Test Laboratory: ESTECH

HEAD-LEFT TOUCH 4182-WCDMA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 850; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.973 \text{ mho/m}$; $\varepsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

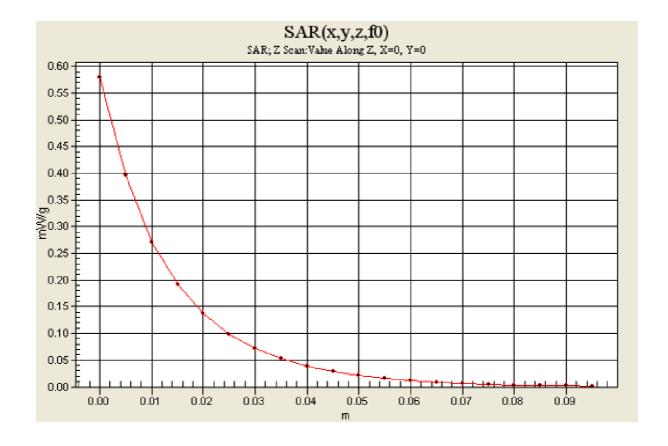
Probe: ET3DV6 - SN1750; ConvF(6.37, 6.37, 6.37); Calibrated: 2009-05-26

Sensor-Surface: 0mm (Fix Surface)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 900; Type: SAM; Serial: tp1262

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 4182-HSDPA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 850; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.973$ mho/m; $\varepsilon_r = 43.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1750; ConvF(6.37, 6.37, 6.37); Calibrated: 2009-05-26

• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 900; Type: SAM; Serial: tp1262

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

• Temperature: 23 , Humidity: 48%

Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm

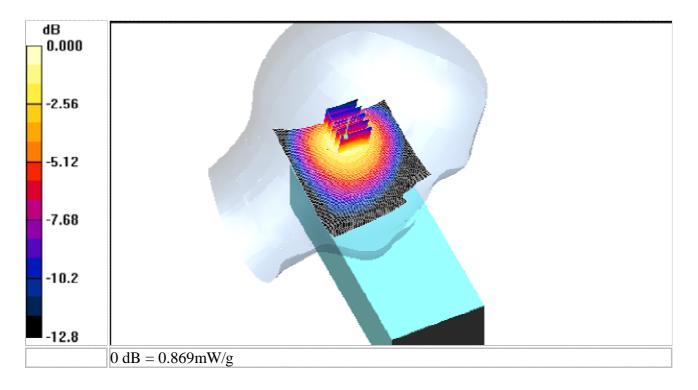
Maximum value of SAR (interpolated) = 0.898 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 27.1 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.812 mW/g; SAR(10 g) = 0.522 mW/gMaximum value of SAR (measured) = 0.869 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 4182-HSDPA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 850; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 836.4 MHz; $\sigma = 0.973 \text{ mho/m}$; $\varepsilon_r = 43.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

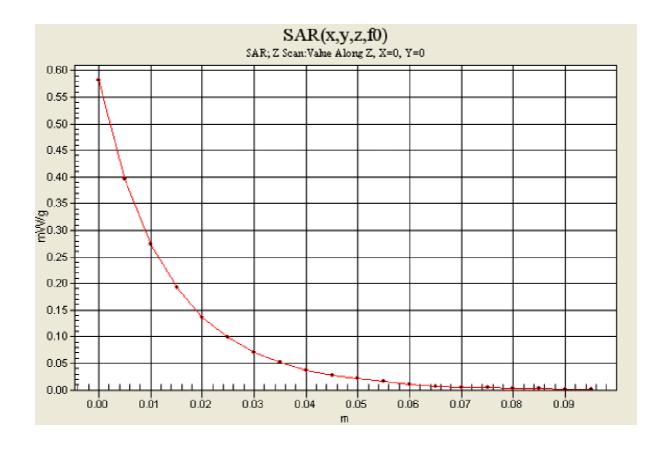
Probe: ET3DV6 - SN1750; ConvF(6.37, 6.37, 6.37); Calibrated: 2009-05-26

Sensor-Surface: 0mm (Fix Surface)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 900; Type: SAM; Serial: tp1262

• Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 9400-WCDMA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 1900; Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.37$ mho/m; $\varepsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ES3DV3 - SN3123; ConvF(4.84, 4.84, 4.84); Calibrated: 2009-01-20

• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

Phantom: SAM 1800; Type: SAM; Serial: TP 1263

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

• Temperature: 23 , Humidity: 48%

Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm

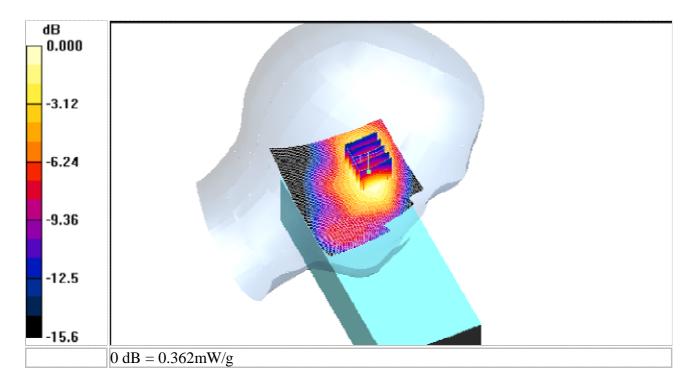
Maximum value of SAR (interpolated) = 0.376 mW/g

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.96 V/m; Power Drift = 0.029 dB

Peak SAR (extrapolated) = 0.550 W/kg

SAR(1 g) = 0.341 mW/g; SAR(10 g) = 0.208 mW/gMaximum value of SAR (measured) = 0.362 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 9400-WCDMA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 1900; Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.37$ mho/m; $\varepsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

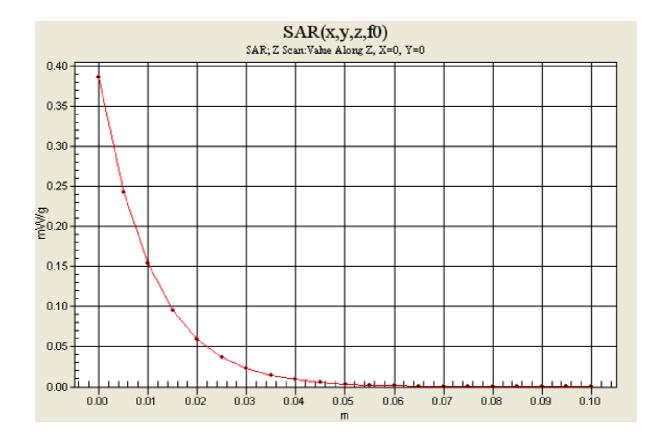
Probe: ES3DV3 - SN3123; ConvF(4.84, 4.84, 4.84); Calibrated: 2009-01-20

Sensor-Surface: 0mm (Fix Surface)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 1800; Type: SAM; Serial: TP 1263

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 9400-HSDPA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 1900; Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.37$ mho/m; $\varepsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ES3DV3 - SN3123; ConvF(4.84, 4.84, 4.84); Calibrated: 2009-01-20

• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 1800; Type: SAM; Serial: TP 1263

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

• Temperature: 23 , Humidity: 48%

Area Scan (71x81x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.367 mW/g

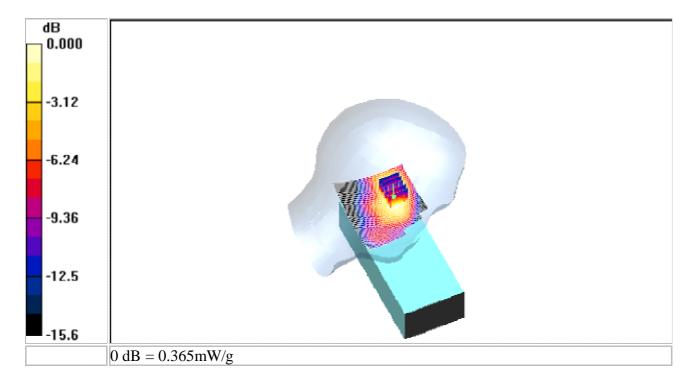
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 6.86 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.559 W/kg

SAR(1 g) = 0.342 mW/g; SAR(10 g) = 0.210 mW/g

Maximum value of SAR (measured) = 0.365 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 9400-HSDPA

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: WCDMA 1900; Frequency: 1880 MHz; Duty Cycle: 1:1 Medium parameters used: f = 1880 MHz; $\sigma = 1.37$ mho/m; $\varepsilon_r = 38.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

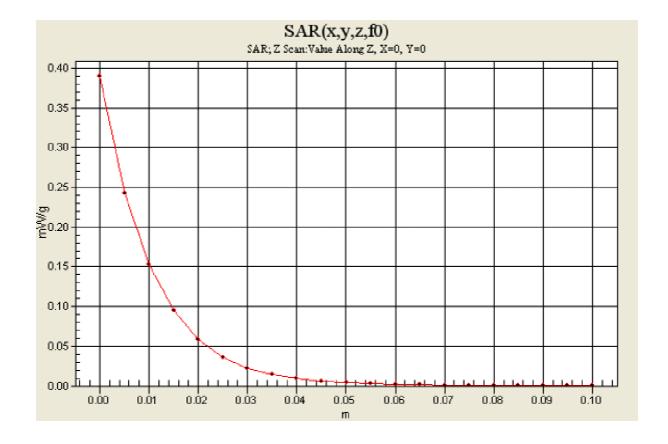
Probe: ES3DV3 - SN3123; ConvF(4.84, 4.84, 4.84); Calibrated: 2009-01-20

