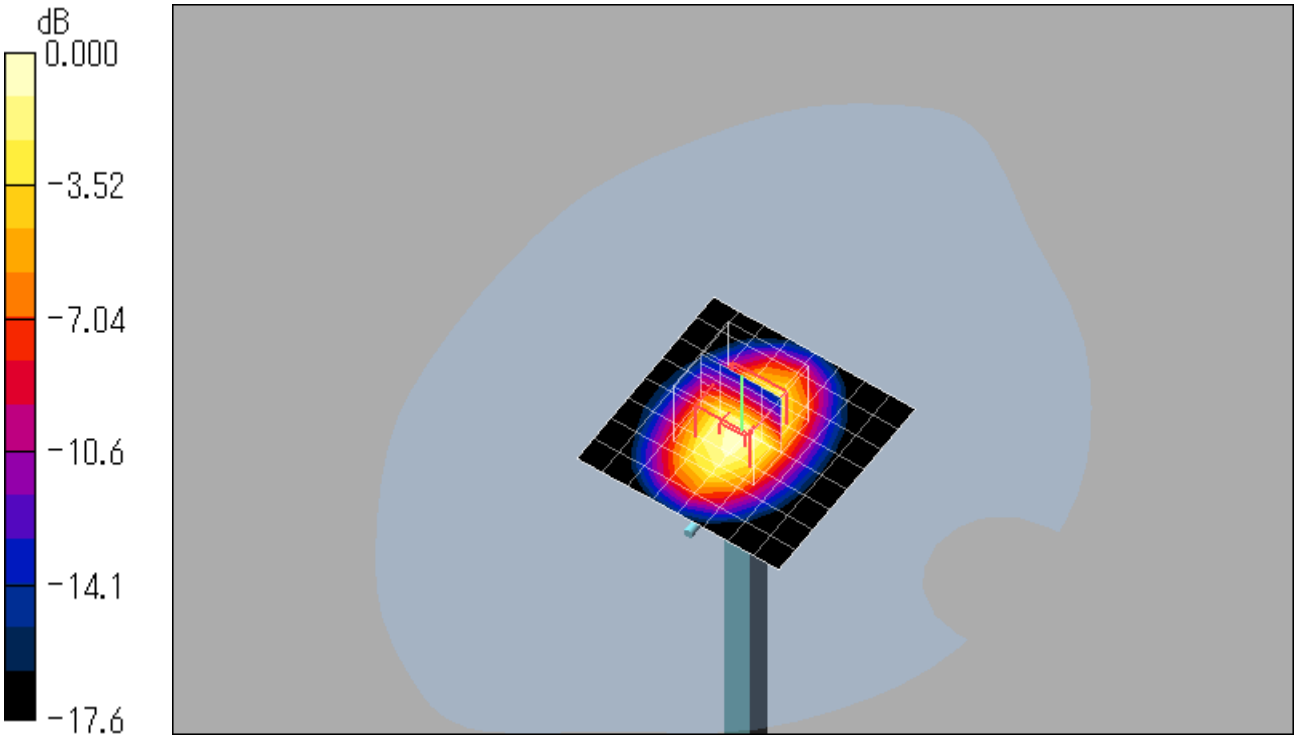
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.43 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Antenna Input Power 250 mW/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 10.9 mW/g

Antenna Input Power 250 mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 92.3 V/m; Power Drift = -0.035 dB
Peak SAR (extrapolated) = 16.9 W/kg
SAR(1 g) = 9.89 mW/g; SAR(10 g) = 5.23 mW/g
Maximum value of SAR (measured) = 11.2 mW/g



0 dB = 11.2mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

System Validation (Body)

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: 5d112

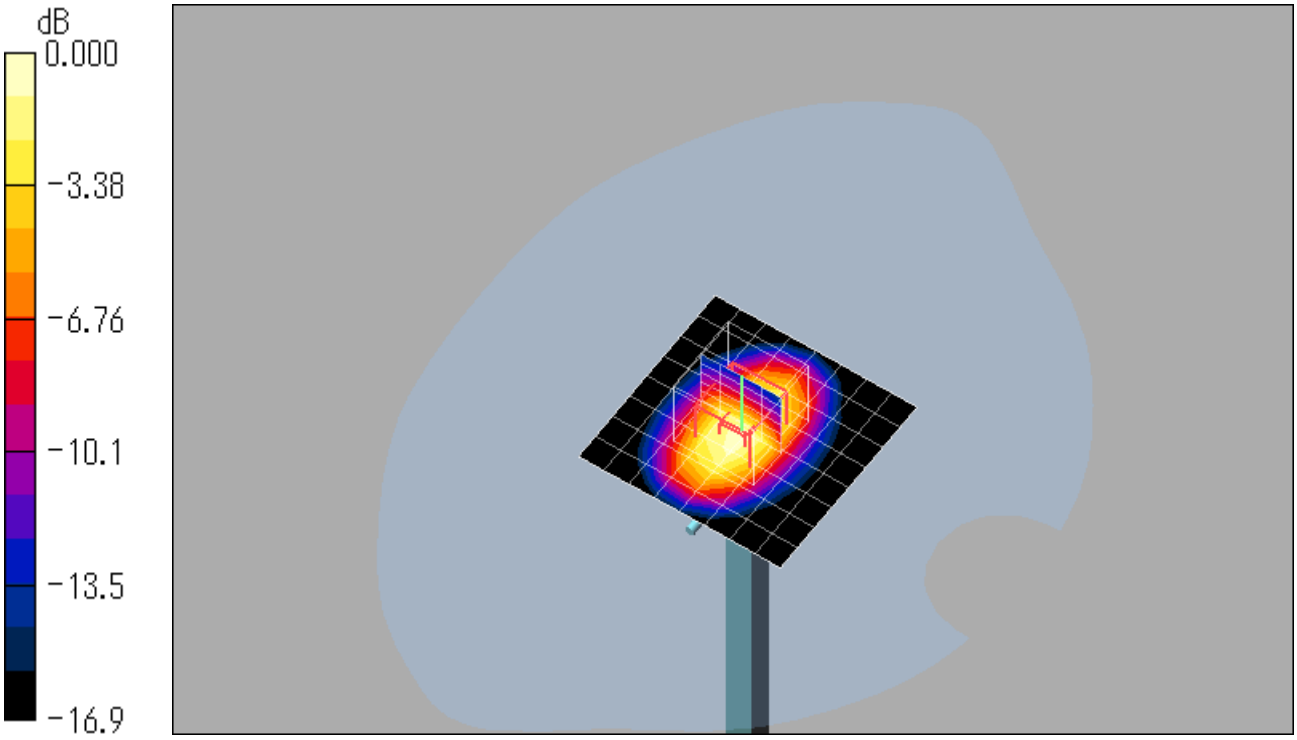
Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1
Medium parameters used: f = 1900 MHz; σ = 1.55 mho/m; ε_r = 53.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Antenna Input Power 250 mW/Area Scan (9x9x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 11.1 mW/g

Antenna Input Power 250 mW/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 92.2 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 16.5 W/kg
SAR(1 g) = 10.1 mW/g; SAR(10 g) = 5.4 mW/g
Maximum value of SAR (measured) = 11.4 mW/g



0 dB = 11.4mW/g

Appendix 2 – SAR Test Plots (WCDMA Band V)

Date/Time: 2012/10/25 17:26:45

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

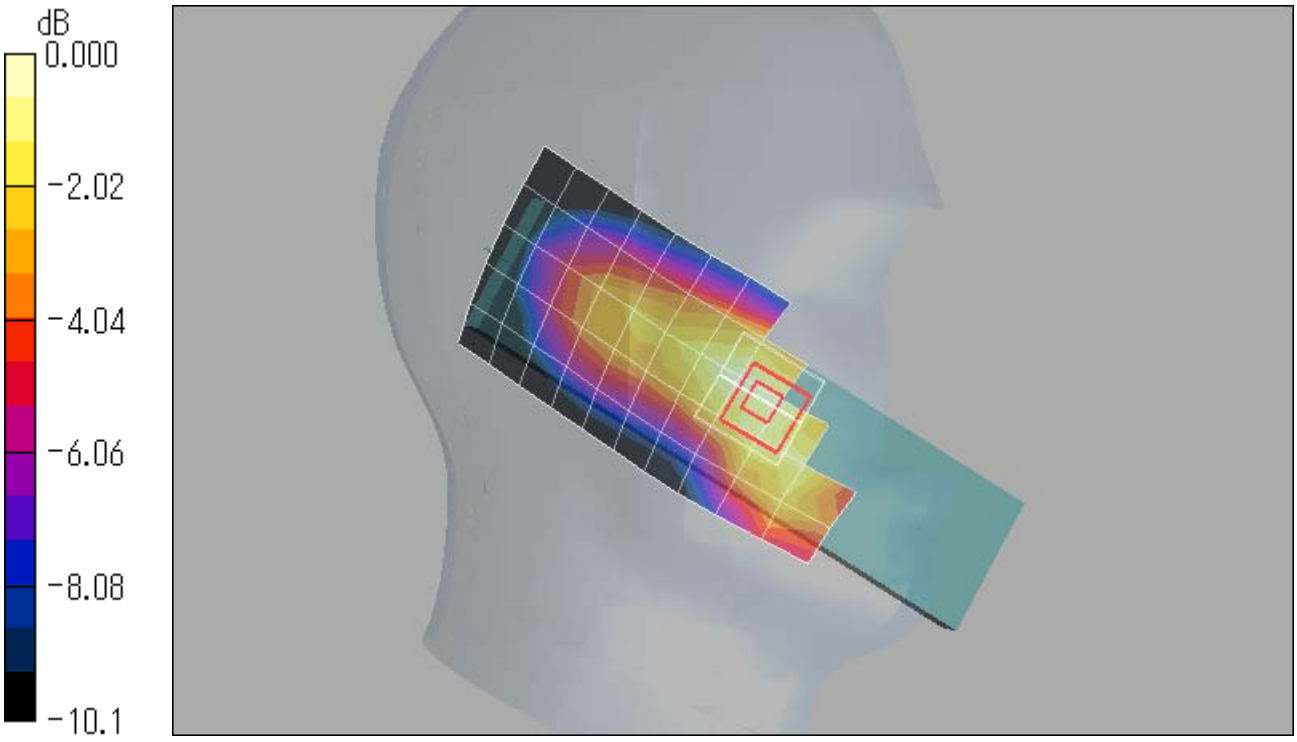
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Left Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.399 mW/g

Left Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.8 V/m; Power Drift = 0.027 dB
Peak SAR (extrapolated) = 0.512 W/kg
SAR(1 g) = 0.389 mW/g; SAR(10 g) = 0.273 mW/g
Maximum value of SAR (measured) = 0.415 mW/g



0 dB = 0.415mW/g

Date/Time: 2012/10/25 15:53:13

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

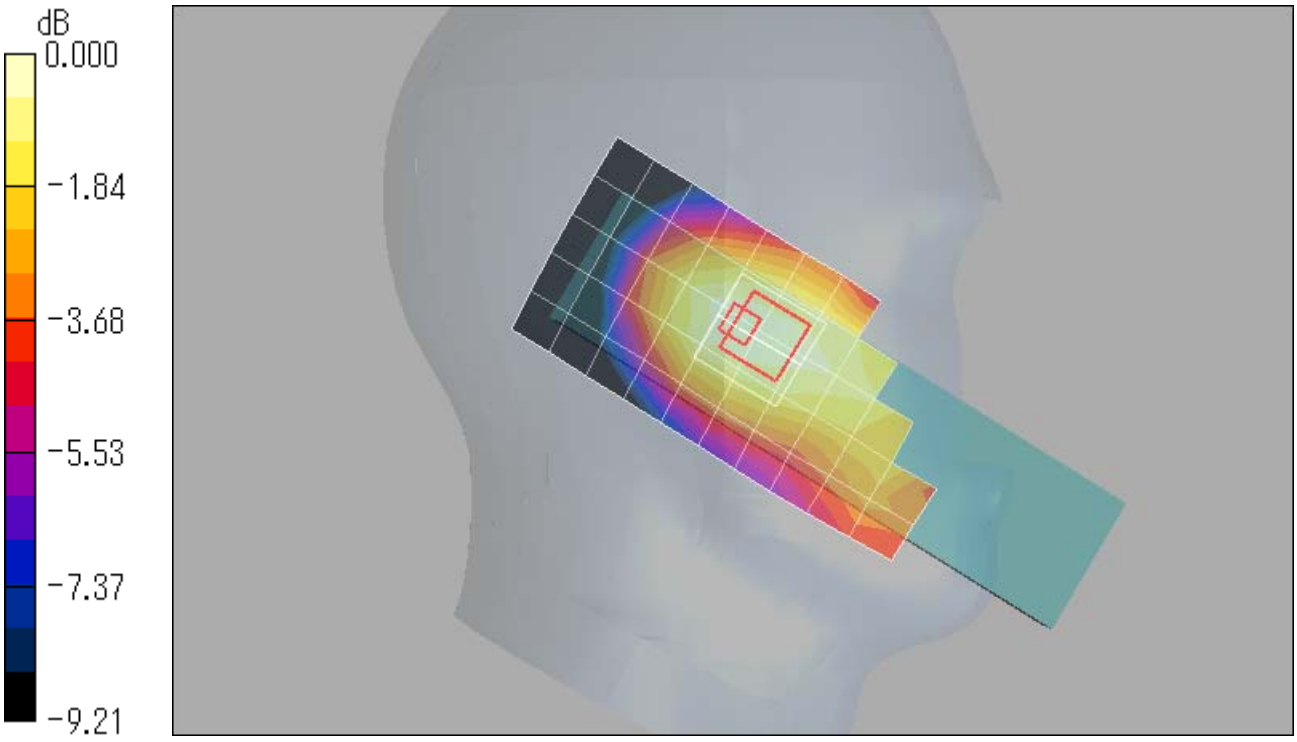
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Left Tilted/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.122 mW/g

Left Tilted/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.8 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 0.144 W/kg
SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.091 mW/g
Maximum value of SAR (measured) = 0.126 mW/g



0 dB = 0.126mW/g

Date/Time: 2012/10/25 15:11:26

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 4132ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

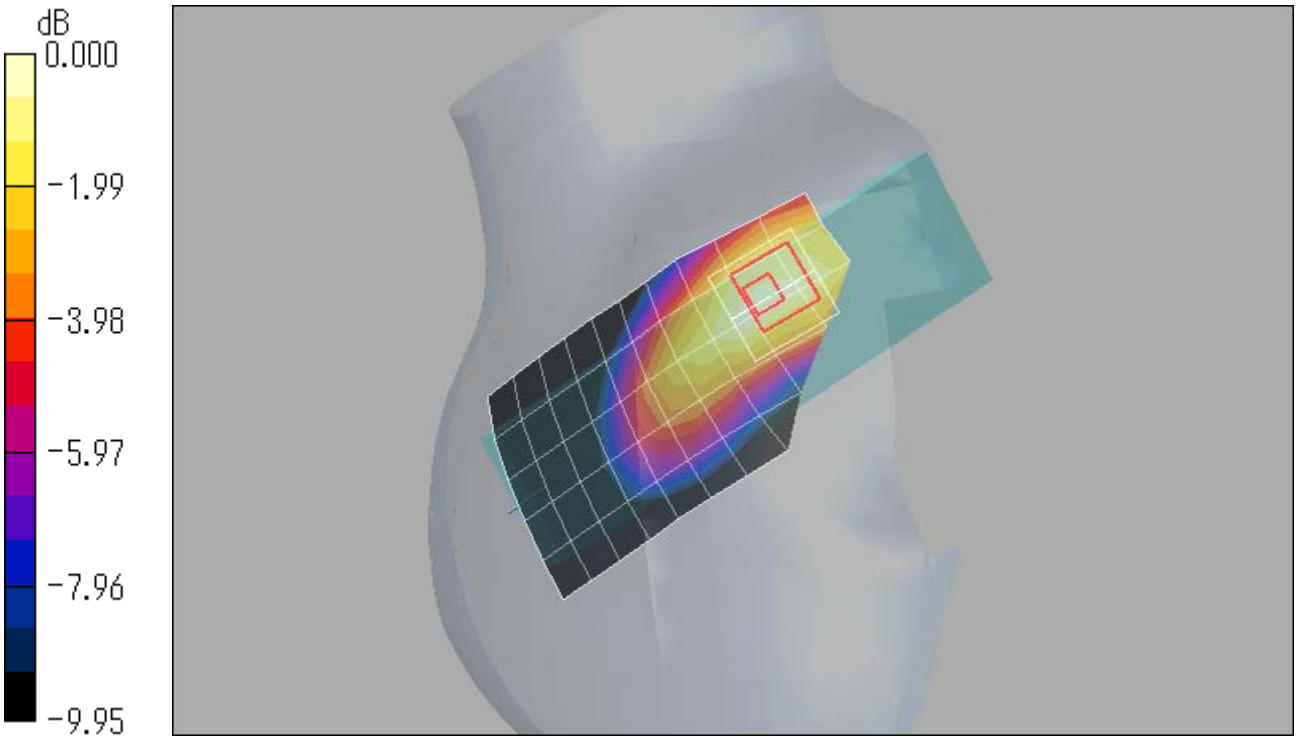
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 826.4 MHz; σ = 0.897 mho/m; ε_r = 41.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.423 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.2 V/m; Power Drift = 0.006 dB
Peak SAR (extrapolated) = 0.555 W/kg
SAR(1 g) = 0.408 mW/g; SAR(10 g) = 0.280 mW/g
Maximum value of SAR (measured) = 0.436 mW/g



0 dB = 0.436mW/g

Date/Time: 2012/10/25 14:40:31

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

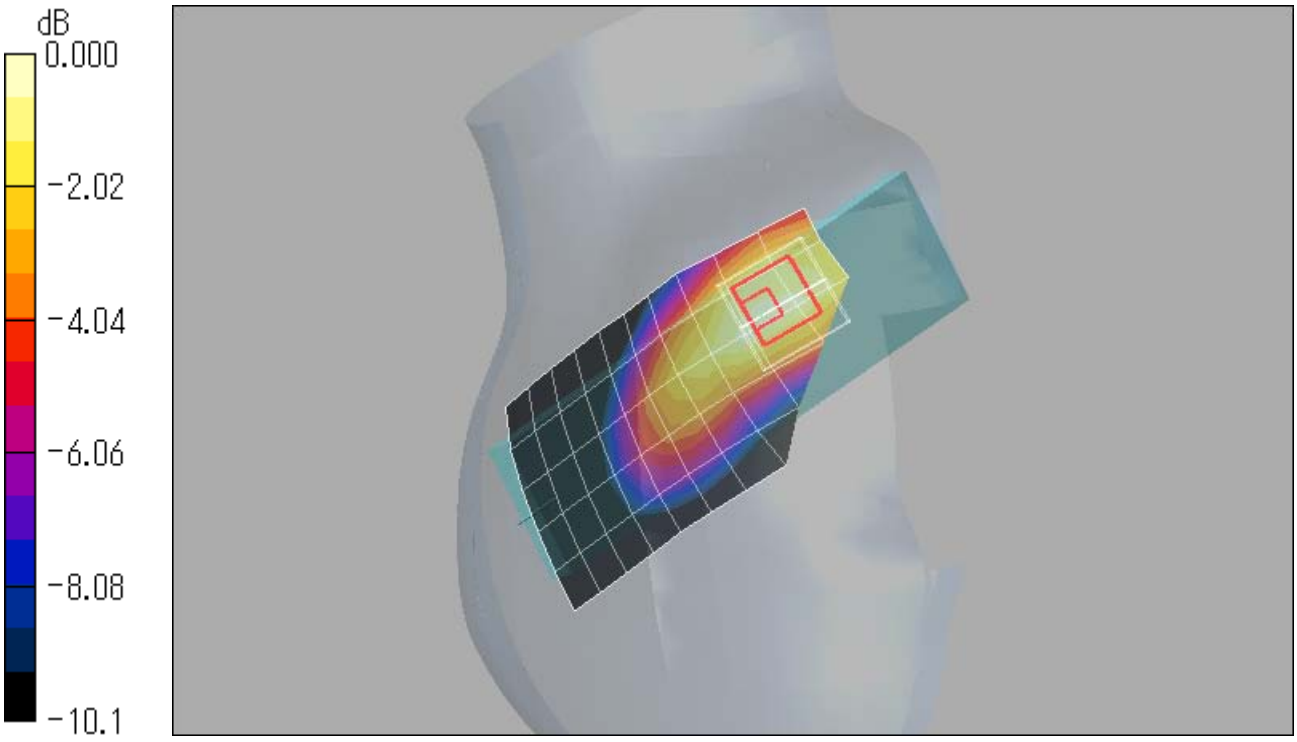
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.465 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.9 V/m; Power Drift = -0.007 dB
Peak SAR (extrapolated) = 0.618 W/kg
SAR(1 g) = 0.453 mW/g; SAR(10 g) = 0.313 mW/g
Maximum value of SAR (measured) = 0.487 mW/g



0 dB = 0.487mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

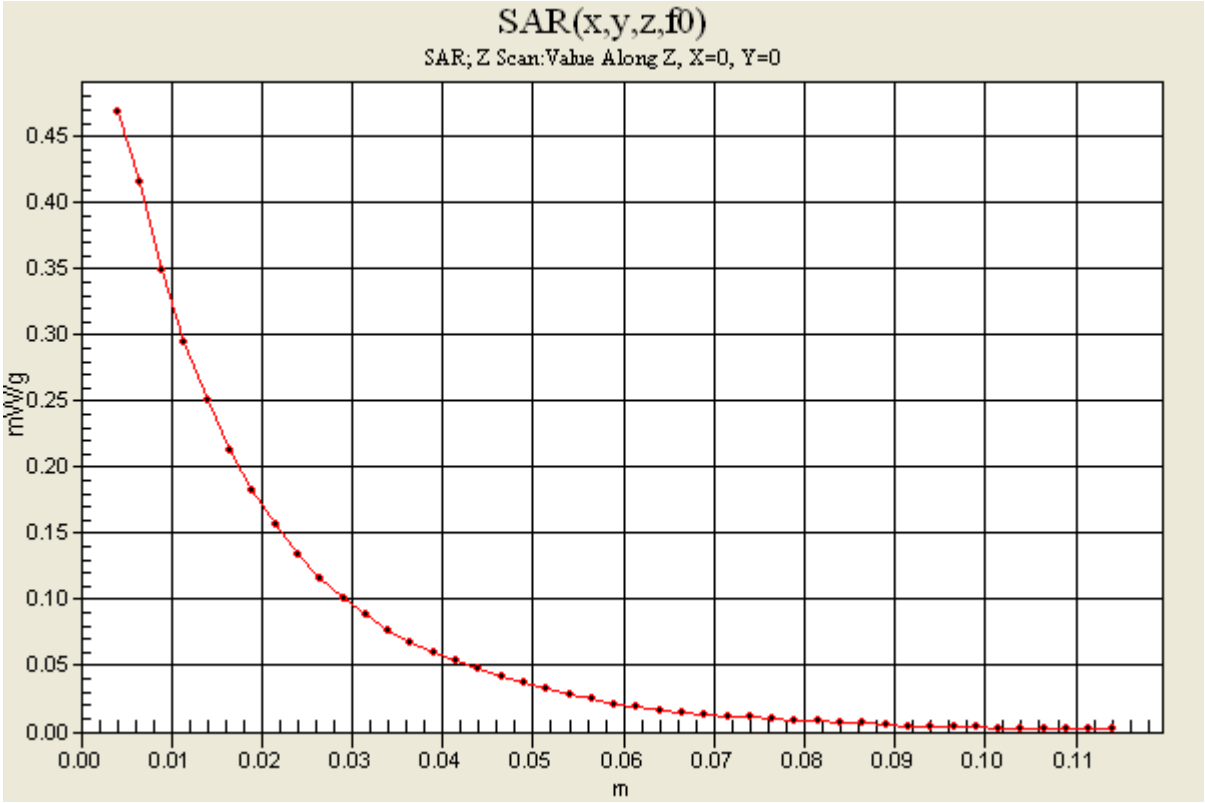
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Z Scan (1x1x45): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.469 mW/g



Date/Time: 2012/10/25 14:55:13

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 4233ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

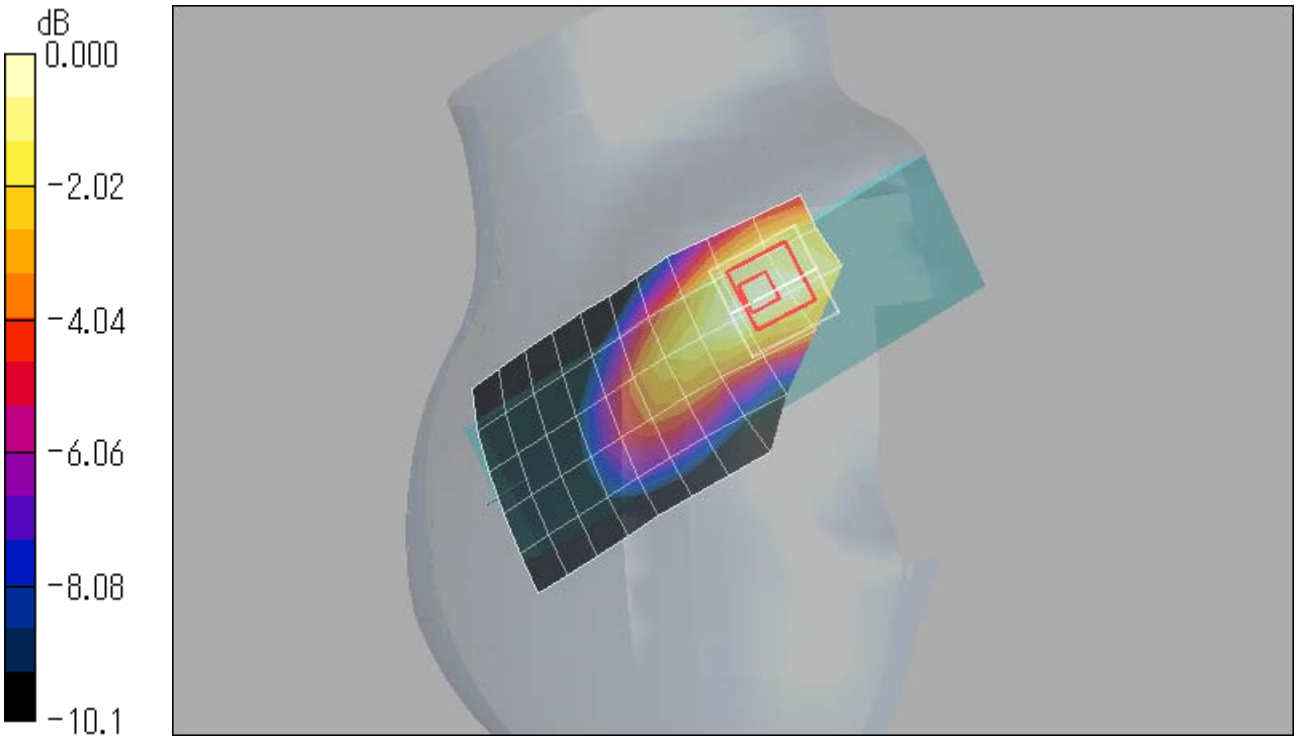
Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium parameters used: f = 846.6 MHz; σ = 0.914 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.437 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 16.1 V/m; Power Drift = -0.030 dB
Peak SAR (extrapolated) = 0.562 W/kg
SAR(1 g) = 0.418 mW/g; SAR(10 g) = 0.290 mW/g
Maximum value of SAR (measured) = 0.445 mW/g



0 dB = 0.445mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

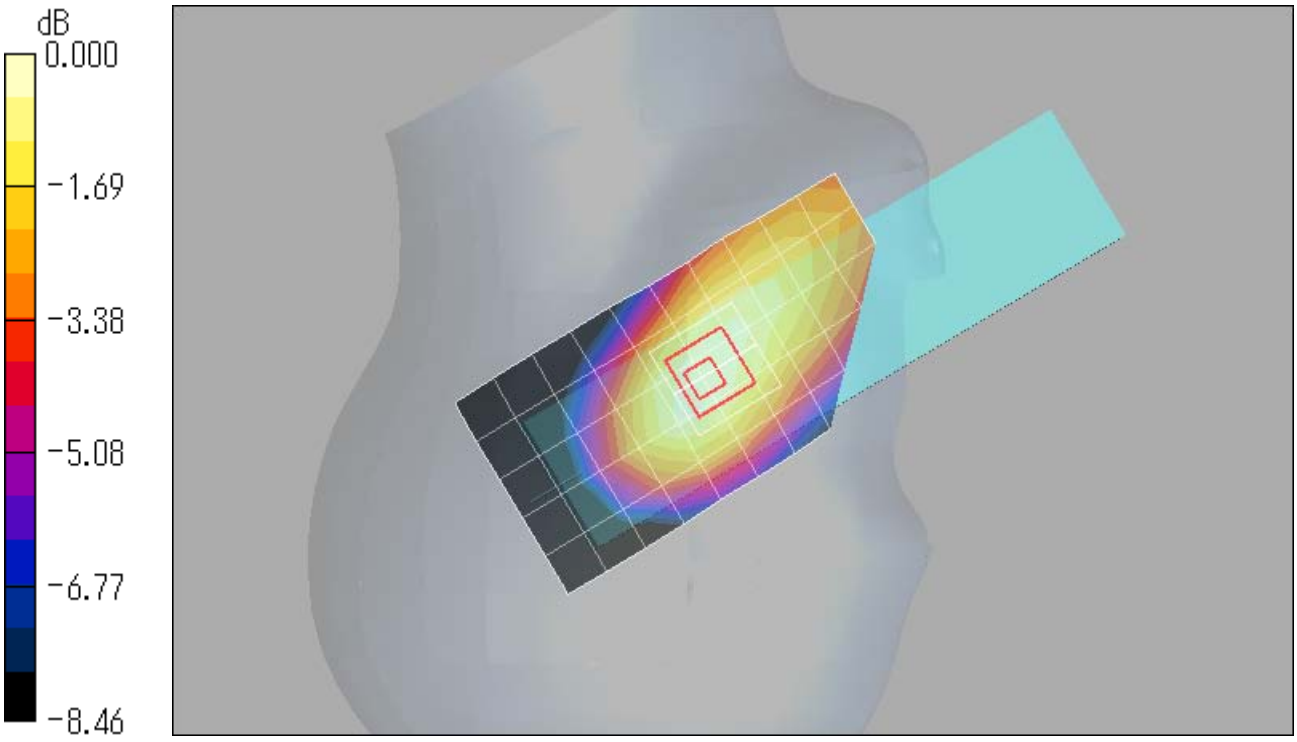
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Tilted/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.131 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 12.7 V/m; Power Drift = 0.031 dB
Peak SAR (extrapolated) = 0.157 W/kg
SAR(1 g) = 0.130 mW/g; SAR(10 g) = 0.099 mW/g
Maximum value of SAR (measured) = 0.137 mW/g



0 dB = 0.137mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.977 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

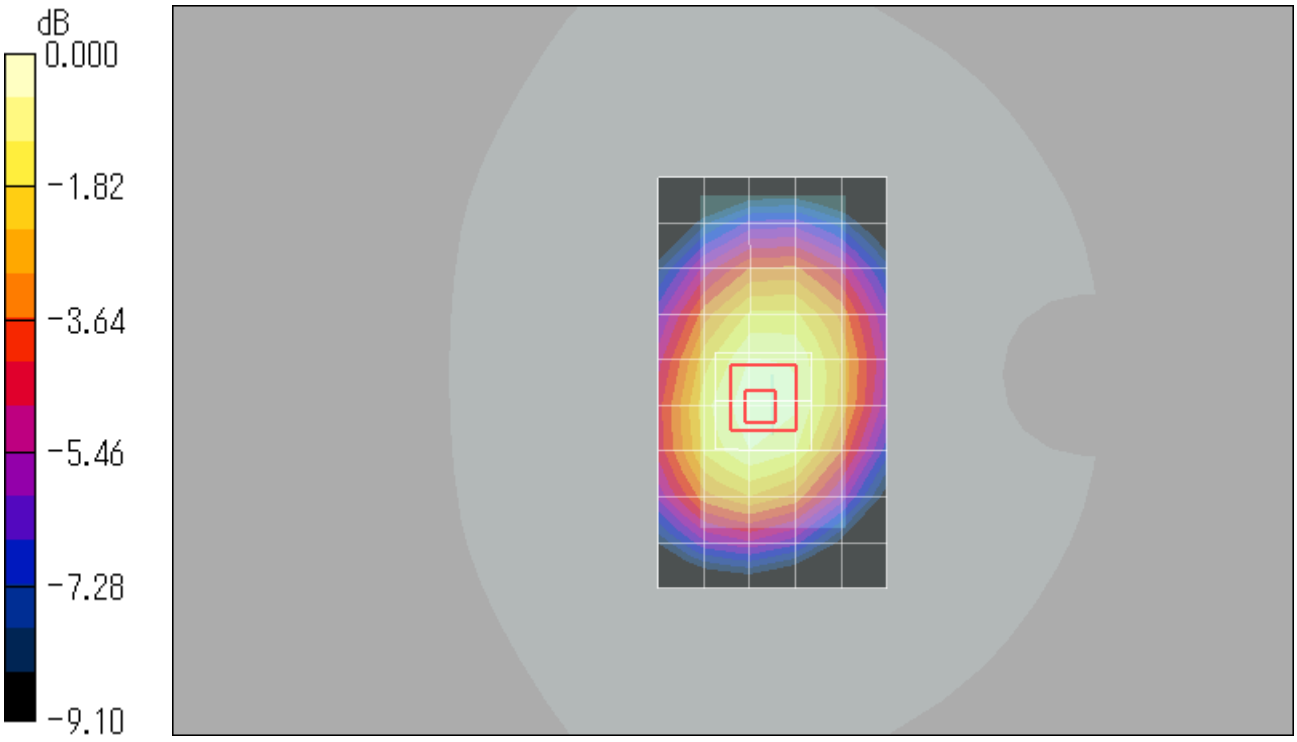
- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Front Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.340 mW/g

Front Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.2 V/m; Power Drift = -0.032 dB
Peak SAR (extrapolated) = 0.418 W/kg
SAR(1 g) = 0.331 mW/g; SAR(10 g) = 0.245 mW/g
Maximum value of SAR (measured) = 0.348 mW/g



0 dB = 0.348mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 4132ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

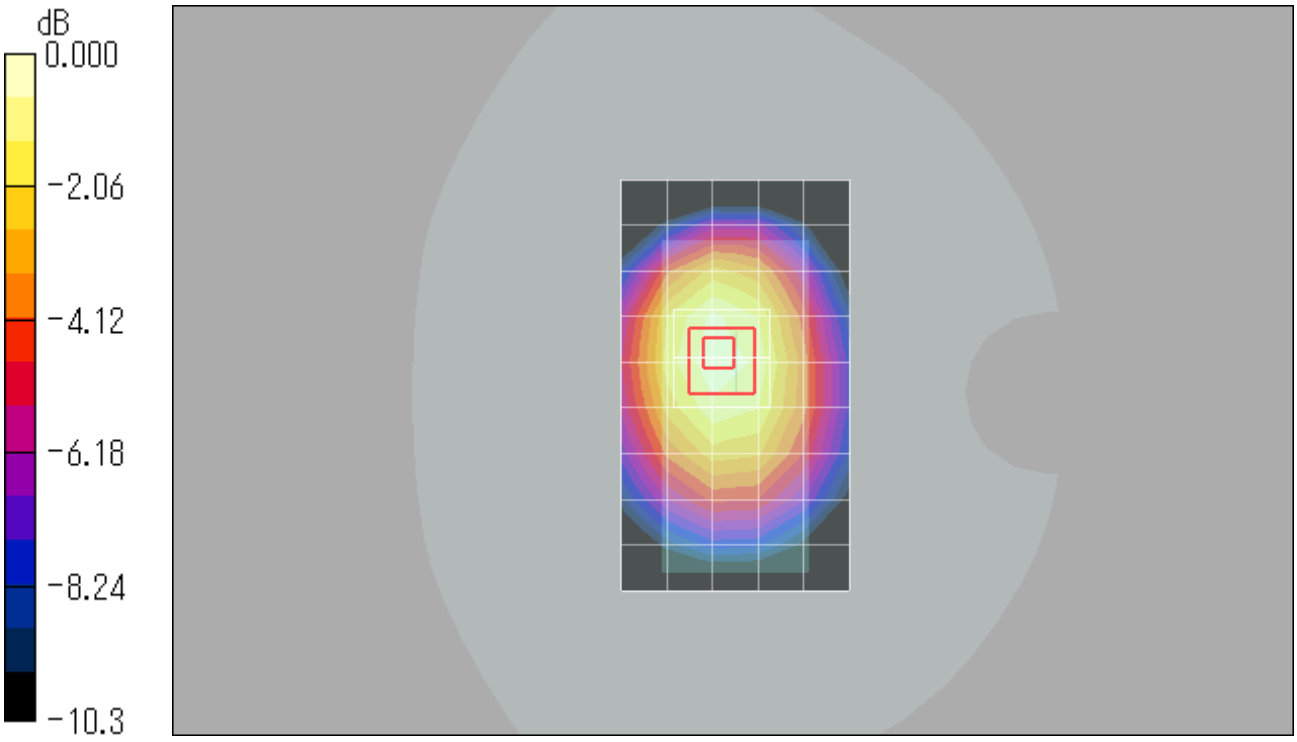
Communication System: WCDMA Band V; Frequency: 826.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 826.4 MHz; σ = 0.968 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.597 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.5 V/m; Power Drift = -0.029 dB
Peak SAR (extrapolated) = 0.759 W/kg
SAR(1 g) = 0.577 mW/g; SAR(10 g) = 0.412 mW/g
Maximum value of SAR (measured) = 0.613 mW/g



0 dB = 0.613mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 4182ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

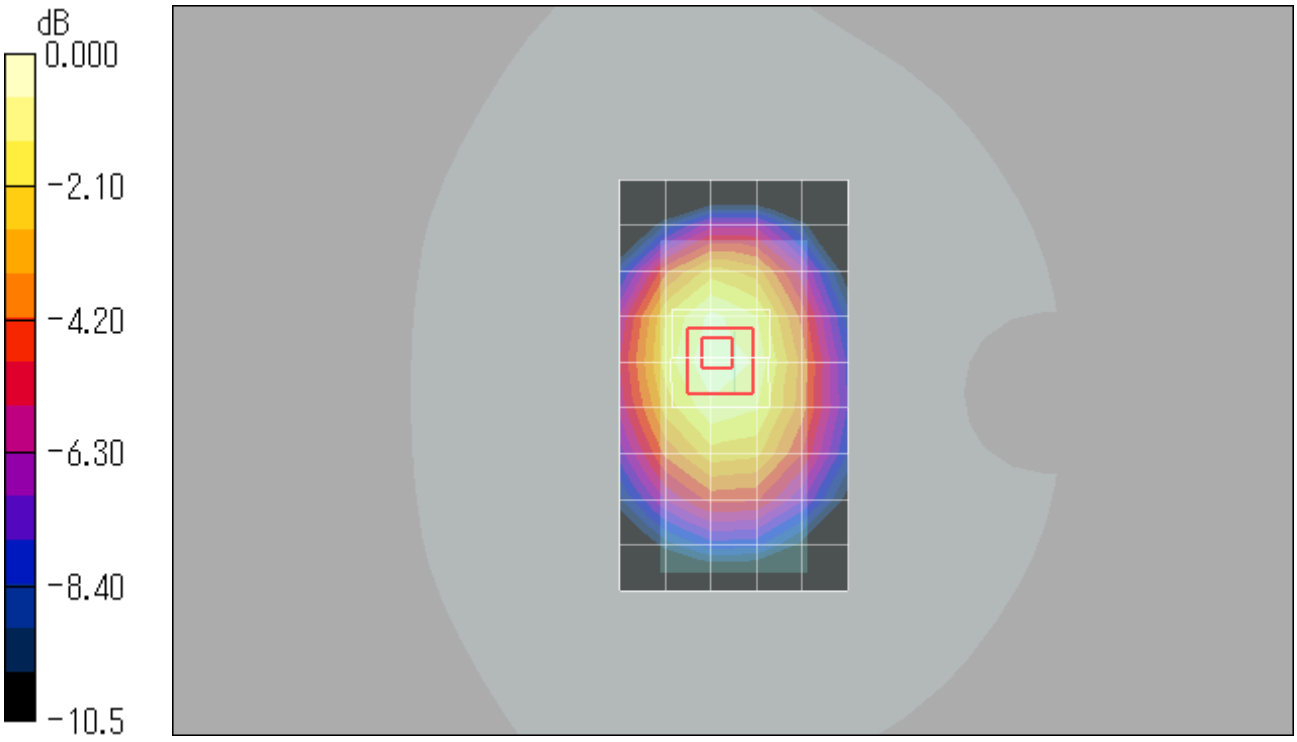
Communication System: WCDMA Band V; Frequency: 836.4 MHz; Duty Cycle: 1:1
Medium parameters used: f = 836.4 MHz; σ = 0.977 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.640 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.9 V/m; Power Drift = -0.019 dB
Peak SAR (extrapolated) = 0.815 W/kg
SAR(1 g) = 0.613 mW/g; SAR(10 g) = 0.436 mW/g
Maximum value of SAR (measured) = 0.650 mW/g



0 dB = 0.650mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 4233ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

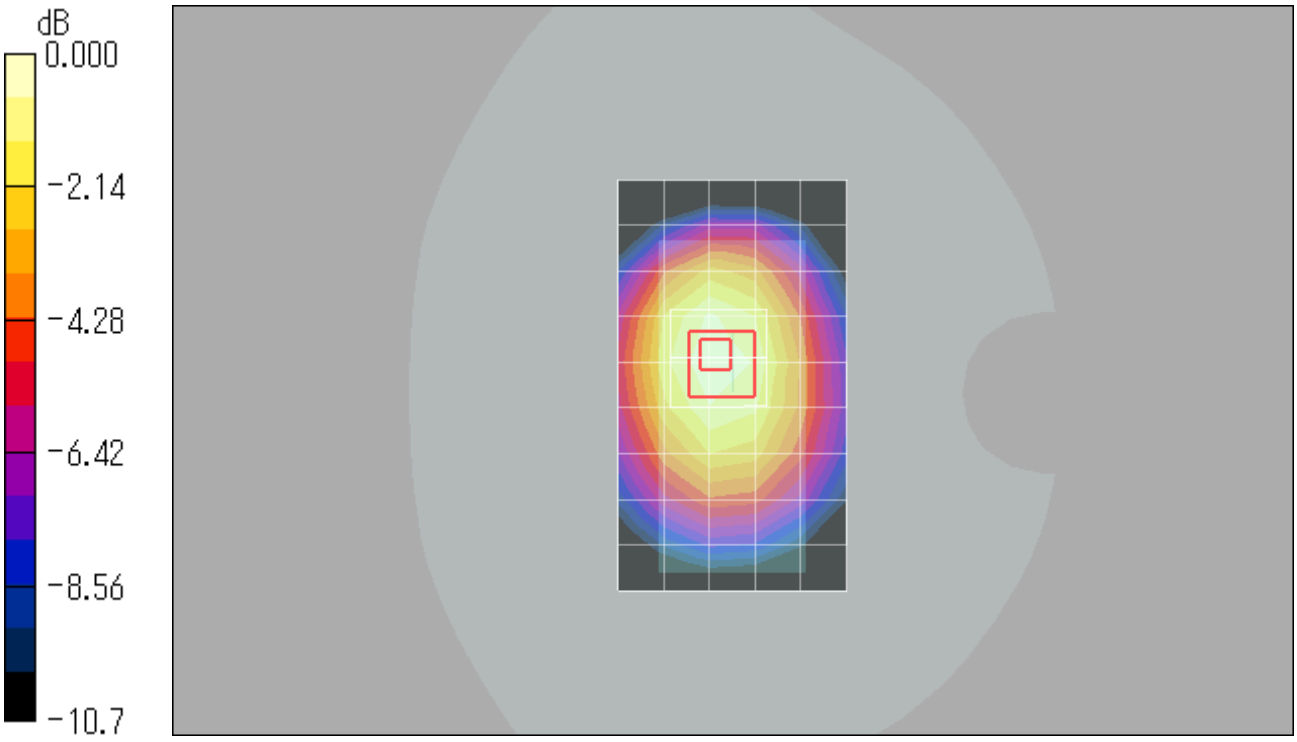
Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium parameters used: f = 846.6 MHz; σ = 0.987 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.658 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.8 V/m; Power Drift = 0.026 dB
Peak SAR (extrapolated) = 0.828 W/kg
SAR(1 g) = 0.627 mW/g; SAR(10 g) = 0.447 mW/g
Maximum value of SAR (measured) = 0.667 mW/g



0 dB = 0.667mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 4233ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