Sensor-Surface: 0mm (Fix Surface)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 1800; Type: SAM; Serial: TP 1263

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186



Test Laboratory: ESTECH

HEAD-LEFT TOUCH CH6-11b

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: Wirless; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2437 MHz; $\sigma = 1.83$ mho/m; $\varepsilon_r = 37.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ES3DV3 - SN3123; ConvF(4.44, 4.44, 4.44); Calibrated: 2009-01-20

• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

Phantom: SAM 1800; Type: SAM; Serial: TP 1263

• Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

• Temperature : 22 , Humidity : 46%

Area Scan (71x61x1): Measurement grid: dx=15mm, dy=15mm

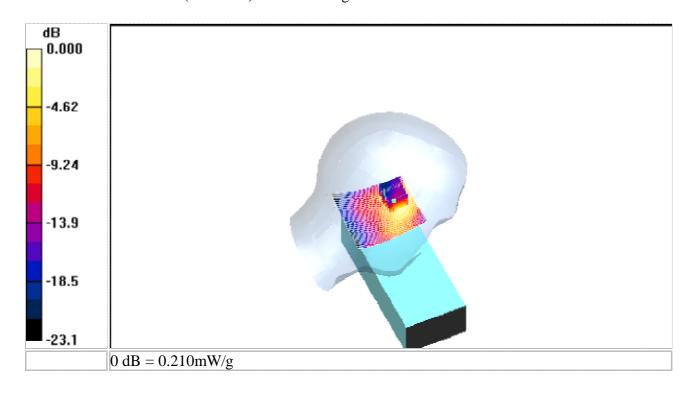
Maximum value of SAR (interpolated) = 0.186 mW/g

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

Reference Value = 4.17 V/m; Power Drift = -0.572 dB

Peak SAR (extrapolated) = 0.354 W/kg

SAR(1 g) = 0.133 mW/g; SAR(10 g) = 0.069 mW/gMaximum value of SAR (measured) = 0.210 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH CH6-11b

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: Wirless; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2437 MHz; $\sigma = 1.83$ mho/m; $\varepsilon_r = 37.4$; $\rho = 1000$ kg/m³

Phantom section: Left Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

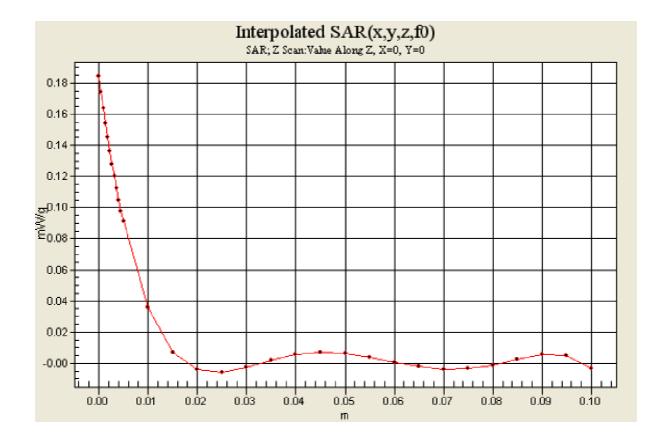
Probe: ES3DV3 - SN3123; ConvF(4.44, 4.44, 4.44); Calibrated: 2009-01-20

Sensor-Surface: 0mm (Fix Surface)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 1800; Type: SAM; Serial: TP 1263

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186



Test Laboratory: ESTECH

HEAD-RIGHT TOUCH CH6-11b

DUT: MM3; Type: BAR TYPE; Serial: XXXX

Communication System: Wirless; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): f = 2437 MHz; $\sigma = 1.83$ mho/m; $\varepsilon_r = 37.4$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ES3DV3 - SN3123; ConvF(4.44, 4.44, 4.44); Calibrated: 2009-01-20

• Sensor-Surface: 4mm (Mechanical Surface Detection)

• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

• Phantom: SAM 1800; Type: SAM; Serial: TP 1263

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

• Temperature: 22 , Humidity: 46%

Area Scan (71x61x1): Measurement grid: dx=15mm, dy=15mm Maximum value of SAR (interpolated) = 0.181 mW/g

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

Reference Value = 5.79 V/m; Power Drift = -0.163 dB

Peak SAR (extrapolated) = 0.325 W/kg

SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.192 mW/g