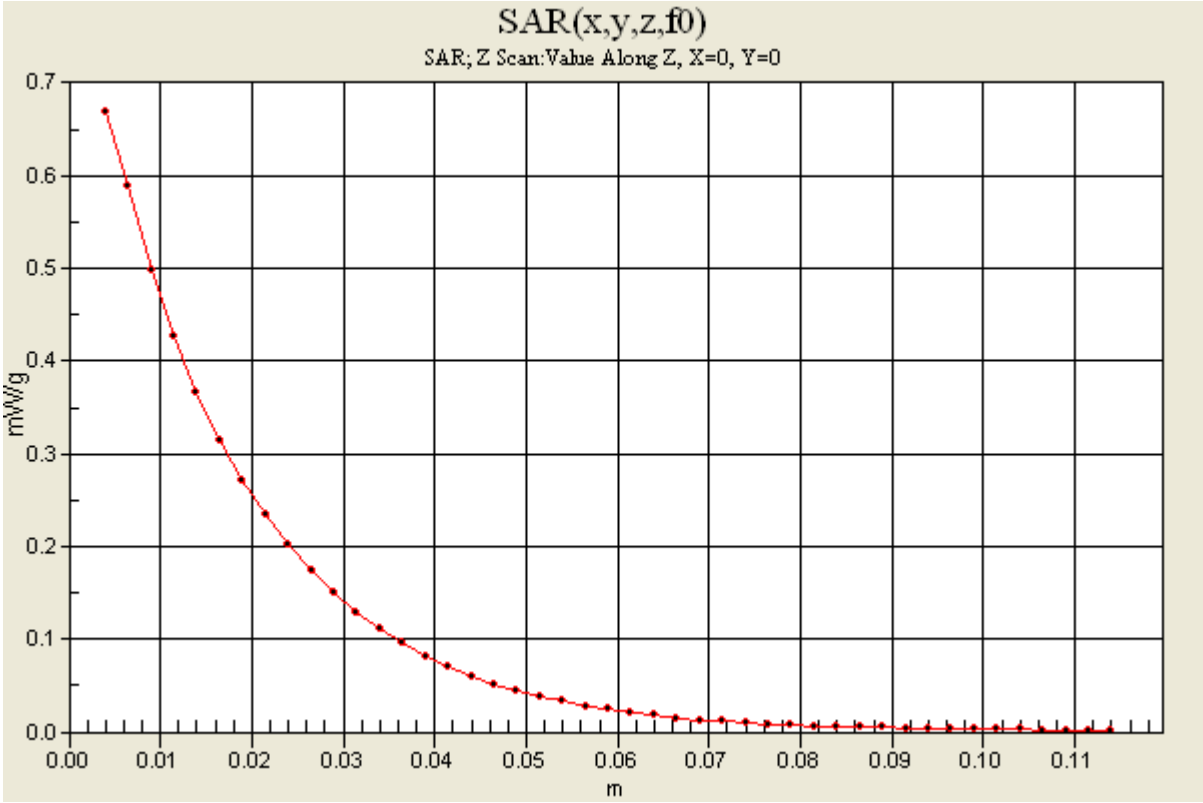
Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium parameters used: f = 846.6 MHz; σ = 0.987 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Z Scan (1x1x45): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.669 mW/g



Date/Time: 2012/10/26 14:53:25

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 4233ch / WCDMA Band V

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

Communication System: WCDMA Band V; Frequency: 846.6 MHz; Duty Cycle: 1:1
Medium parameters used: f = 846.6 MHz; σ = 0.987 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

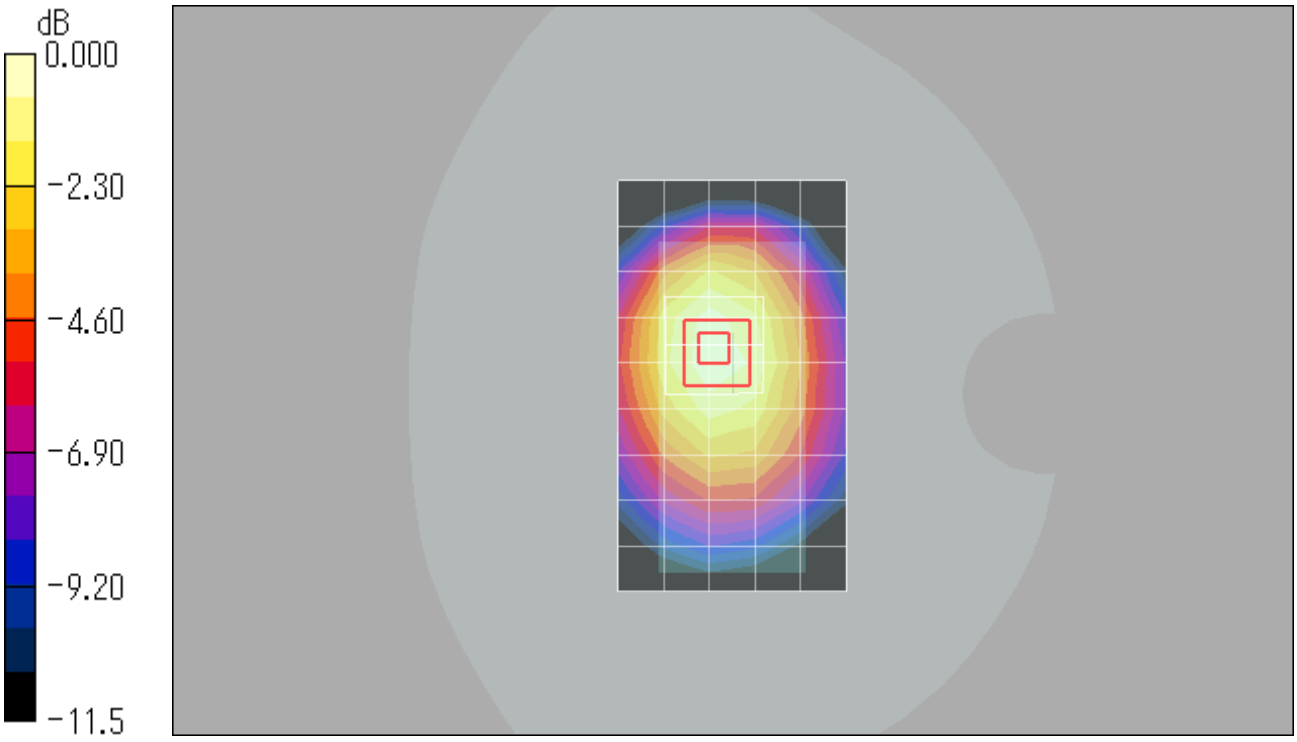
- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side w/headset/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.484 mW/g

Rear Side w/headset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.4 V/m; Power Drift = -0.015 dB
Peak SAR (extrapolated) = 0.635 W/kg
SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.326 mW/g
Maximum value of SAR (measured) = 0.500 mW/g



0 dB = 0.500mW/g

Appendix 2 – SAR Test Plots (GSM 850)

Date/Time: 2012/10/25 17:08:24

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head 189ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

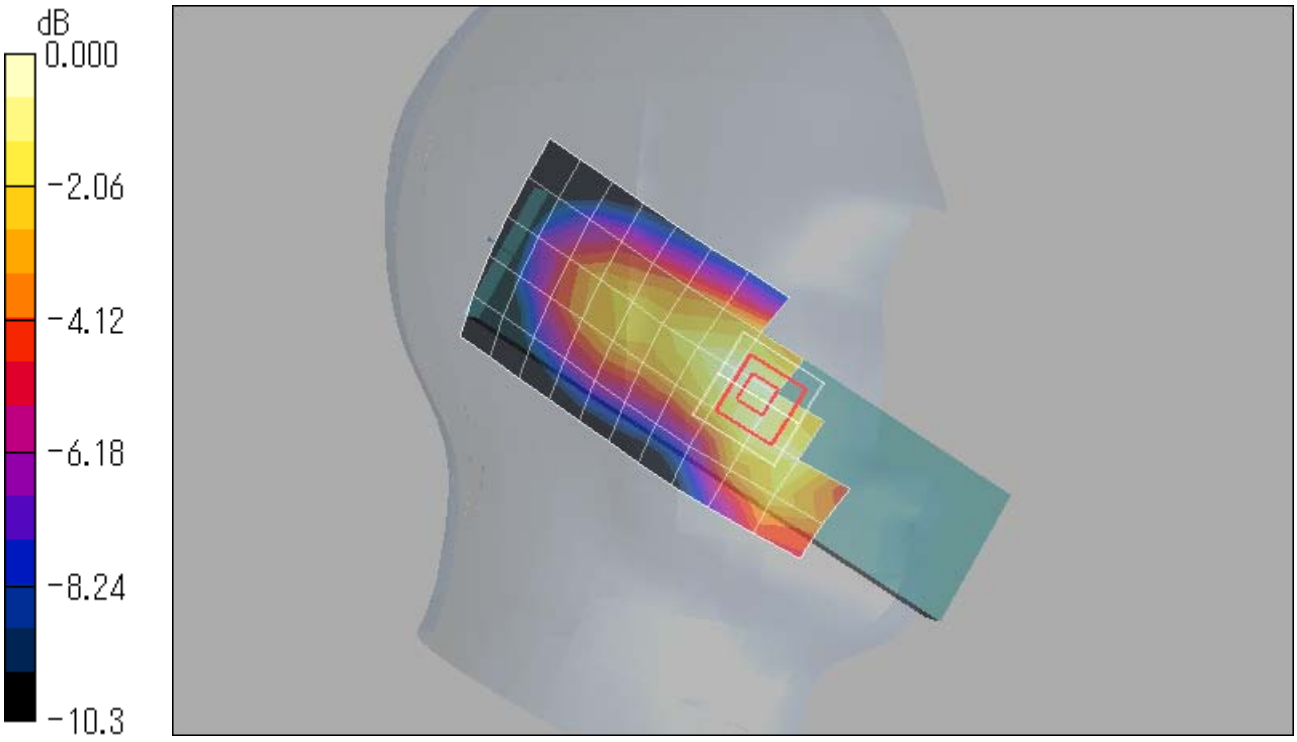
Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Left Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.319 mW/g

Left Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.2 V/m; Power Drift = -0.064 dB
Peak SAR (extrapolated) = 0.412 W/kg
SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.218 mW/g
Maximum value of SAR (measured) = 0.334 mW/g



0 dB = 0.334mW/g

Date/Time: 2012/10/25 16:18:08

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head 189ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

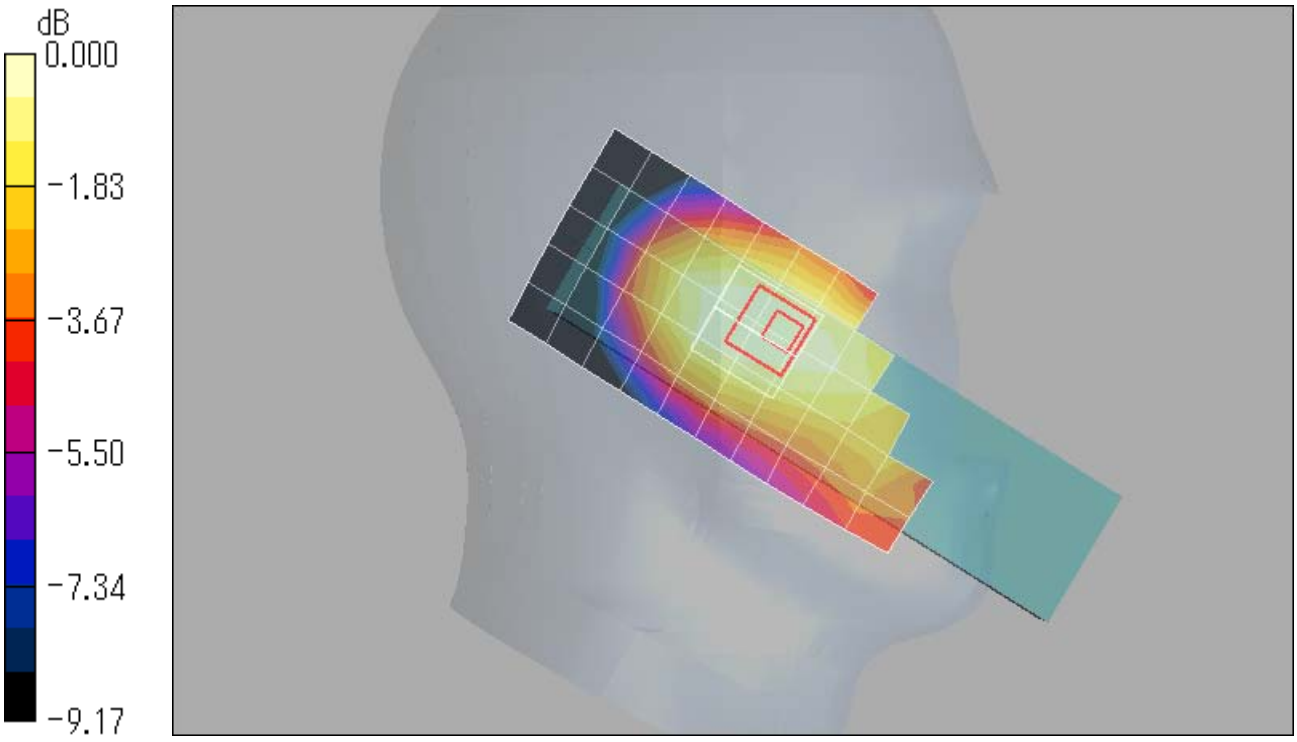
Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Left Tilted/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.099 mW/g

Left Tilted/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.6 V/m; Power Drift = -0.051 dB
Peak SAR (extrapolated) = 0.115 W/kg
SAR(1 g) = 0.095 mW/g; SAR(10 g) = 0.073 mW/g



0 dB = 0.099mW/g

Date/Time: 2012/10/25 14:06:12

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 128ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

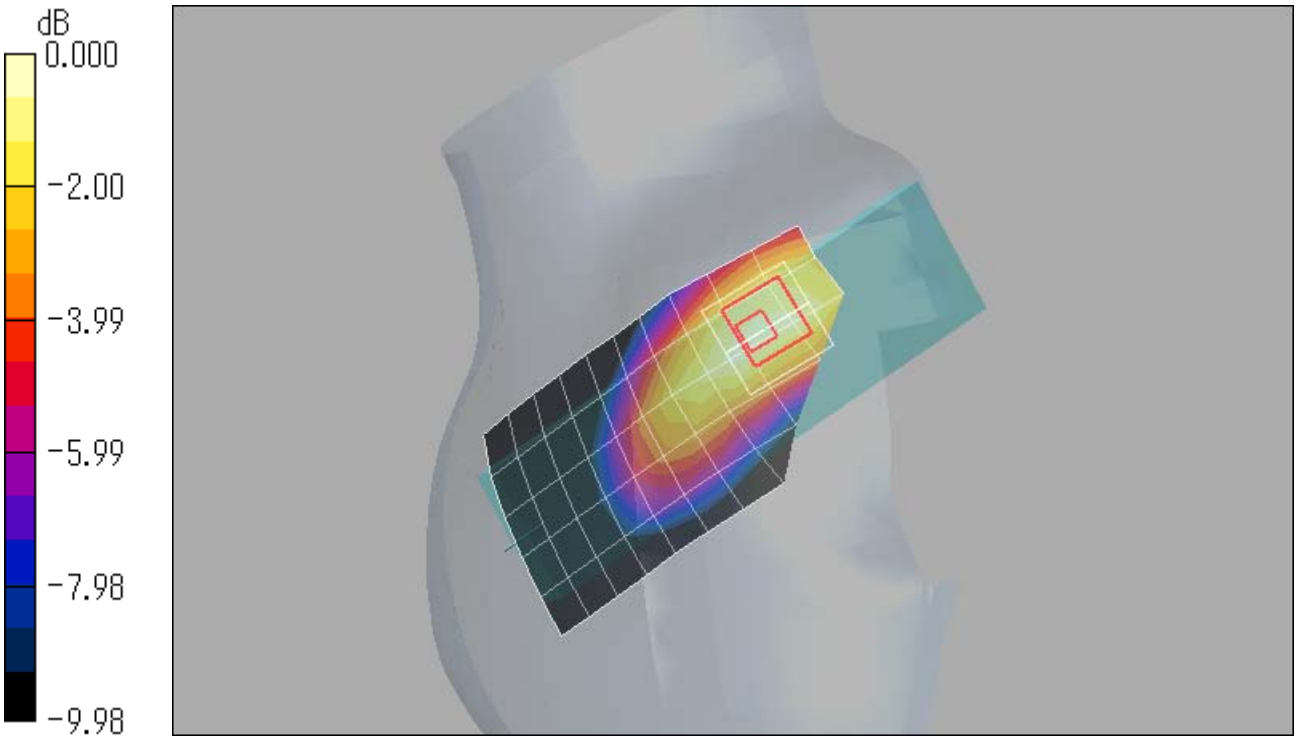
Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.895 mho/m; ε_r = 41.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.362 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = 0.007 dB
Peak SAR (extrapolated) = 0.467 W/kg
SAR(1 g) = 0.343 mW/g; SAR(10 g) = 0.235 mW/g
Maximum value of SAR (measured) = 0.368 mW/g



0 dB = 0.368mW/g

Date/Time: 2012/10/25 13:36:36

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 189ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

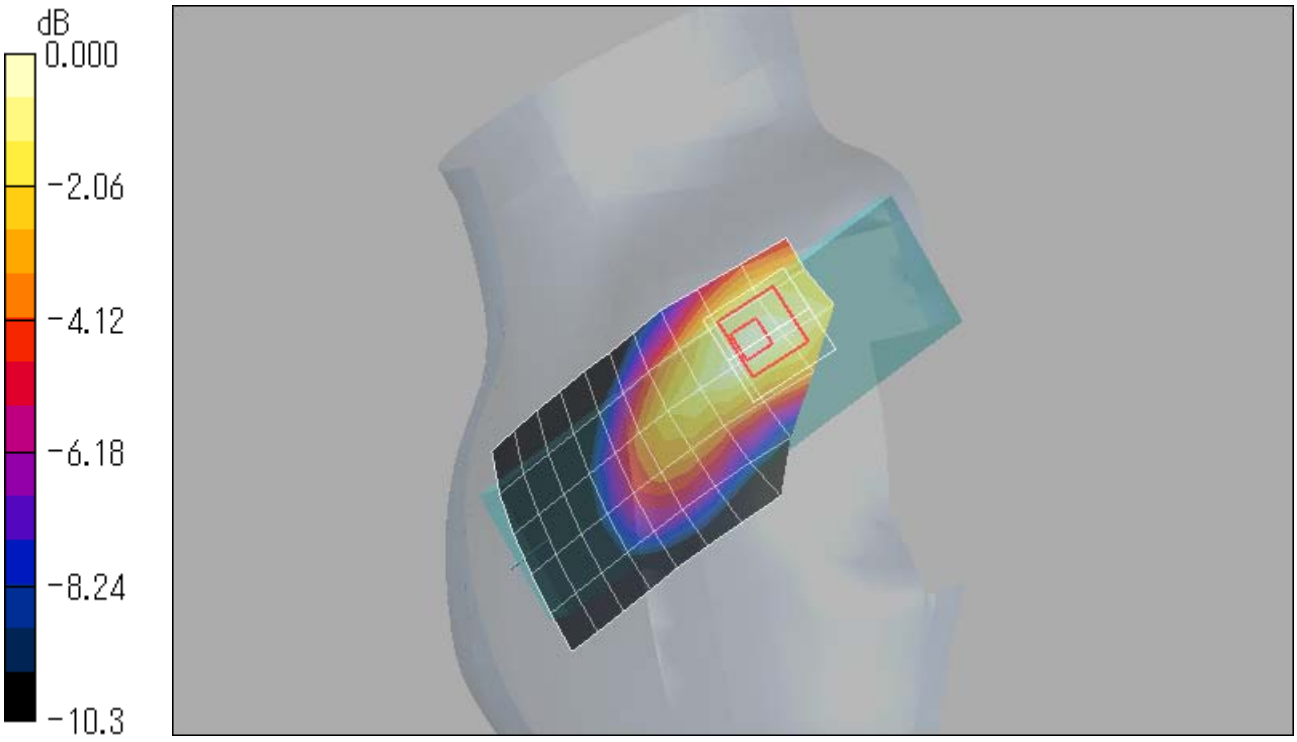
Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.385 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.4 V/m; Power Drift = -0.031 dB
Peak SAR (extrapolated) = 0.499 W/kg
SAR(1 g) = 0.365 mW/g; SAR(10 g) = 0.252 mW/g
Maximum value of SAR (measured) = 0.391 mW/g



0 dB = 0.391mW/g

Date/Time: 2012/10/25 13:50:55

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 251ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

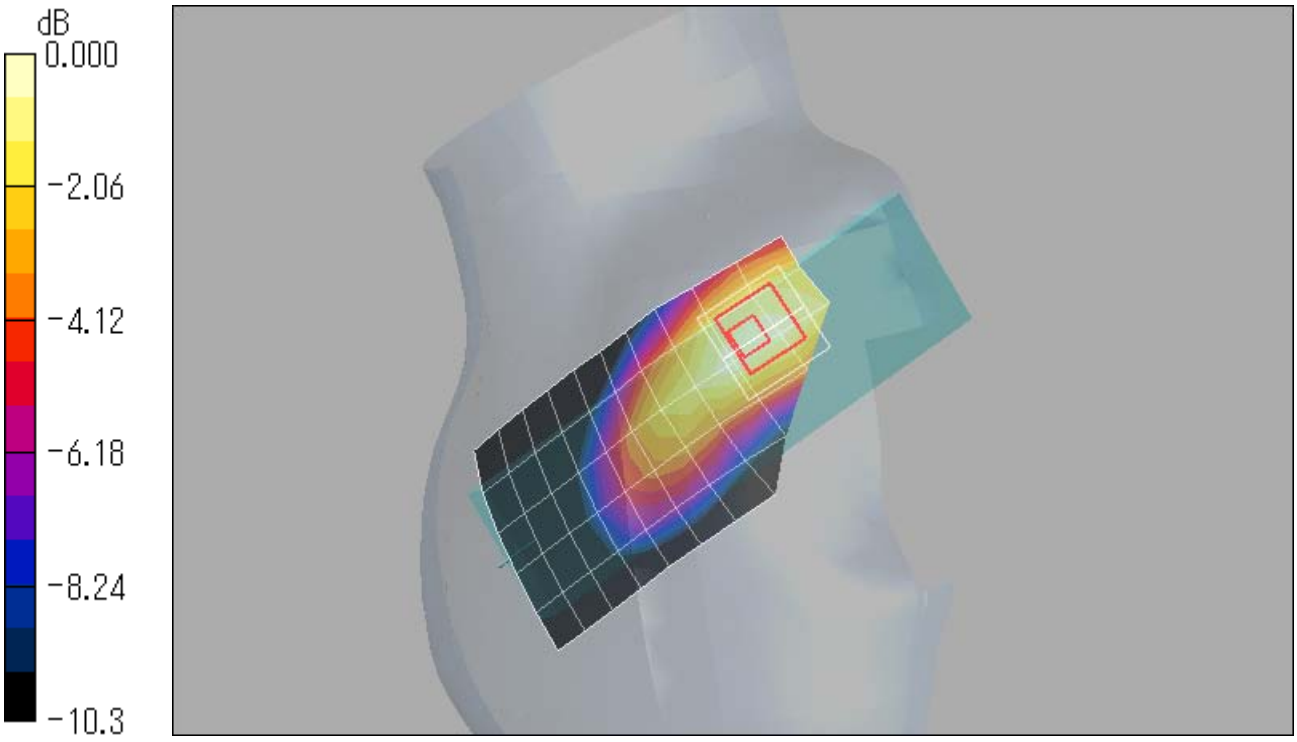
Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz; σ = 0.916 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.390 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 15.4 V/m; Power Drift = -0.039 dB
Peak SAR (extrapolated) = 0.510 W/kg
SAR(1 g) = 0.373 mW/g; SAR(10 g) = 0.258 mW/g
Maximum value of SAR (measured) = 0.395 mW/g



0 dB = 0.395mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 251ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

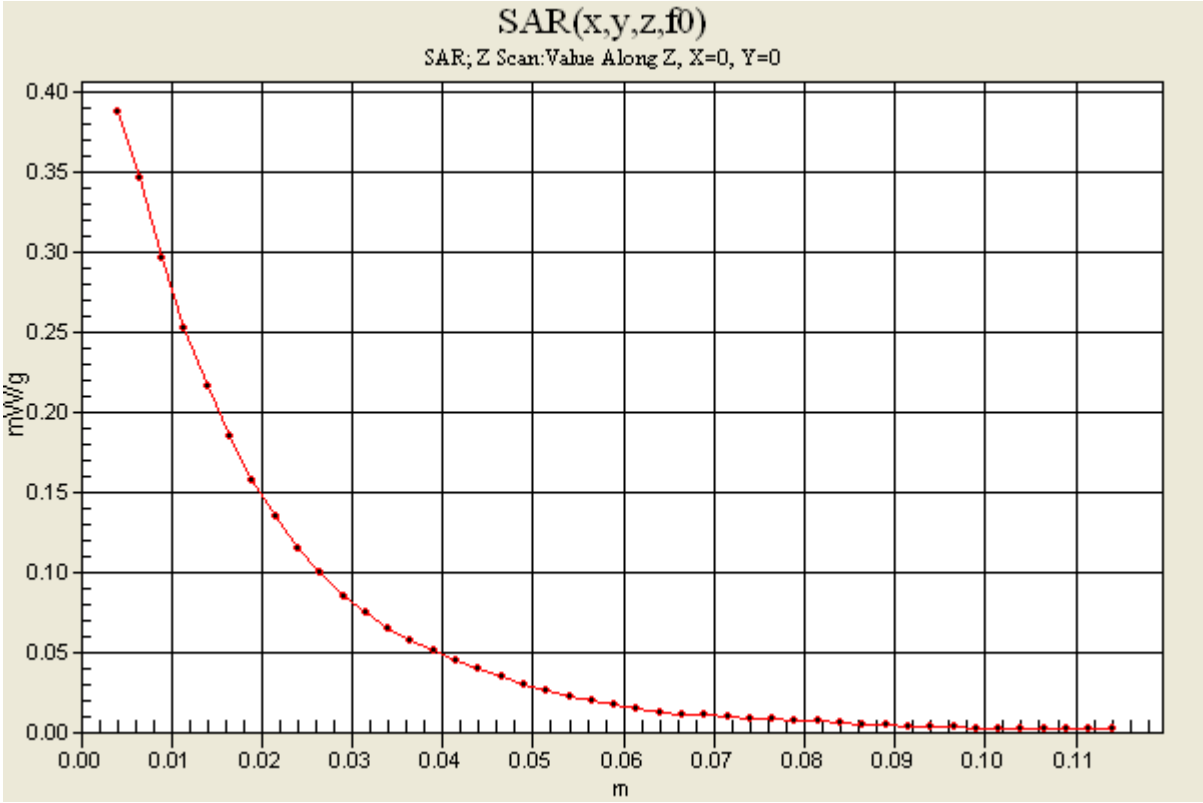
Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz; σ = 0.916 mho/m; ε_r = 41.2; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Z Scan (1x1x45): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.388 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 189ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

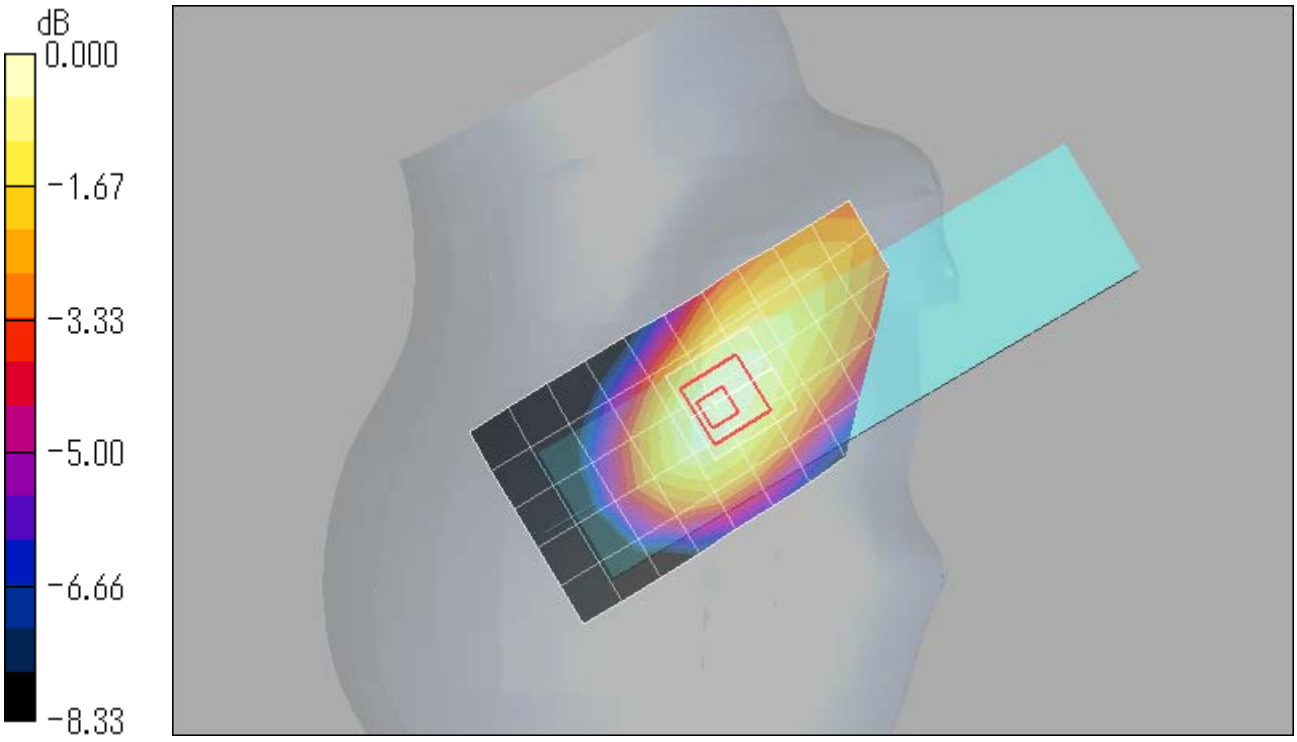
Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 836.4 MHz; σ = 0.905 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.16, 6.16, 6.16); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Tilted/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.103 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.1 V/m; Power Drift = -0.007 dB
Peak SAR (extrapolated) = 0.121 W/kg
SAR(1 g) = 0.101 mW/g; SAR(10 g) = 0.077 mW/g
Maximum value of SAR (measured) = 0.107 mW/g



0 dB = 0.107mW/g

Date/Time: 2012/10/26 11:48:32

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 189ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

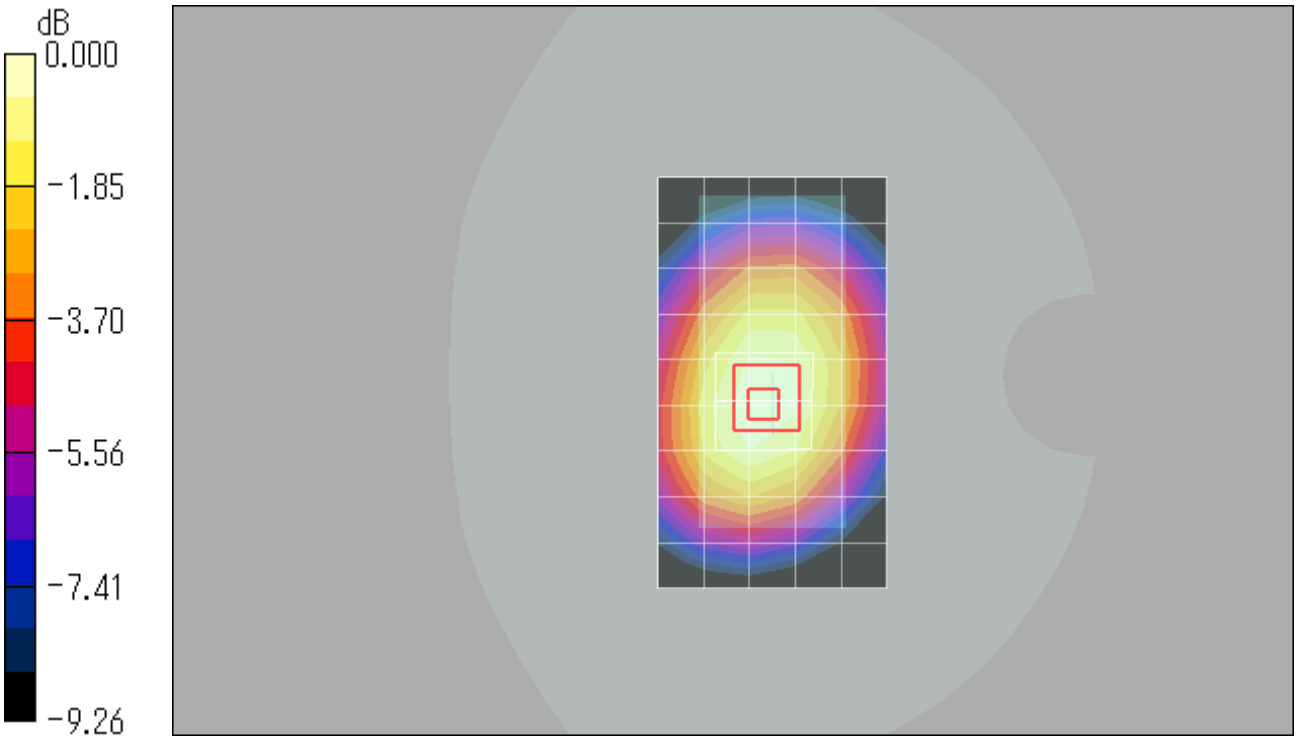
Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 836.4 MHz; σ = 0.977 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Front Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.299 mW/g

Front Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 17.9 V/m; Power Drift = -0.055 dB
Peak SAR (extrapolated) = 0.361 W/kg
SAR(1 g) = 0.284 mW/g; SAR(10 g) = 0.209 mW/g
Maximum value of SAR (measured) = 0.302 mW/g



0 dB = 0.302mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 128ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

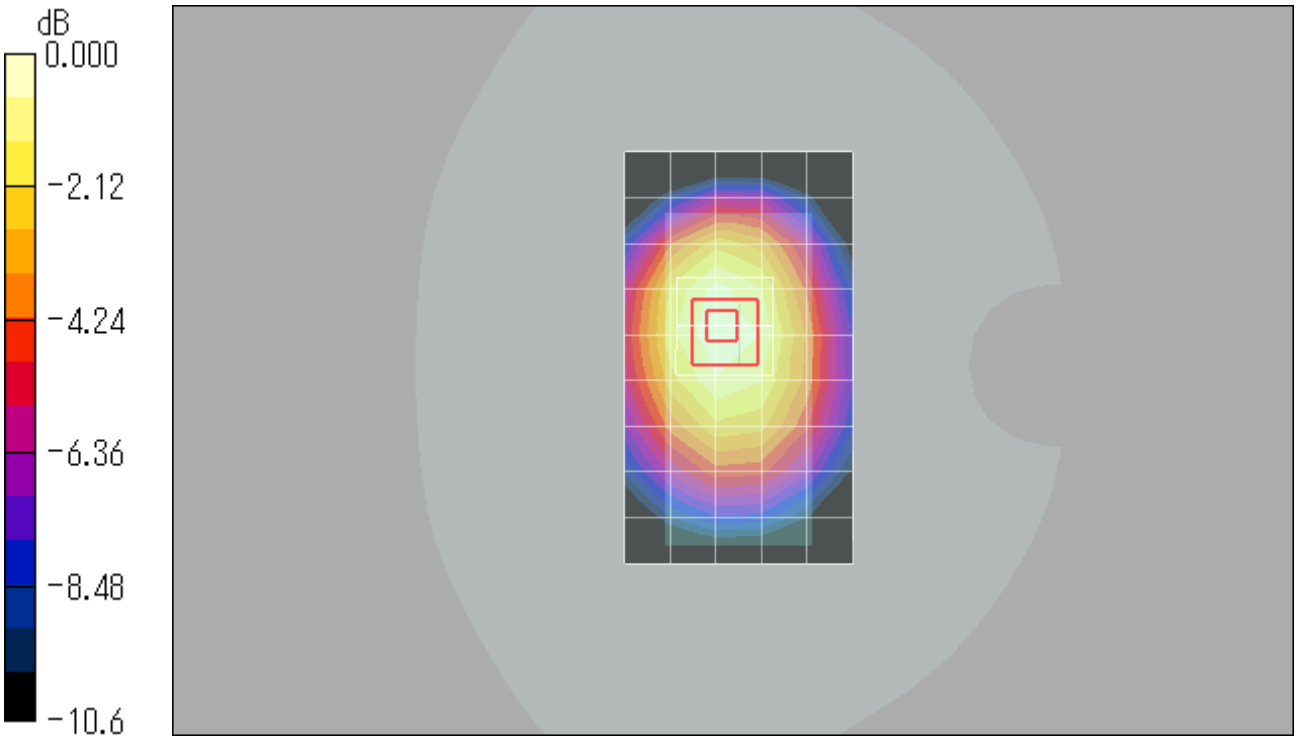
Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.966 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.550 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = -0.018 dB
Peak SAR (extrapolated) = 0.700 W/kg
SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.375 mW/g
Maximum value of SAR (measured) = 0.558 mW/g



0 dB = 0.558mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 128ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

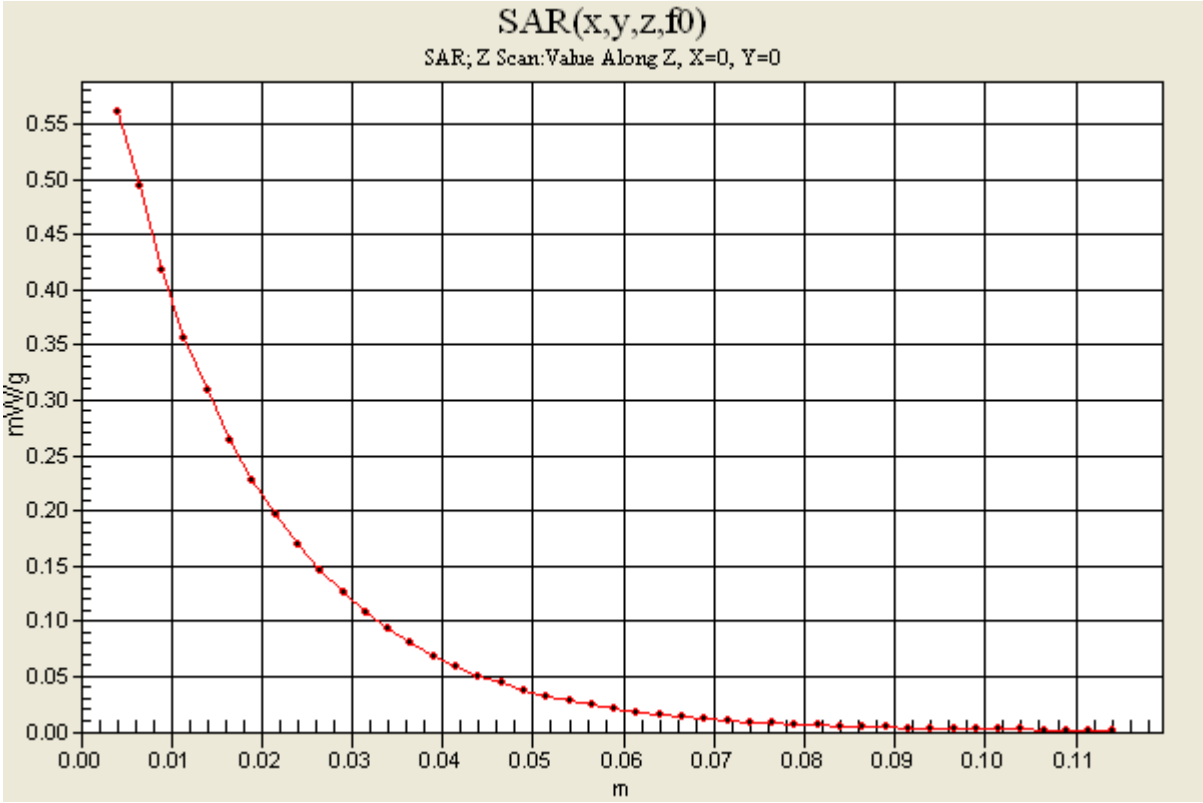
Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.966 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Z Scan (1x1x45): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.561 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 128ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

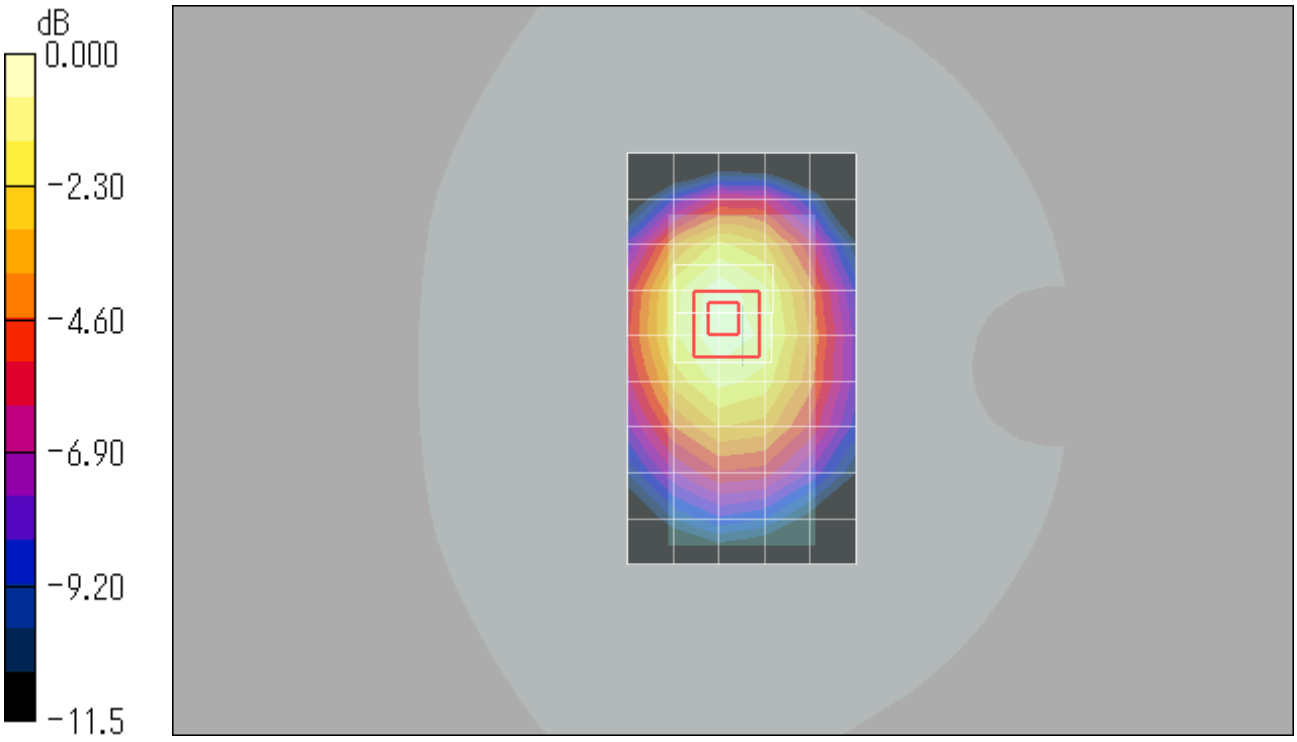
Communication System: GSM 850; Frequency: 824.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 824.2 MHz; σ = 0.966 mho/m; ε_r = 54.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side w/headset/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.388 mW/g

Rear Side w/headset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 13.2 V/m; Power Drift = -0.049 dB
Peak SAR (extrapolated) = 0.504 W/kg
SAR(1 g) = 0.374 mW/g; SAR(10 g) = 0.262 mW/g
Maximum value of SAR (measured) = 0.399 mW/g



0 dB = 0.399mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 189ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

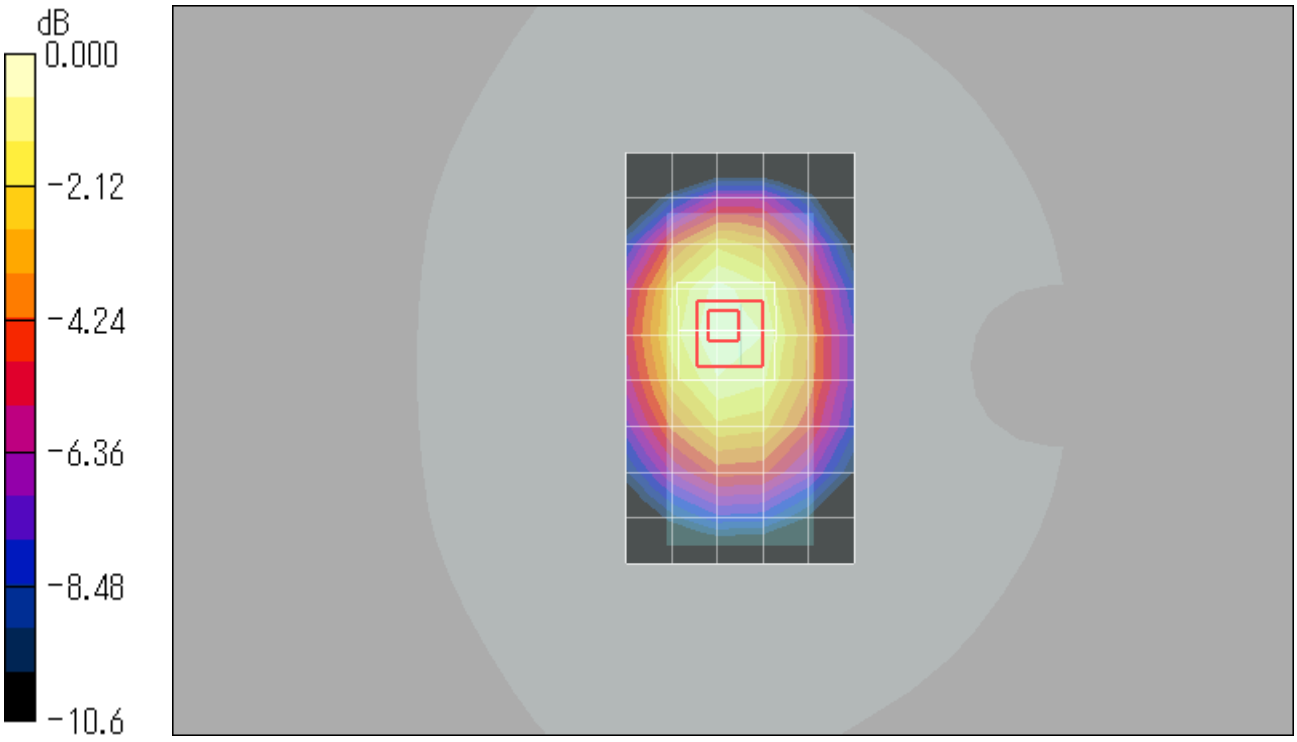
Communication System: GSM 850; Frequency: 836.4 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 836.4 MHz; σ = 0.977 mho/m; ε_r = 54.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.558 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.9 V/m; Power Drift = -0.016 dB
Peak SAR (extrapolated) = 0.688 W/kg
SAR(1 g) = 0.522 mW/g; SAR(10 g) = 0.370 mW/g
Maximum value of SAR (measured) = 0.553 mW/g



0 dB = 0.553mW/g

Date/Time: 2012/10/26 13:15:57

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 251ch / GSM 850

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

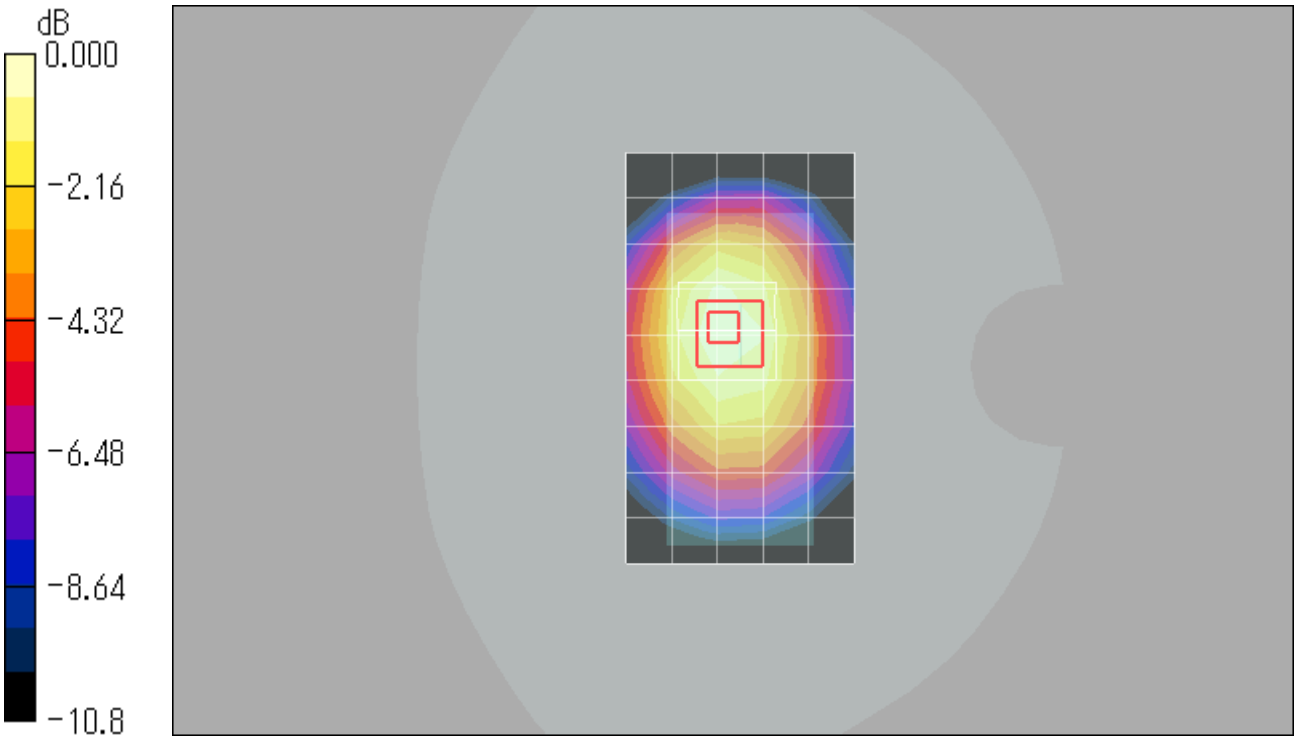
Communication System: GSM 850; Frequency: 848.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 848.8 MHz; σ = 0.989 mho/m; ε_r = 54.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(6.21, 6.21, 6.21); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.542 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.5 V/m; Power Drift = -0.014 dB
Peak SAR (extrapolated) = 0.677 W/kg
SAR(1 g) = 0.511 mW/g; SAR(10 g) = 0.363 mW/g
Maximum value of SAR (measured) = 0.544 mW/g



0 dB = 0.544mW/g

Appendix 2 – SAR Test Plots (PCS 1900)

Date/Time: 2012/10/24 11:03:08

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head 661ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

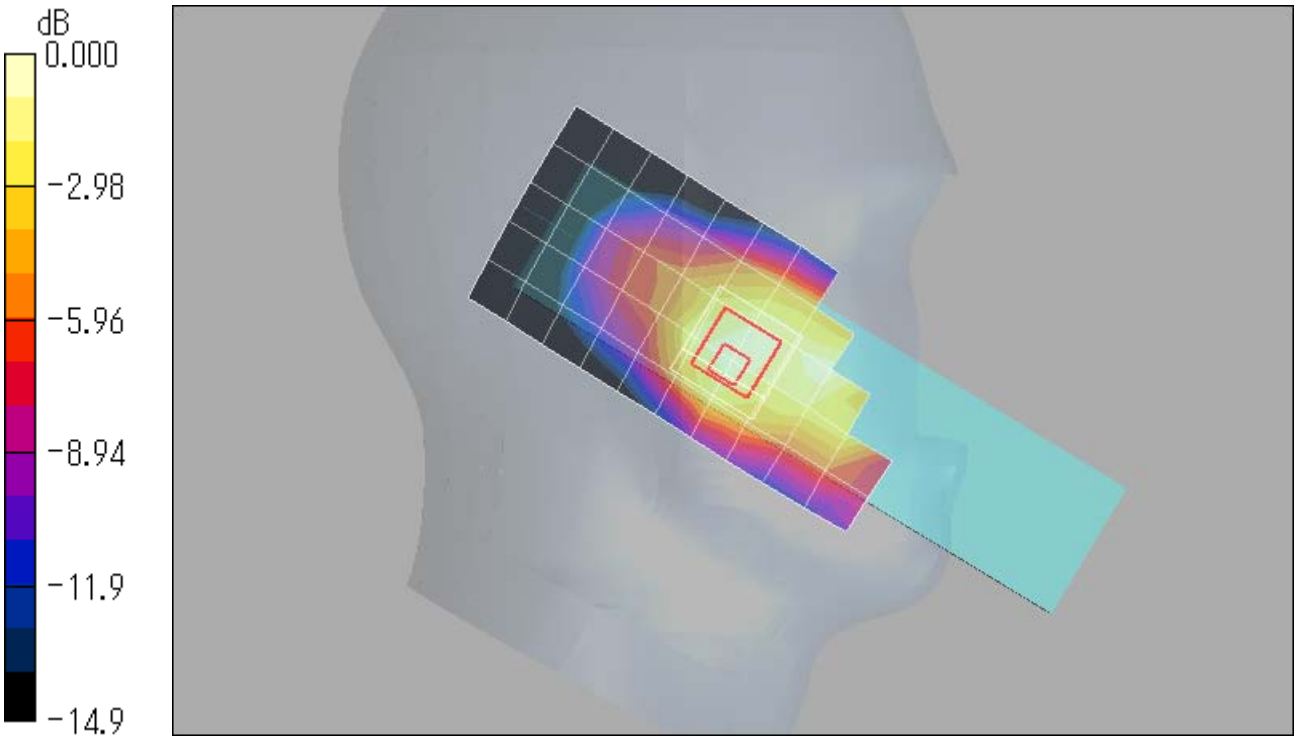
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Left Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.241 mW/g

Left Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.8 V/m; Power Drift = 0.012 dB
Peak SAR (extrapolated) = 0.316 W/kg
SAR(1 g) = 0.221 mW/g; SAR(10 g) = 0.140 mW/g
Maximum value of SAR (measured) = 0.238 mW/g



0 dB = 0.238mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Left Head 661ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

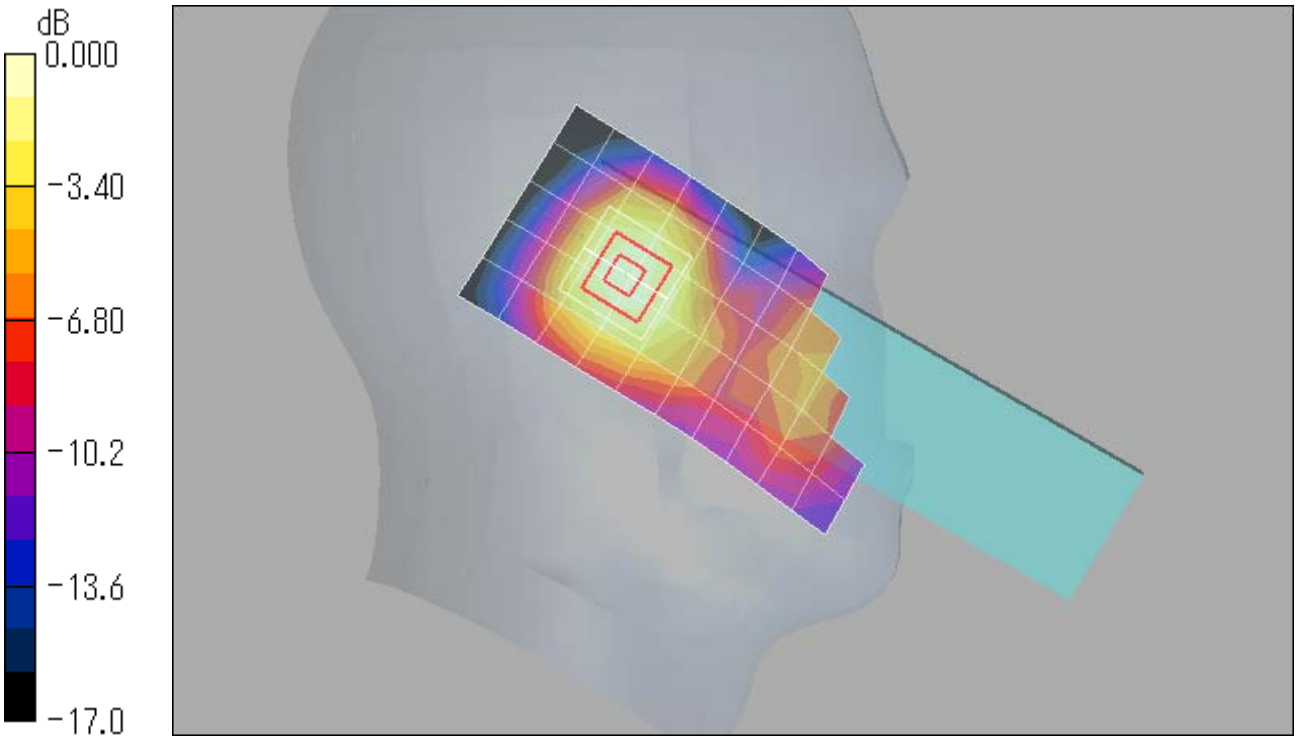
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Left Tilted/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.116 mW/g

Left Tilted/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.21 V/m; Power Drift = 0.010 dB
Peak SAR (extrapolated) = 0.156 W/kg
SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.071 mW/g
Maximum value of SAR (measured) = 0.119 mW/g



0 dB = 0.119mW/g

Date/Time: 2012/10/24 13:20:18

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 512ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

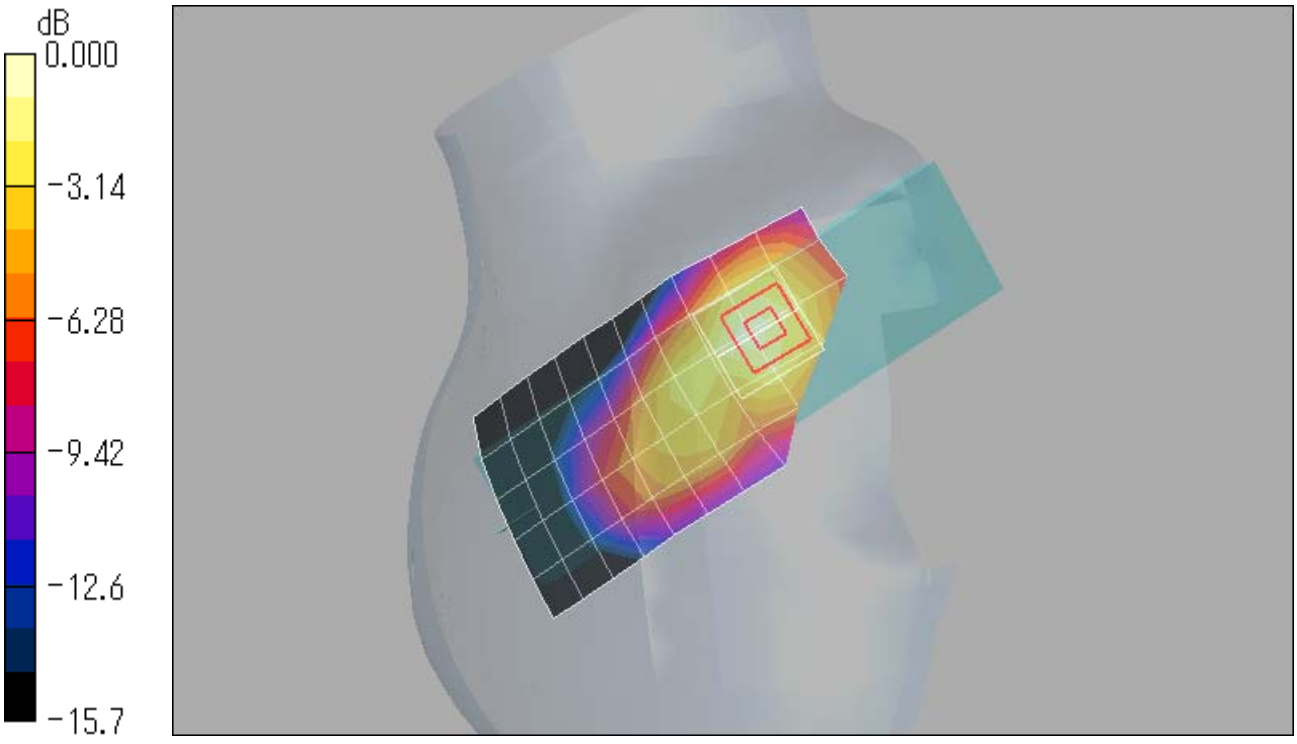
Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.38 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.286 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.3 V/m; Power Drift = -0.020 dB
Peak SAR (extrapolated) = 0.393 W/kg
SAR(1 g) = 0.271 mW/g; SAR(10 g) = 0.160 mW/g
Maximum value of SAR (measured) = 0.295 mW/g



0 dB = 0.295mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 512ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

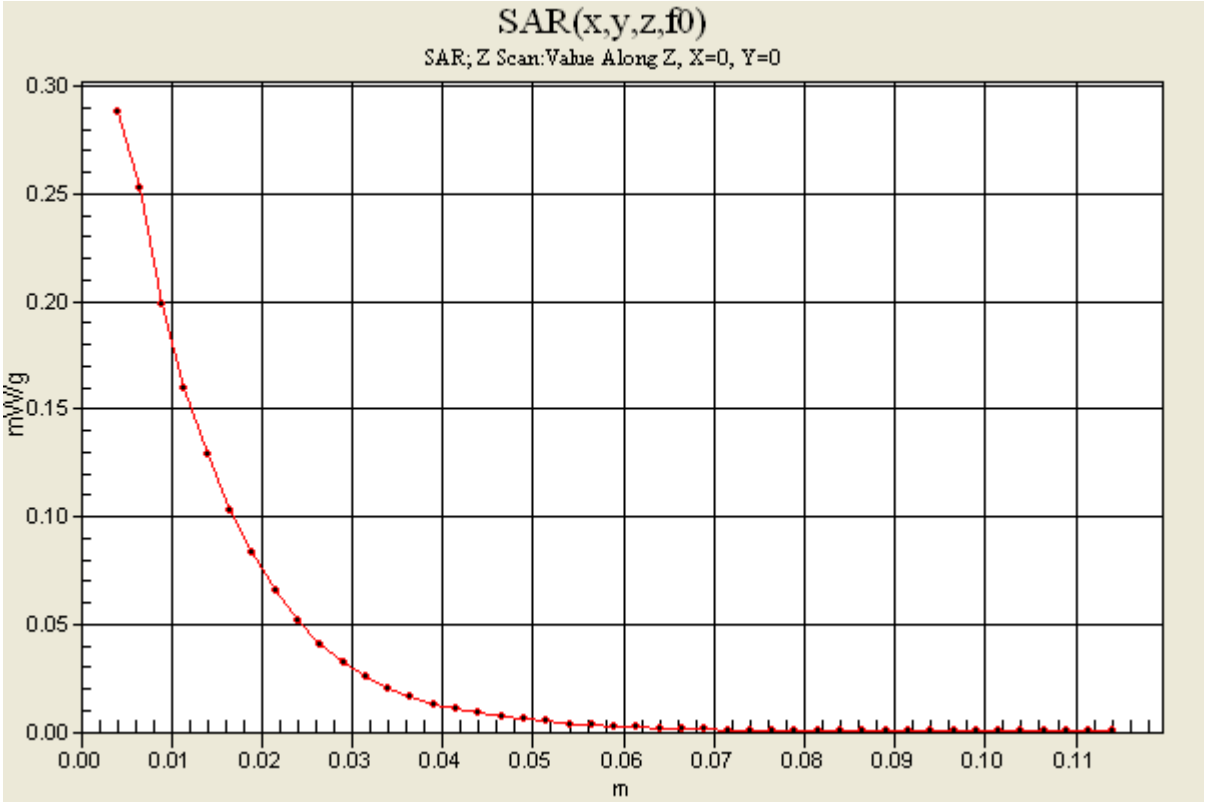
Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.38 mho/m; ε_r = 40.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Z Scan (1x1x45): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.288 mW/g



Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 661ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

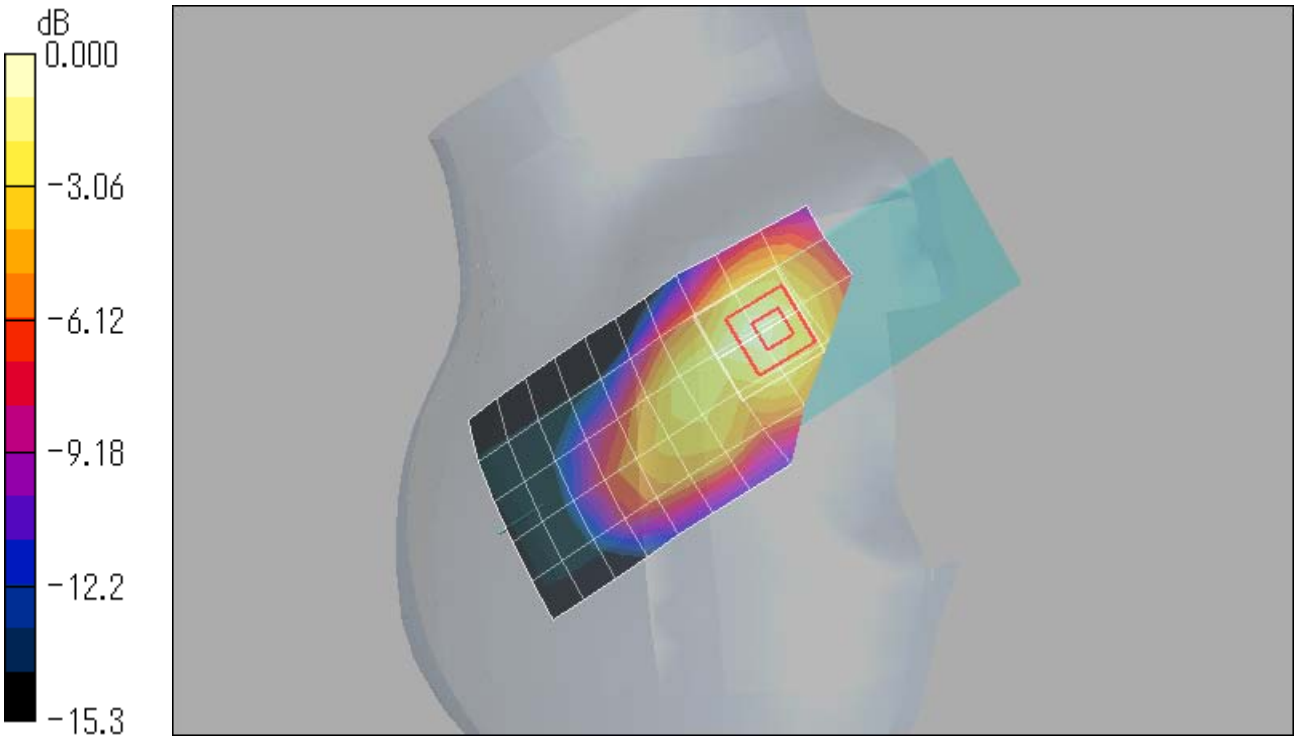
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.280 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.5 V/m; Power Drift = -0.001 dB
Peak SAR (extrapolated) = 0.385 W/kg
SAR(1 g) = 0.265 mW/g; SAR(10 g) = 0.158 mW/g



0 dB = 0.280mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 810ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

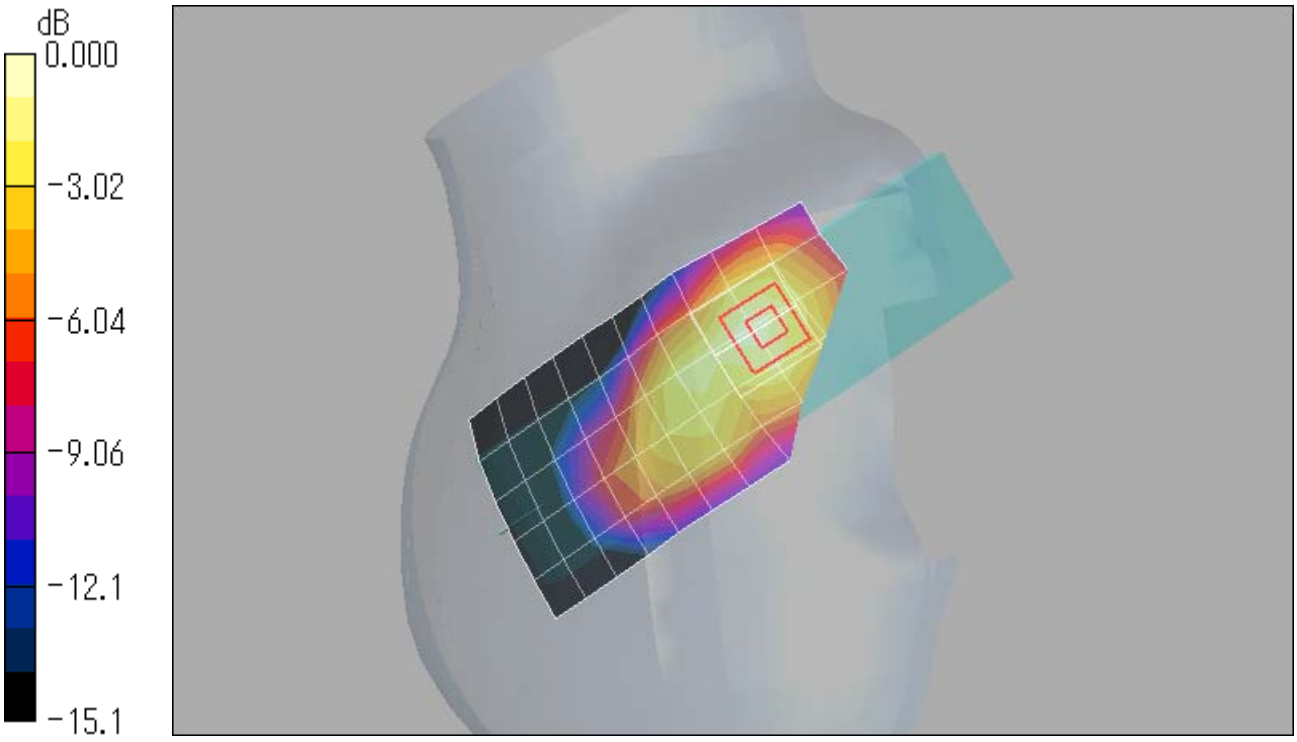
Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz; σ = 1.44 mho/m; ε_r = 40.2; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Touched/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.257 mW/g

Right Touched/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 10.4 V/m; Power Drift = -0.007 dB
Peak SAR (extrapolated) = 0.356 W/kg
SAR(1 g) = 0.242 mW/g; SAR(10 g) = 0.143 mW/g
Maximum value of SAR (measured) = 0.260 mW/g



0 dB = 0.260mW/g

Date/Time: 2012/10/24 13:48:44

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Right Head 661ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

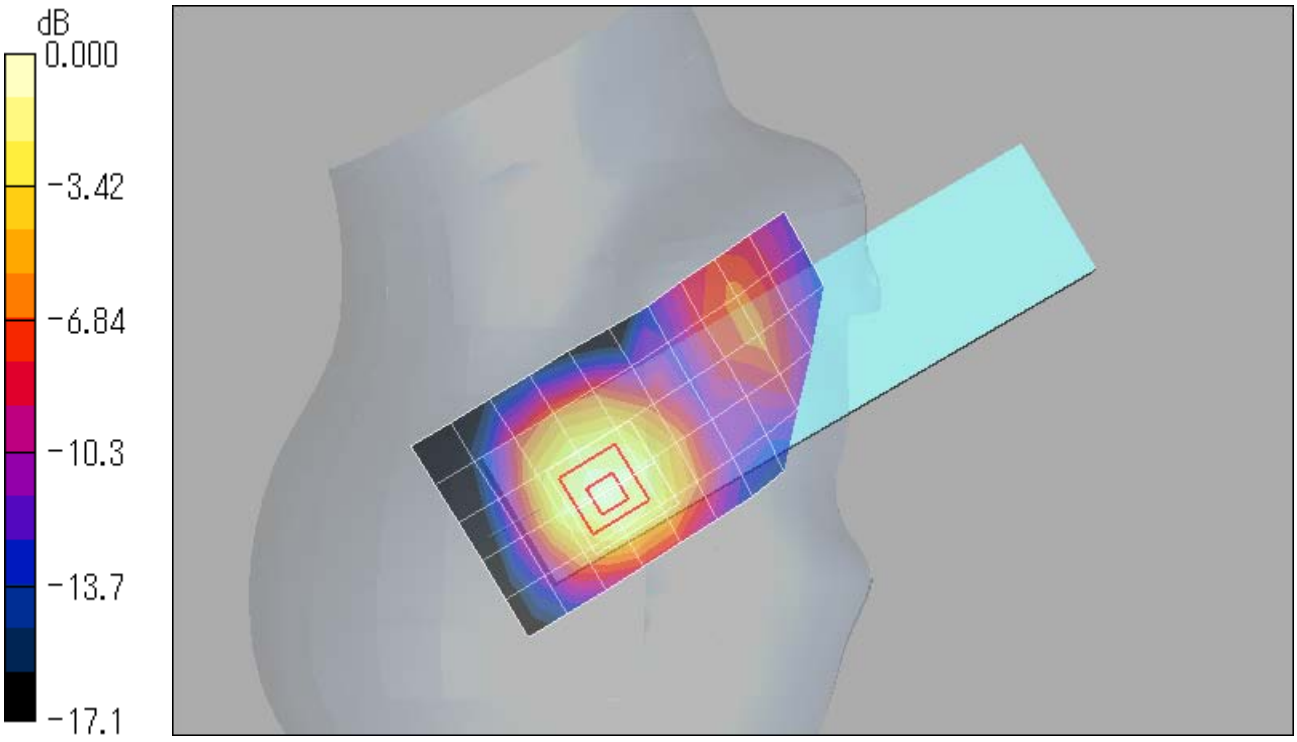
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.41 mho/m; ε_r = 40.3; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(5.06, 5.06, 5.06); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Right Tilted/Area Scan (11x6x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.158 mW/g

Right Tilted/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 7.01 V/m; Power Drift = -0.005 dB
Peak SAR (extrapolated) = 0.215 W/kg
SAR(1 g) = 0.149 mW/g; SAR(10 g) = 0.093 mW/g
Maximum value of SAR (measured) = 0.160 mW/g



0 dB = 0.160mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 661ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

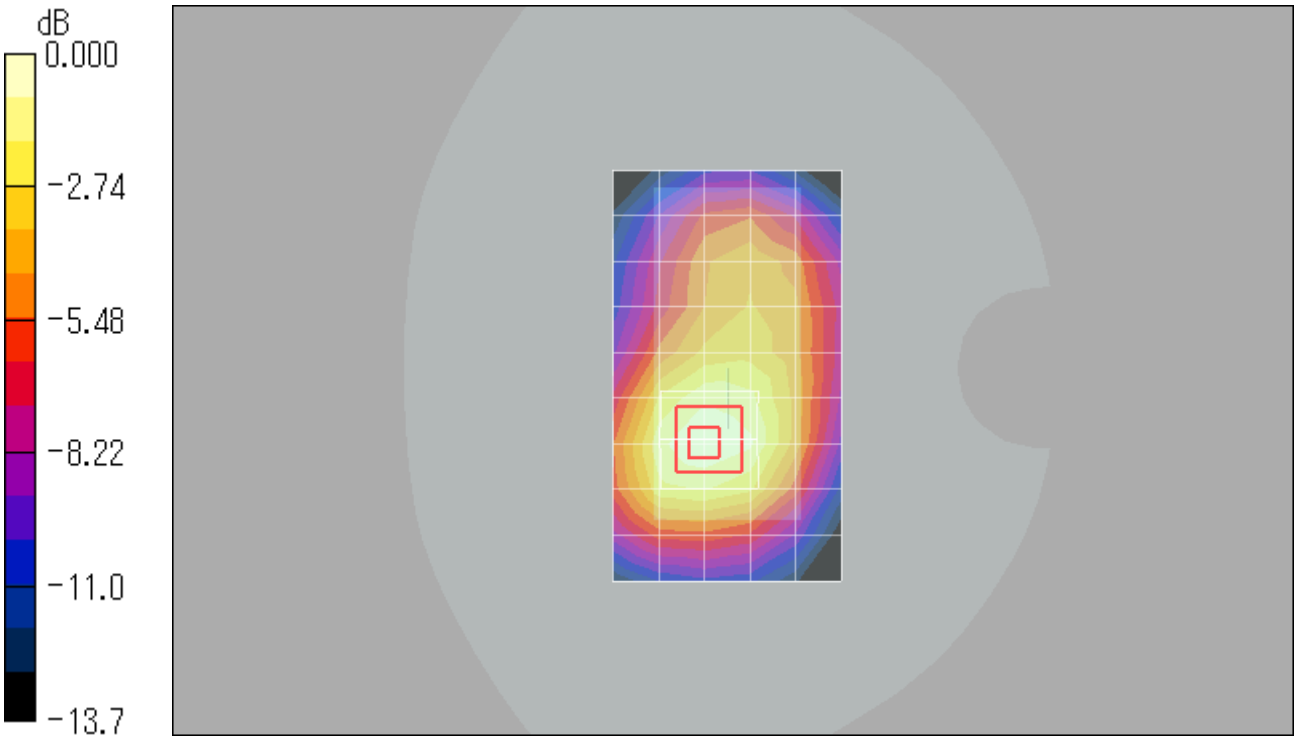
- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Front Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.229 mW/g

Front Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.1 V/m; Power Drift = 0.013 dB
Peak SAR (extrapolated) = 0.320 W/kg
SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.134 mW/g
Maximum value of SAR (measured) = 0.226 mW/g



0 dB = 0.226mW/g

Date/Time: 2012/10/24 15:34:51

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 512ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

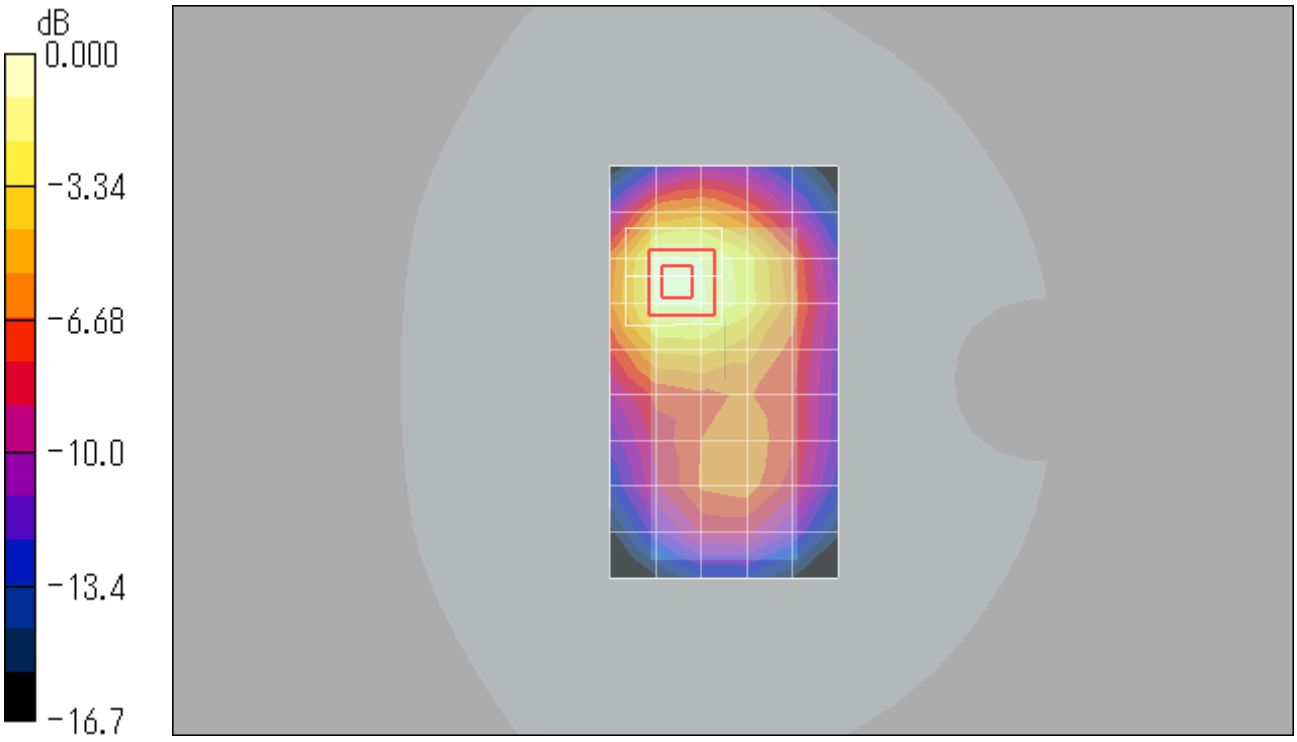
Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.48 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.331 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.2 V/m; Power Drift = 0.017 dB
Peak SAR (extrapolated) = 0.566 W/kg
SAR(1 g) = 0.373 mW/g; SAR(10 g) = 0.225 mW/g
Maximum value of SAR (measured) = 0.406 mW/g



0 dB = 0.406mW/g

Date/Time: 2012/10/24 16:00:48

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 512ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

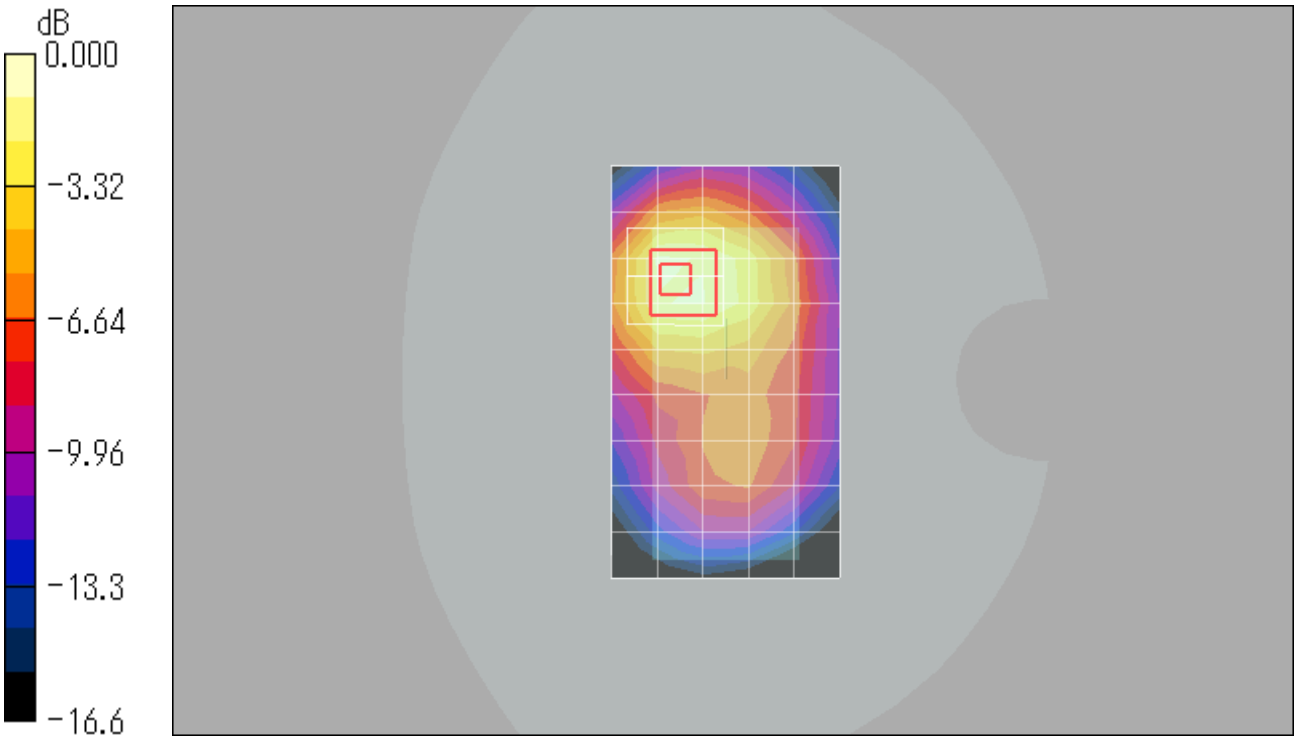
Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.48 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side w/headset/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.330 mW/g

Rear Side w/headset/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 11.4 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 0.576 W/kg
SAR(1 g) = 0.375 mW/g; SAR(10 g) = 0.226 mW/g
Maximum value of SAR (measured) = 0.413 mW/g



0 dB = 0.413mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 512ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

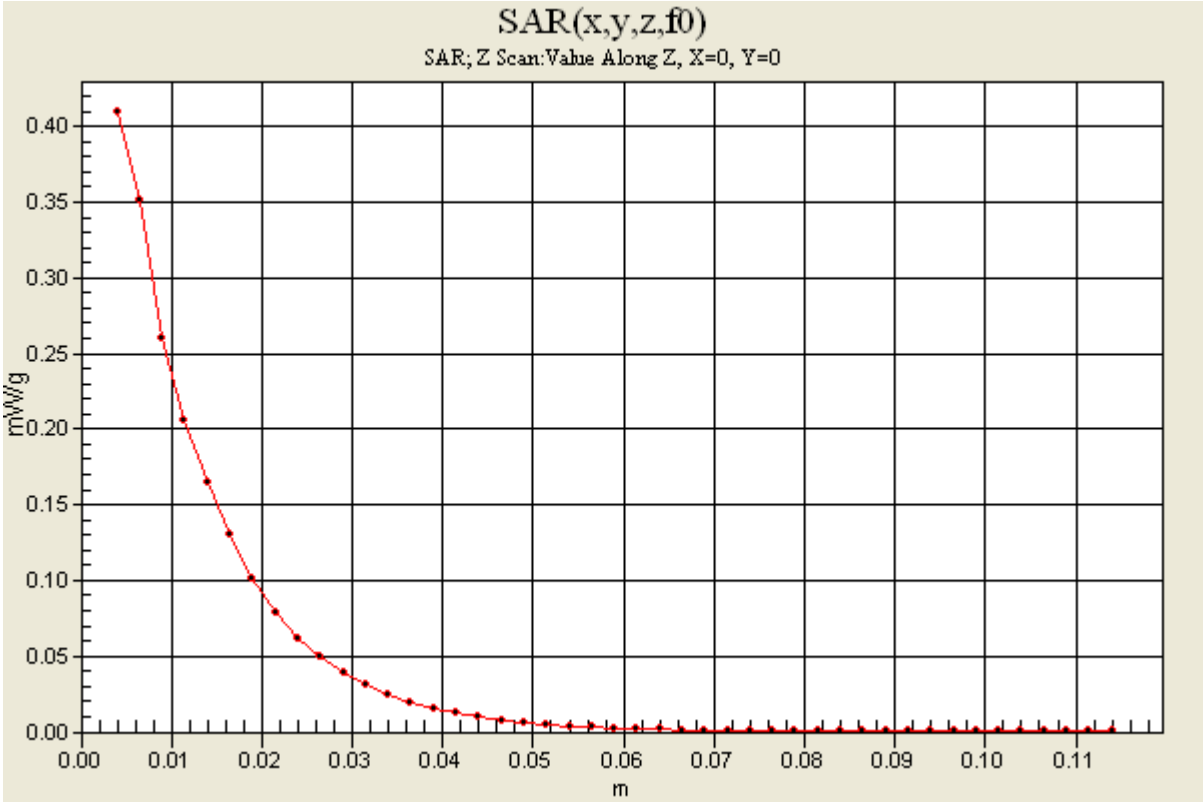
Communication System: PCS 1900; Frequency: 1850.2 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1850.2 MHz; σ = 1.48 mho/m; ε_r = 53.5; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side w/headset/Z Scan (1x1x45): Measurement grid: dx=20mm, dy=20mm, dz=2.5mm

Maximum value of SAR (measured) = 0.410 mW/g



Date/Time: 2012/10/24 15:19:07

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 661ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

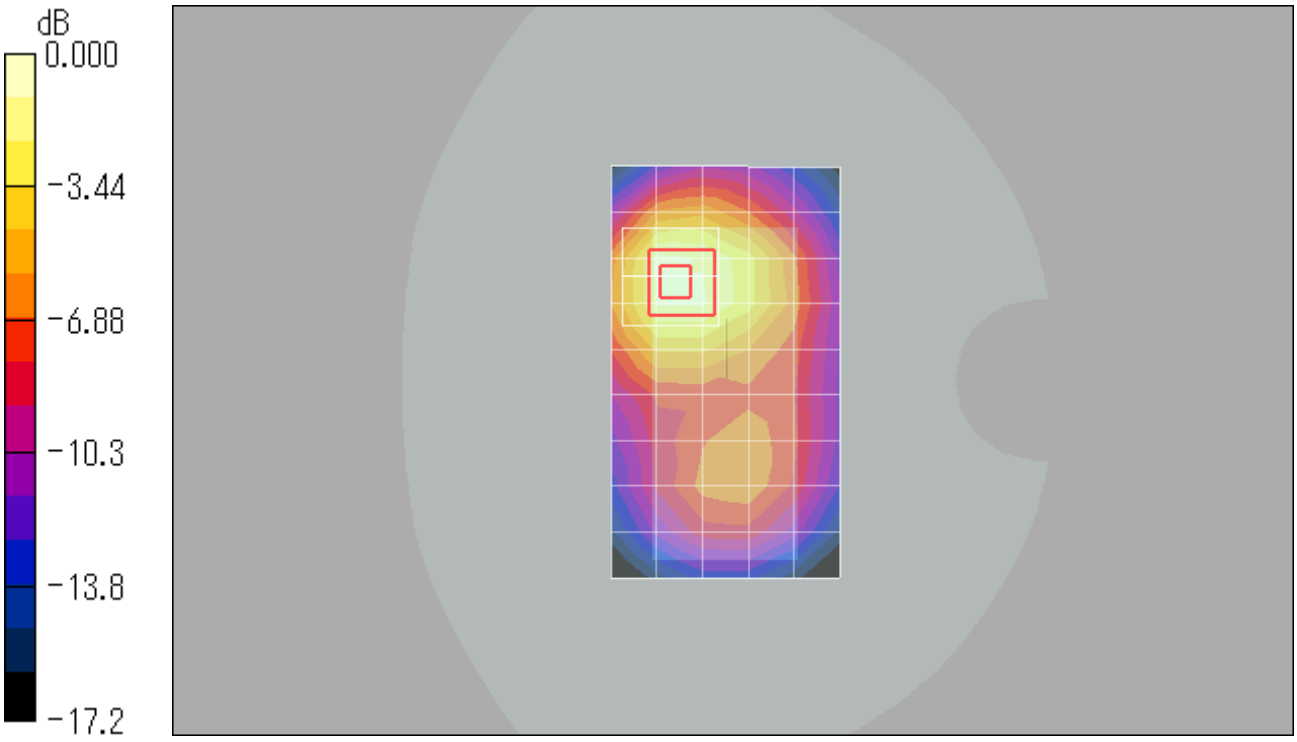
Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1880 MHz; σ = 1.52 mho/m; ε_r = 53.4; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.284 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 9.96 V/m; Power Drift = -0.012 dB
Peak SAR (extrapolated) = 0.486 W/kg
SAR(1 g) = 0.317 mW/g; SAR(10 g) = 0.189 mW/g
Maximum value of SAR (measured) = 0.346 mW/g



0 dB = 0.346mW/g

Test Laboratory: JAPAN QUALITY ASSURANCE ORGANIZATION

Body 810ch / PCS 1900

DUT: Cellular Phone; Type: SH-03E; Serial: 004401114395292

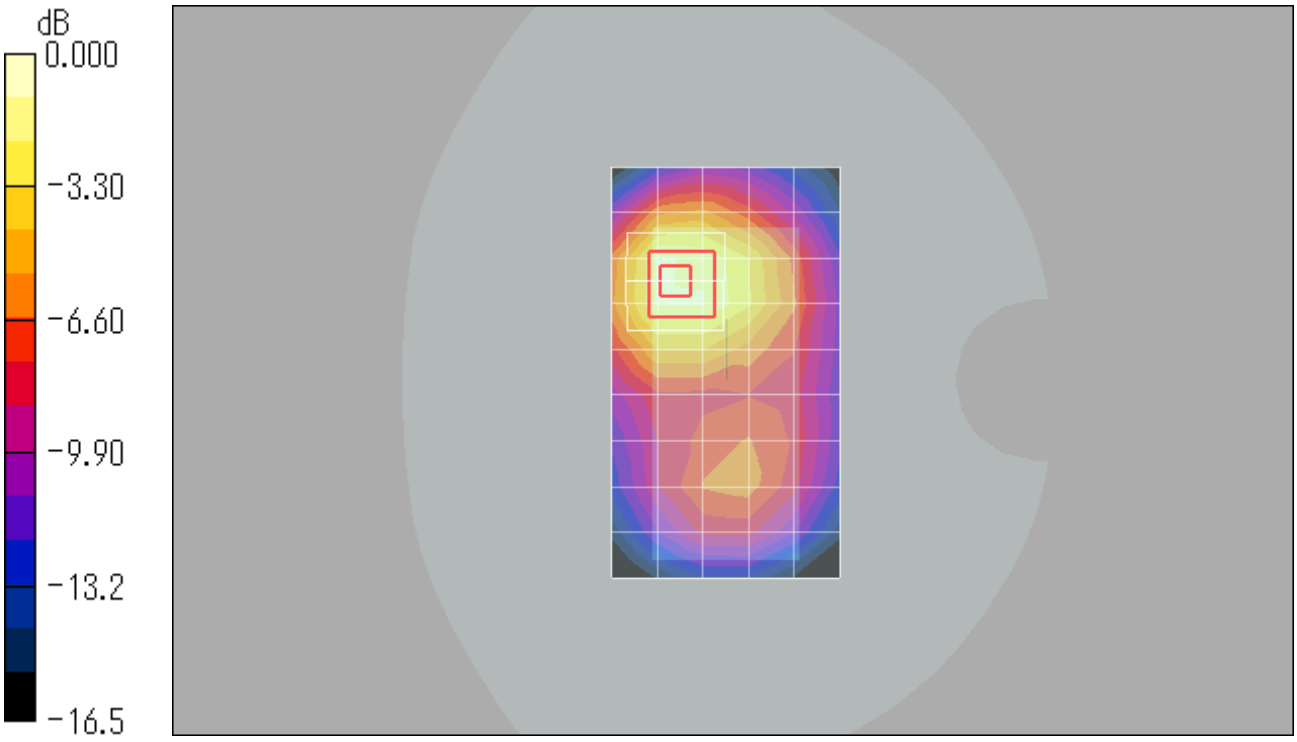
Communication System: PCS 1900; Frequency: 1909.8 MHz; Duty Cycle: 1:8.3
Medium parameters used: f = 1909.8 MHz; σ = 1.56 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

DASY4 Configuration:

- Probe: ET3DV6 - SN1679; ConvF(4.51, 4.51, 4.51); Calibrated: 2012/08/17
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn328; Calibrated: 2012/06/14
- Phantom: SAM; Type: QD 000 P40 CA; Serial: 1200

Rear Side/Area Scan (6x10x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 0.235 mW/g

Rear Side/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 8.67 V/m; Power Drift = 0.018 dB
Peak SAR (extrapolated) = 0.409 W/kg
SAR(1 g) = 0.264 mW/g; SAR(10 g) = 0.156 mW/g
Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291mW/g

Appendix 3 – Dosimetric E-Field Probe ET3DV6 – SN: 1679 Calibration Data

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client JQA (PTT)

Certificate No: ET3-1679_Aug12

CALIBRATION CERTIFICATE

Object: ET3DV6 - SN:1679

Calibration procedure(s): QA CAL-01.v8, QA CAL-23.v4, QA CAL-25.v4
Calibration procedure for dosimetric E-field probes

Calibration date: August 17, 2012

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	29-Mar-12 (No. 217-01508)	Apr-13
Power sensor E4412A	MY41498087	29-Mar-12 (No. 217-01508)	Apr-13
Reference 3 dB Attenuator	SN: S5054 (3c)	27-Mar-12 (No. 217-01531)	Apr-13
Reference 20 dB Attenuator	SN: S5086 (20b)	27-Mar-12 (No. 217-01529)	Apr-13
Reference 30 dB Attenuator	SN: S5129 (30b)	27-Mar-12 (No. 217-01532)	Apr-13
Reference Probe ES3DV2	SN: 3013	29-Dec-11 (No. ES3-3013_Dec11)	Dec-12
DAE4	SN: 660	20-Jun-12 (No. DAE4-660_Jun12)	Jun-13
Secondary Standards	ID	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Apr-11)	In house check: Apr-13
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-11)	In house check: Oct-12

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: August 17, 2012

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConvF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C	modulation dependent linearization parameters
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not affect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- *PAR:* PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- *Ax,y,z; Bx,y,z; Cx,y,z, VRx,y,z: A, B, C* are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. *VR* is the maximum calibration range expressed in RMS voltage across the diode.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe ET3DV6

SN:1679

Manufactured: May 7, 2002
Calibrated: August 17, 2012

Calibrated for DASY/EASY Systems
(Note: non-compatible with DASY2 system!)

DASY/EASY - Parameters of Probe: ET3DV6 - SN:1679

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu V/(V/m)^2$)[A]	1.92	1.96	1.94	± 10.1 %
DCP (mV)[B]	100.0	96.0	98.6	

Modulation Calibration Parameters

UID	Communication System Name	PAR		A dB	B dB	C dB	VR mV	Unc[E] (k=2)
0	CW	0.00	X	0.00	0.00	1.00	155.0	±2.2 %
			Y	0.00	0.00	1.00	147.2	
			Z	0.00	0.00	1.00	155.4	

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Pages 5 and 6).
[B] Numerical linearization parameter: uncertainty not required.
[E] Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

DASY/EASY - Parameters of Probe: ET3DV6 - SN:1679

Calibration Parameter Determined in Head Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha	Depth (mm)	Unct. (k=2)
835	41.5	0.90	6.30	6.30	6.30	0.28	3.00	± 12.0 %
900	41.5	0.97	6.16	6.16	6.16	0.31	3.00	± 12.0 %
1450	40.5	1.20	5.32	5.32	5.32	0.45	3.00	± 12.0 %
1750	40.1	1.37	5.34	5.34	5.34	0.79	2.08	± 12.0 %
1900	40.0	1.40	5.06	5.06	5.06	0.80	2.08	± 12.0 %
1950	40.0	1.40	4.93	4.93	4.93	0.77	2.18	± 12.0 %

[C] Frequency validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

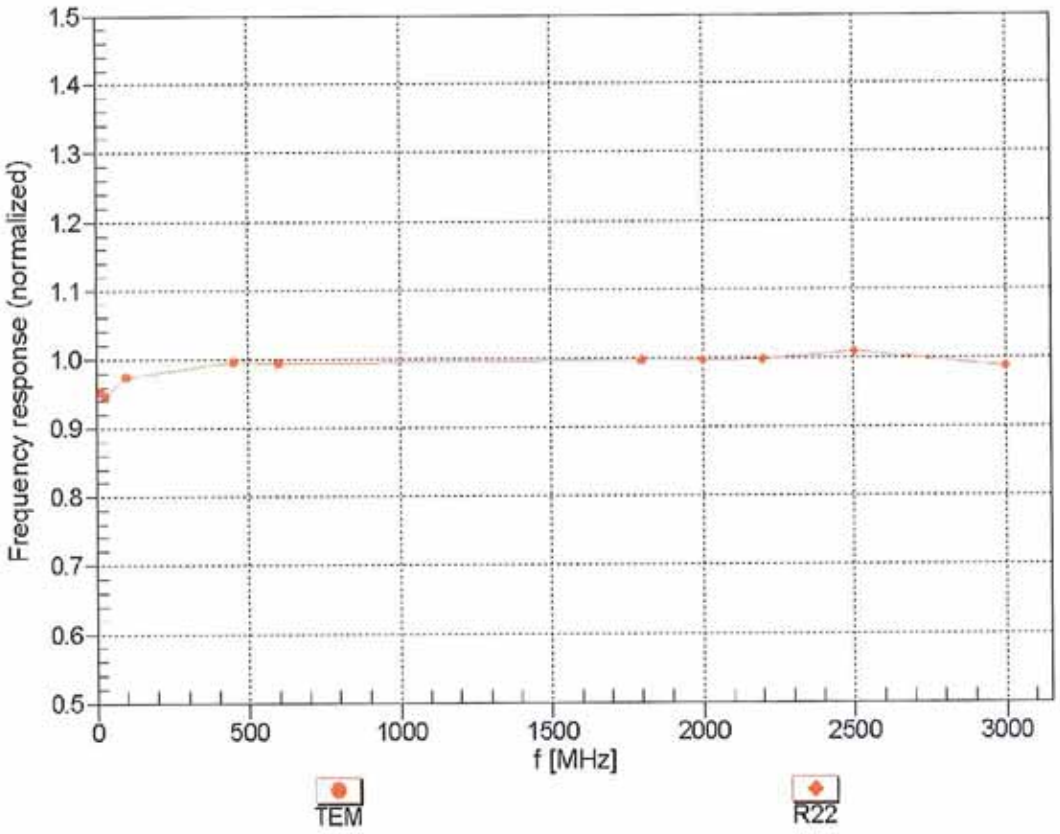
DASY/EASY - Parameters of Probe: ET3DV6 - SN:1679

Calibration Parameter Determined in Body Tissue Simulating Media

f (MHz) [C]	Relative Permittivity [F]	Conductivity (S/m) [F]	ConvF X	ConvF Y	ConvF Z	Alpha	Depth (mm)	Unct. (k=2)
835	55.2	0.97	6.21	6.21	6.21	0.39	2.41	± 12.0 %
1750	53.4	1.49	4.75	4.75	4.75	0.80	2.43	± 12.0 %
1900	53.3	1.52	4.51	4.51	4.51	0.80	2.40	± 12.0 %

[C] Frequency validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ± 50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.
[F] At frequencies below 3 GHz, the validity of tissue parameters (ε and σ) can be relaxed to ± 10% if liquid compensation formula is applied to measured SAR values. At frequencies above 3 GHz, the validity of tissue parameters (ε and σ) is restricted to ± 5%. The uncertainty is the RSS of the ConvF uncertainty for indicated target tissue parameters.

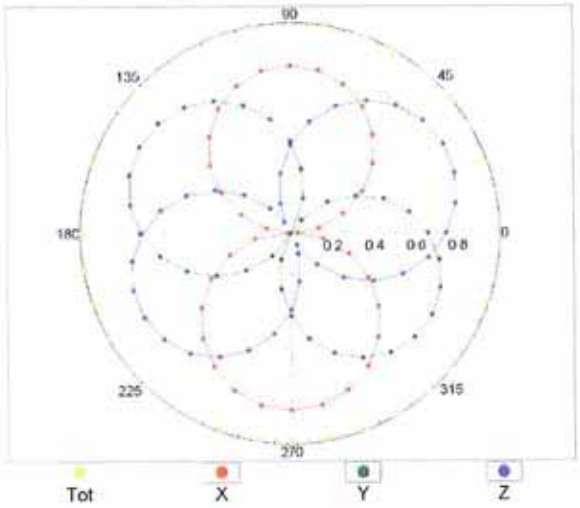
Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)



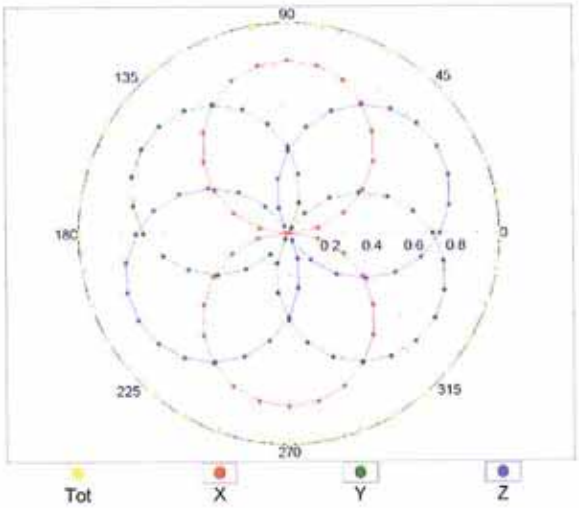
Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

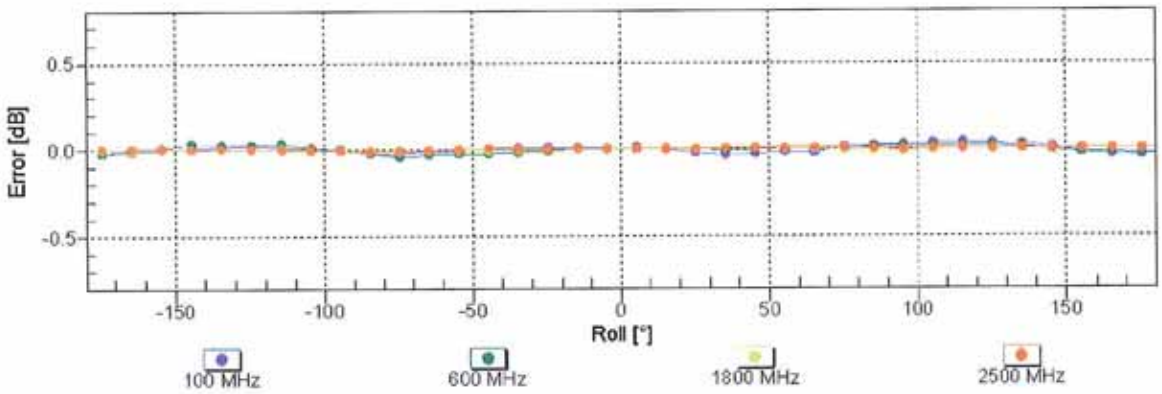
Receiving Pattern (ϕ), ϑ = 0°

f=600 MHz,TEM



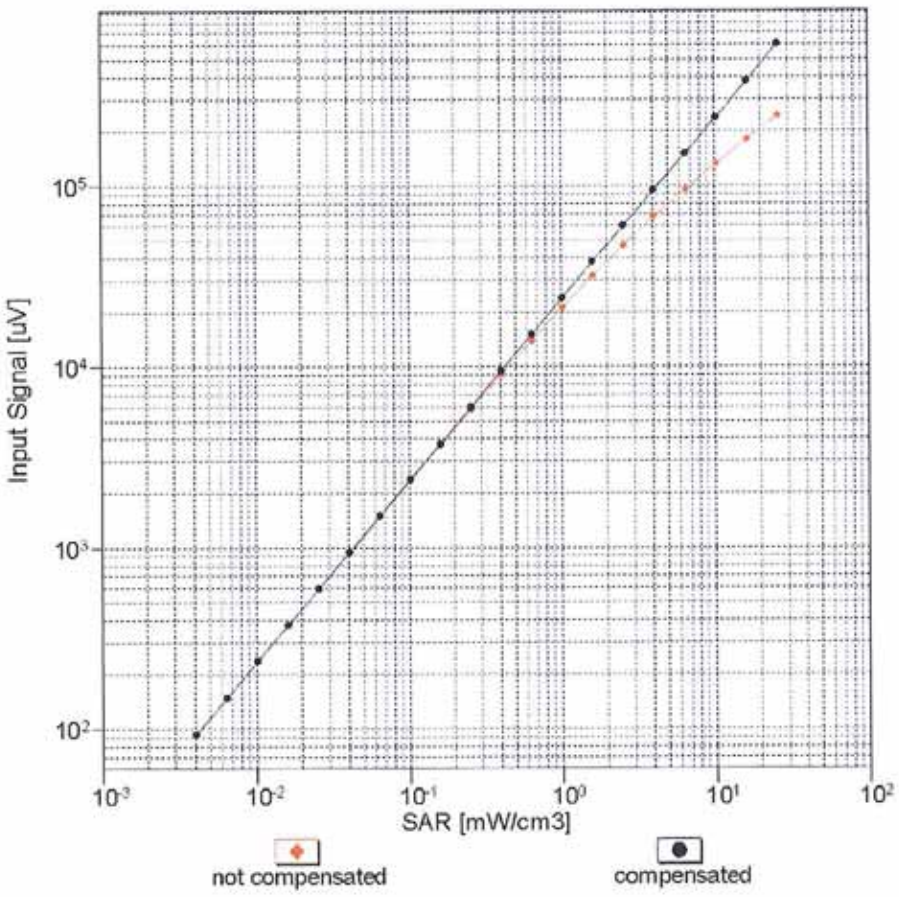
f=1800 MHz,R22

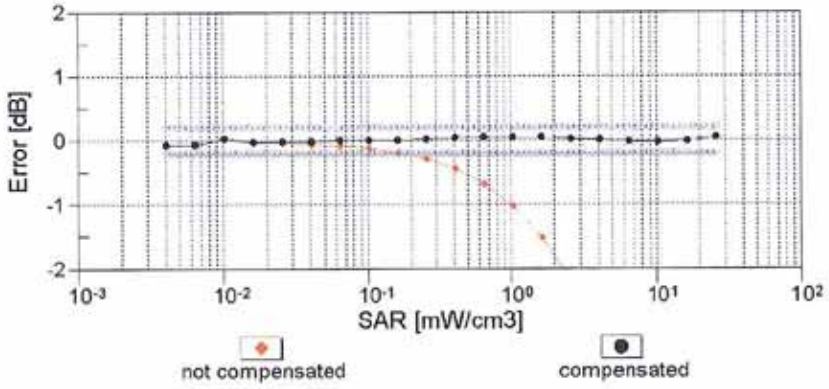




Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

Dynamic Range f(SAR_{head})
(TEM cell , f = 900 MHz)

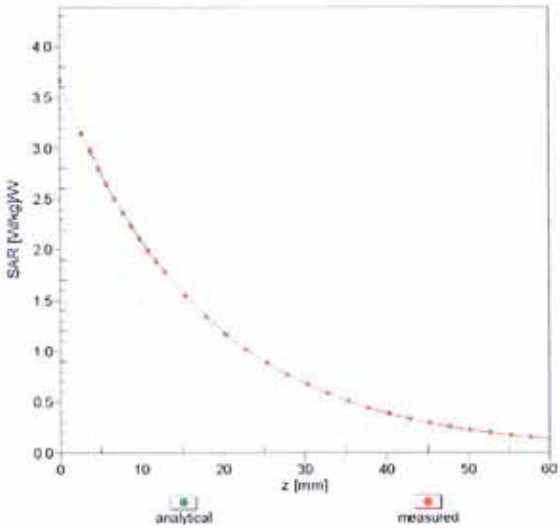




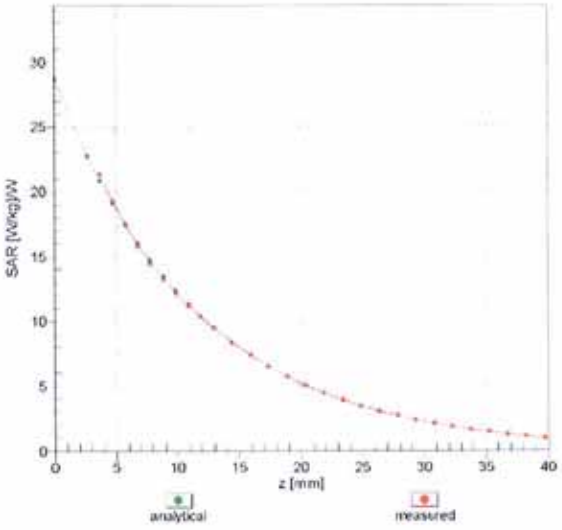
Uncertainty of Linearity Assessment: ± 0.6% (k=2)

Conversion Factor Assessment

f = 900 MHz,WGLS R9 (H_convF)

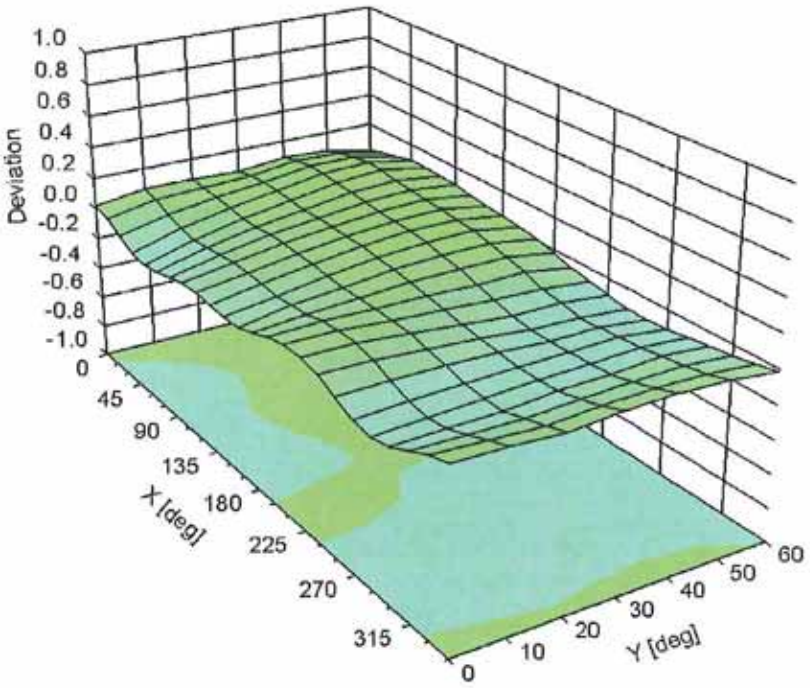


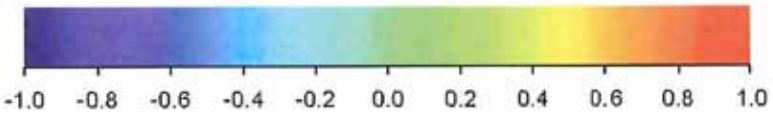
f = 1950 MHz,WGLS R22 (H_convF)



Deviation from Isotropy in Liquid

Error (ϕ, ϑ), f = 900 MHz





Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

DASY/EASY - Parameters of Probe: ET3DV6 - SN:1679

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	175.5
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	6.8 mm
Probe Tip to Sensor X Calibration Point	2.7 mm
Probe Tip to Sensor Y Calibration Point	2.7 mm
Probe Tip to Sensor Z Calibration Point	2.7 mm
Recommended Measurement Distance from Surface	4 mm

Appendix 4 – System Validation Dipole D835V2 – SN: 4d081 Calibration Data

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client JQA (PTT)

Certificate No: D835V2-4d081_Aug12

CALIBRATION CERTIFICATE

Object: D835V2 - SN: 4d081

Calibration procedure(s): QA CAL-05.v8
Calibration procedure for dipole validation kits above 700 MHz

Calibration date: August 08, 2012

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	05-Oct-11 (No. 217-01451)	Oct-12
Power sensor HP 8481A	US37292783	05-Oct-11 (No. 217-01451)	Oct-12
Reference 20 dB Attenuator	SN: 5058 (20k)	27-Mar-12 (No. 217-01530)	Apr-13
Type-N mismatch combination	SN: 5047.2 / 06327	27-Mar-12 (No. 217-01533)	Apr-13
Reference Probe ES3DV3	SN: 3205	30-Dec-11 (No. ES3-3205_Dec11)	Dec-12
DAE4	SN: 601	27-Jun-12 (No. DAE4-601_Jun12)	Jun-13

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-11)	In house check: Oct-13
RF generator R&S SMT-06	100005	04-Aug-99 (in house check Oct-11)	In house check: Oct-13
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-11)	In house check: Oct-12

	Name	Function	Signature
Calibrated by:	Israe El-Naouq	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: August 8, 2012

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.3 ± 6 %	0.90 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.34 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**9.35 mW /g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.53 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**6.12 mW /g ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	55.2	0.97 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	53.2 ± 6 %	1.00 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	2.44 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**9.46 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	1.60 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**6.25 mW / g ± 16.5 % (k=2)**

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	50.4 Ω - 6.1 jΩ
Return Loss	- 24.3 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	47.0 Ω - 7.0 jΩ
Return Loss	- 22.1 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.393 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	October 17, 2008

DASY5 Validation Report for Head TSL

Date: 07.08.2012

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d081

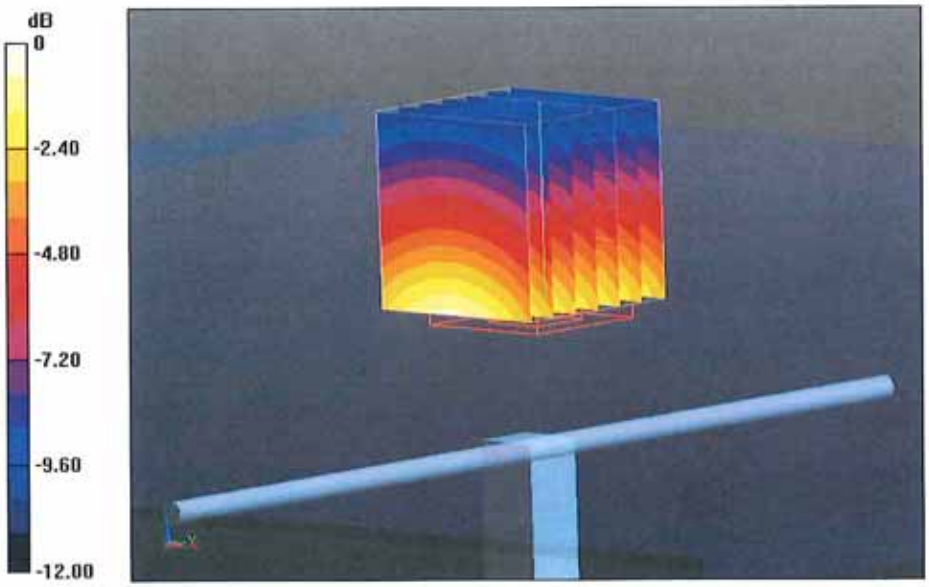
Communication System: CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 0.9 mho/m; ε_r = 41.3; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.07, 6.07, 6.07); Calibrated: 30.12.2011;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.06.2012
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.2(961); SEMCAD X 14.6.6(6816)

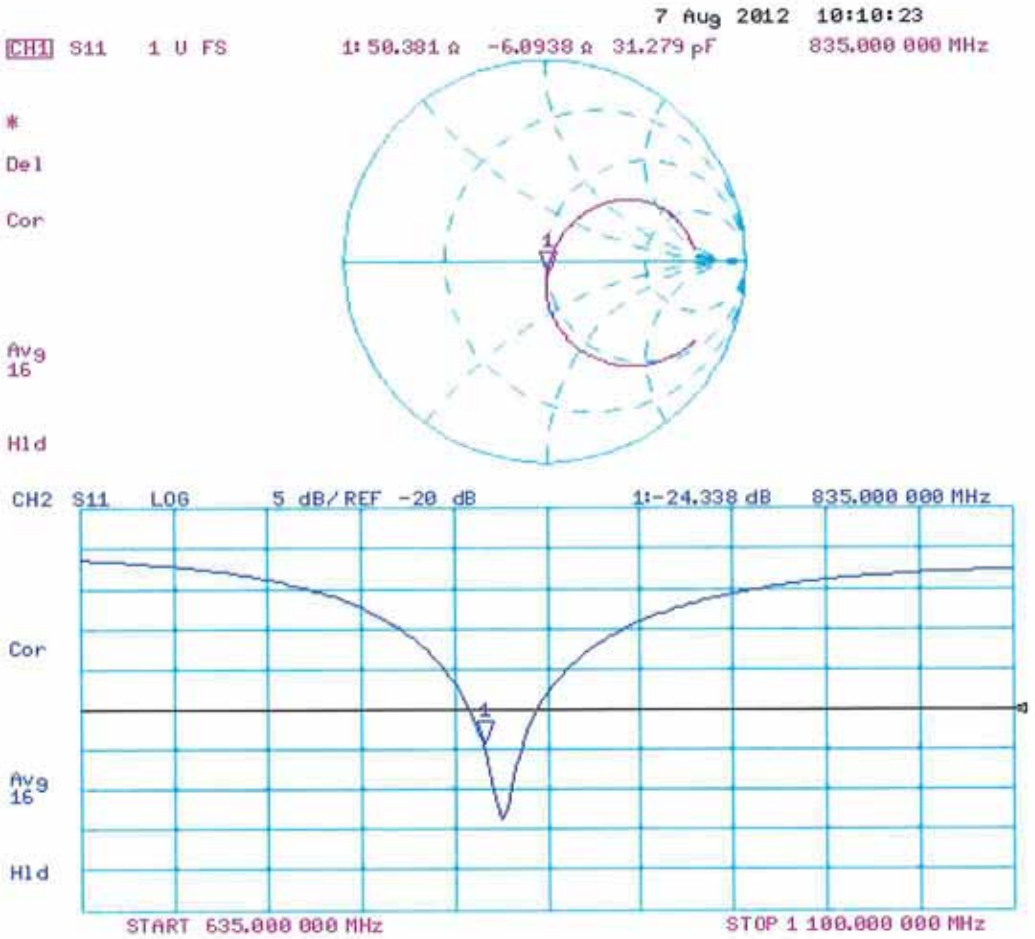
Dipole Calibration for Head Tissue/Pin=250 mW, d=15mm 2/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 56.851 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.463 mW/g
SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.53 mW/g
Maximum value of SAR (measured) = 2.73 W/kg



0 dB = 2.73 W/kg = 8.72 dB W/kg

Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 08.08.2012

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d081

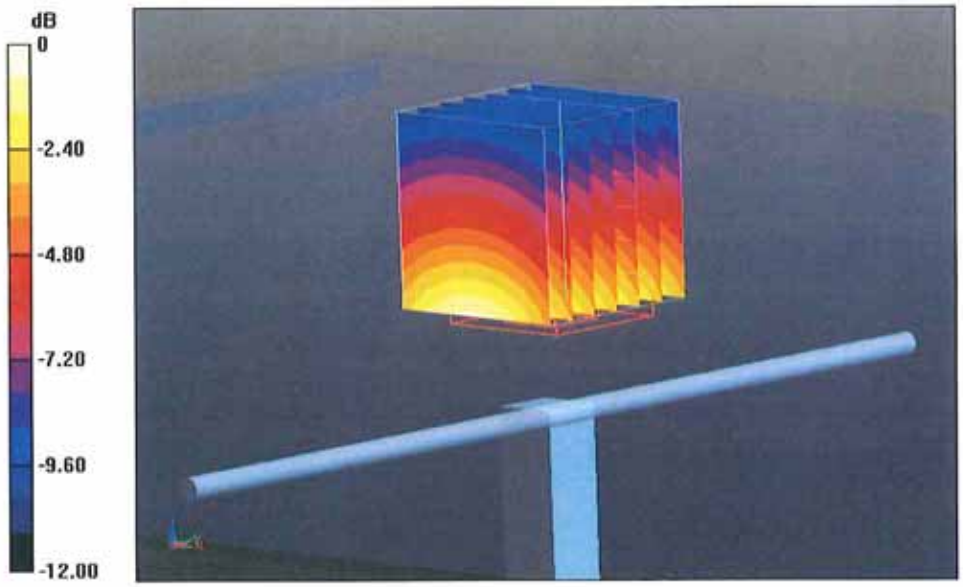
Communication System: CW; Frequency: 835 MHz
Medium parameters used: f = 835 MHz; σ = 1 mho/m; ε_r = 53.2; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(6.02, 6.02, 6.02); Calibrated: 30.12.2011;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.06.2012
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- DASY52 52.8.2(961); SEMCAD X 14.6.6(6816)

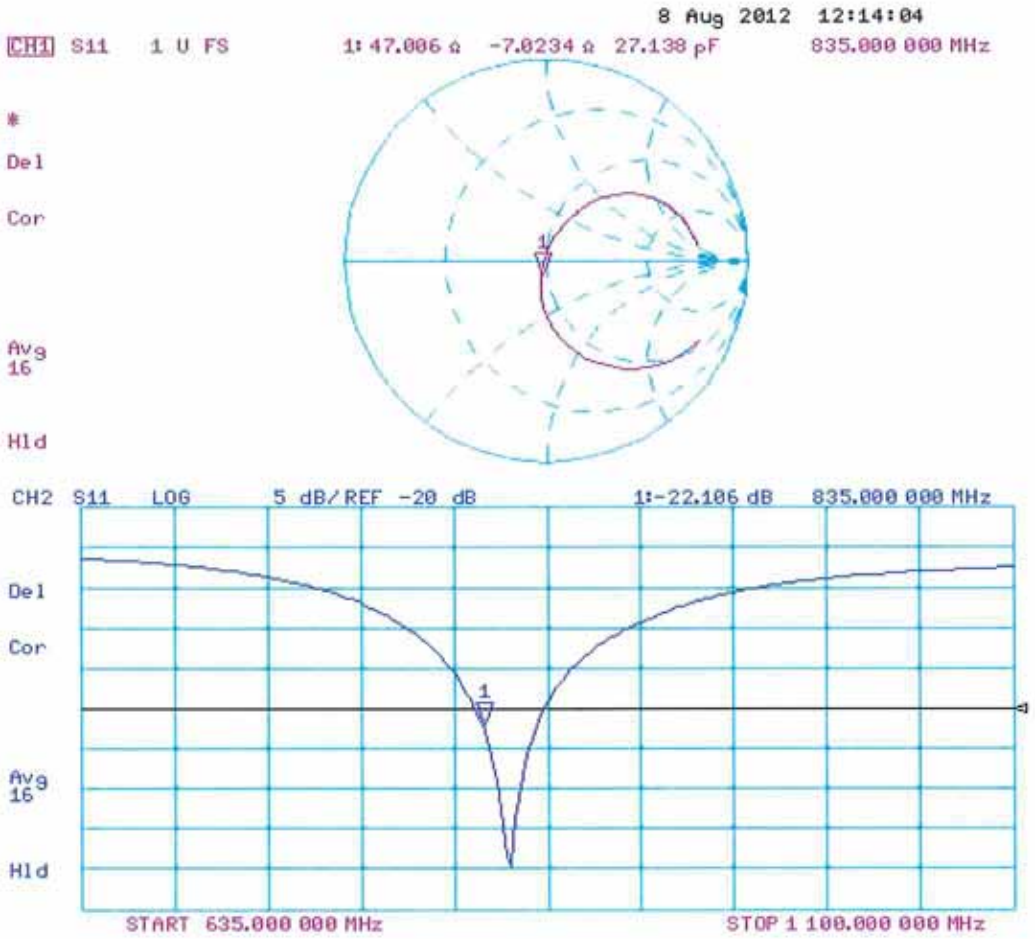
Dipole Calibration for Body Tissue/Pin=250 mW, d=15mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 55.144 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 3.564 mW/g
SAR(1 g) = 2.44 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.84 W/kg



0 dB = 2.84 W/kg = 9.07 dB W/kg

Impedance Measurement Plot for Body TSL



Appendix 4 – System Validation Dipole D1900V2 – SN: 5d112 Calibration Data

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client JQA (PTT)

Certificate No: D1900V2-5d112_Aug12

CALIBRATION CERTIFICATE

Object	D1900V2 - SN: 5d112
Calibration procedure(s)	QA CAL-05.v8 Calibration procedure for dipole validation kits above 700 MHz
Calibration date:	August 14, 2012

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	05-Oct-11 (No. 217-01451)	Oct-12
Power sensor HP 8481A	US37292783	05-Oct-11 (No. 217-01451)	Oct-12
Reference 20 dB Attenuator	SN: 5058 (20k)	27-Mar-12 (No. 217-01530)	Apr-13
Type-N mismatch combination	SN: 5047.2 / 06327	27-Mar-12 (No. 217-01533)	Apr-13
Reference Probe ES3DV3	SN: 3205	30-Dec-11 (No. ES3-3205_Dec11)	Dec-12
DAE4	SN: 601	27-Jun-12 (No. DAE4-601_Jun12)	Jun-13

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-11)	In house check: Oct-13
RF generator R&S SMT-06	100005	04-Aug-99 (in house check Oct-11)	In house check: Oct-13
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-11)	In house check: Oct-12

	Name	Function	Signature
Calibrated by:	Israe El-Naouq	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: August 14, 2012

Glossary:

TSL	tissue simulating liquid
ConvF	sensitivity in TSL / NORM x,y,z
N/A	not applicable or not measured

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY5	V52.8.2
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom	
Distance Dipole Center - TSL	10 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	1900 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Head TSL parameters	22.0 °C	40.0	1.40 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	39.9 ± 6 %	1.38 mho/m ± 6 %
Head TSL temperature change during test	< 0.5 °C	----	----

SAR result with Head TSL

SAR averaged over 1 cm^3 (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	9.81 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**39.6 mW /g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Head TSL	condition	
SAR measured	250 mW input power	5.19 mW / g
SAR for nominal Head TSL parameters	normalized to 1W	**20.9 mW /g ± 16.5 % (k=2)**

Body TSL parameters

The following parameters and calculations were applied.

	Temperature	**Permittivity**	**Conductivity**
Nominal Body TSL parameters	22.0 °C	53.3	1.52 mho/m
Measured Body TSL parameters	(22.0 ± 0.2) °C	52.5 ± 6 %	1.53 mho/m ± 6 %
Body TSL temperature change during test	< 0.5 °C	----	----

SAR result with Body TSL

SAR averaged over 1 cm^3 (1 g) of Body TSL	Condition	
SAR measured	250 mW input power	10.2 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**40.5 mW / g ± 17.0 % (k=2)**

SAR averaged over 10 cm^3 (10 g) of Body TSL	condition	
SAR measured	250 mW input power	5.39 mW / g
SAR for nominal Body TSL parameters	normalized to 1W	**21.5 mW / g ± 16.5 % (k=2)**

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	50.9 Ω + 6.6 jΩ
Return Loss	- 23.6 dB

Antenna Parameters with Body TSL

Impedance, transformed to feed point	47.1 Ω + 6.4 jΩ
Return Loss	- 22.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.205 ns

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.
No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	March 28, 2008

Date: 14.08.2012

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d112

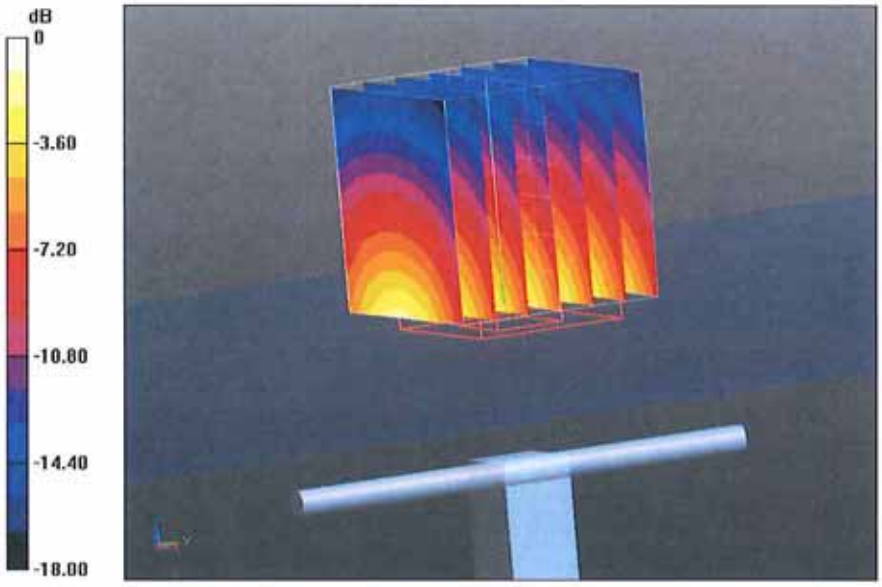
Communication System: CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.38 mho/m; ε_r = 39.9; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(5.01, 5.01, 5.01); Calibrated: 30.12.2011;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.06.2012
- Phantom: Flat Phantom 5.0 (front); Type: QD000P50AA; Serial: 1001
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

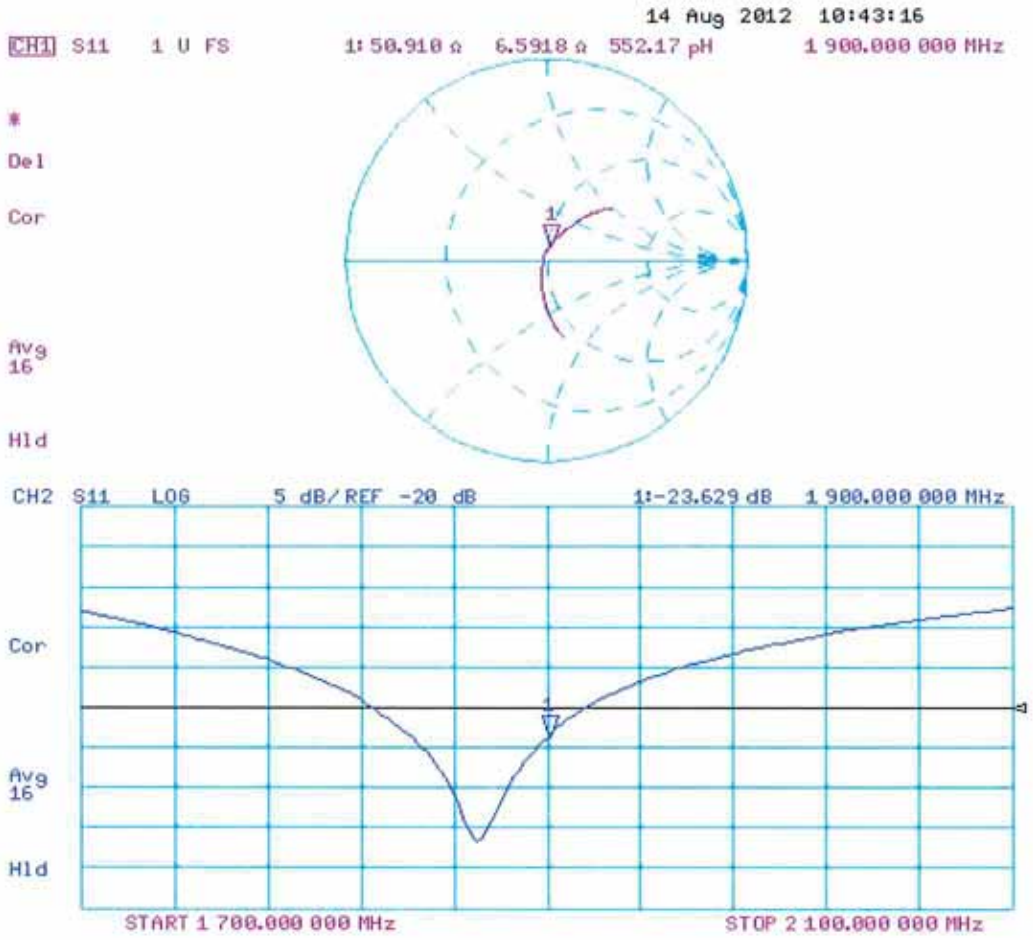
Dipole Calibration for Head Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.184 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 17.454 mW/g
SAR(1 g) = 9.81 mW/g; SAR(10 g) = 5.19 mW/g
Maximum value of SAR (measured) = 12.0 W/kg



0 dB = 12.0 W/kg = 21.58 dB W/kg

Impedance Measurement Plot for Head TSL



Date: 14.08.2012

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 1900 MHz; Type: D1900V2; Serial: D1900V2 - SN: 5d112

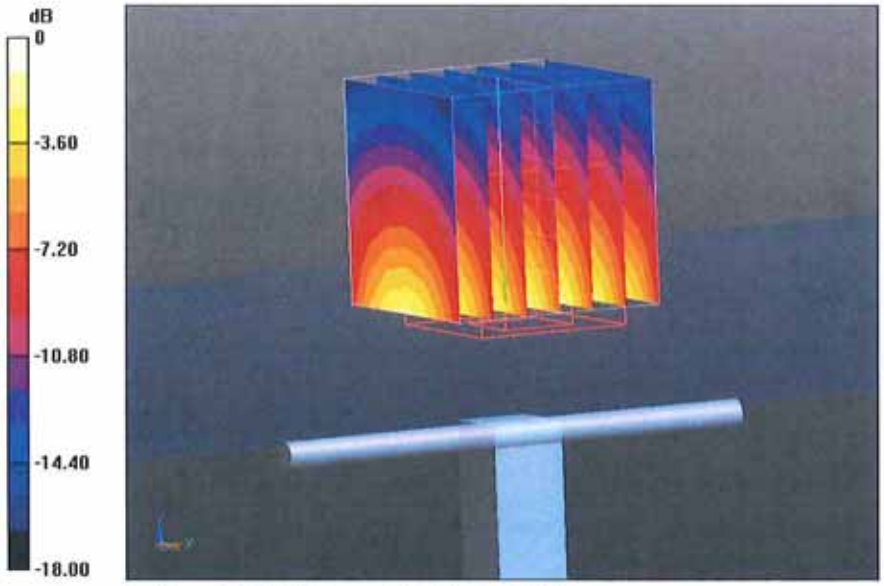
Communication System: CW; Frequency: 1900 MHz
Medium parameters used: f = 1900 MHz; σ = 1.53 mho/m; ε_r = 52.5; ρ = 1000 kg/m^3
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY52 Configuration:

- Probe: ES3DV3 - SN3205; ConvF(4.62, 4.62, 4.62); Calibrated: 30.12.2011;
- Sensor-Surface: 3mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 27.06.2012
- Phantom: Flat Phantom 5.0 (back); Type: QD000P50AA; Serial: 1002
- DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Dipole Calibration for Body Tissue/Pin=250 mW, d=10mm/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 95.184 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 17.839 mW/g
SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.39 mW/g
Maximum value of SAR (measured) = 12.8 W/kg



0 dB = 12.8 W/kg = 22.14 dB W/kg

Impedance Measurement Plot for Body TSL