

APPENDIX C : SAR Test Data

Test Laboratory: ESTECH

HEAD-LEFT TOUCH 190-GSM

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

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 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

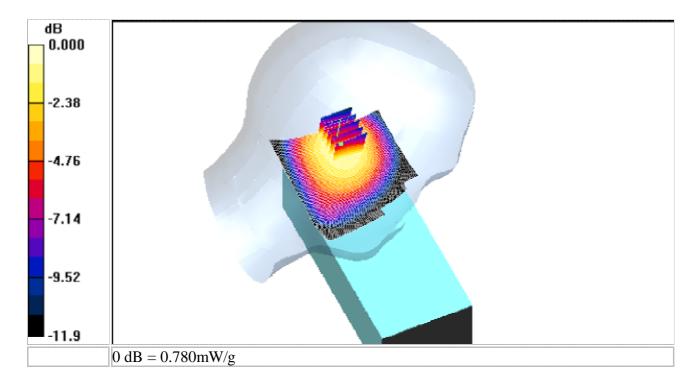
Maximum value of SAR (interpolated) = 0.769 mW/g

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

Reference Value = 26.6 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 1.12 W/kg

SAR(1 g) = 0.723 mW/g; SAR(10 g) = 0.490 mW/gMaximum value of SAR (measured) = 0.780 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 190-GSM

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

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 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

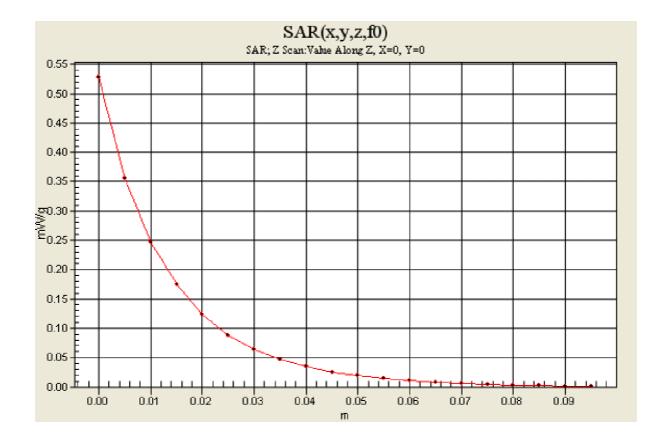
Sensor-Surface: 0mm (Fix Surface)

• 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

• Temperature: 23 , Humidity: 48%



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 190-GPRS

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

Communication System: GSM 850; Frequency: 836.6 MHz;Duty Cycle: 1:8.3

Medium parameters used: f = 837 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

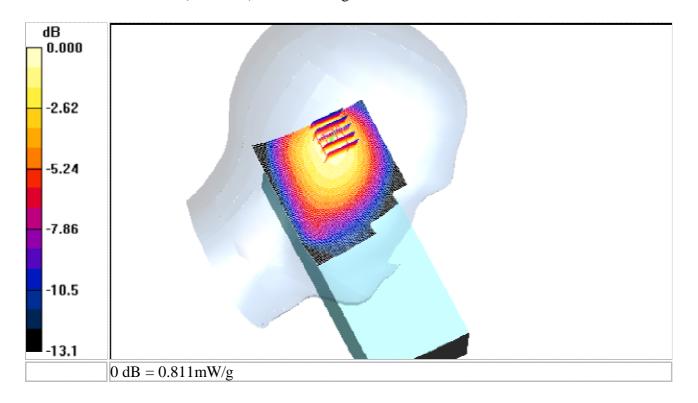
Maximum value of SAR (interpolated) = 0.858 mW/g

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

Reference Value = 26.8 V/m; Power Drift = -0.055 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.757 mW/g; SAR(10 g) = 0.512 mW/gMaximum value of SAR (measured) = 0.811 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 190-GPRS

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

Communication System: GSM 850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: f = 837 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

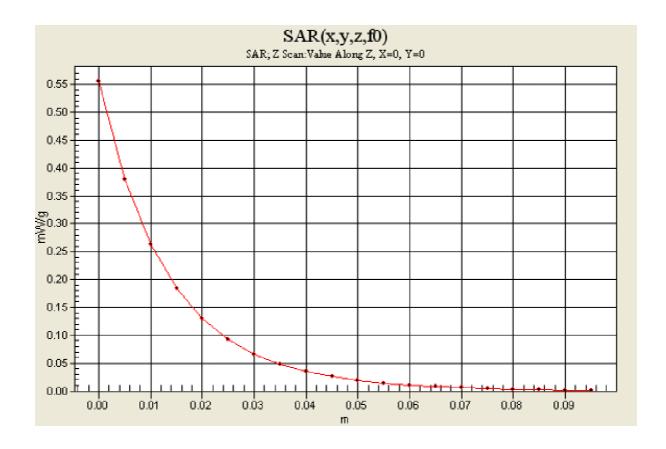
Sensor-Surface: 0mm (Fix Surface)

• 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

• Temperature: 23 , Humidity: 48%



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 661-GSM

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

Communication System: GSM1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

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

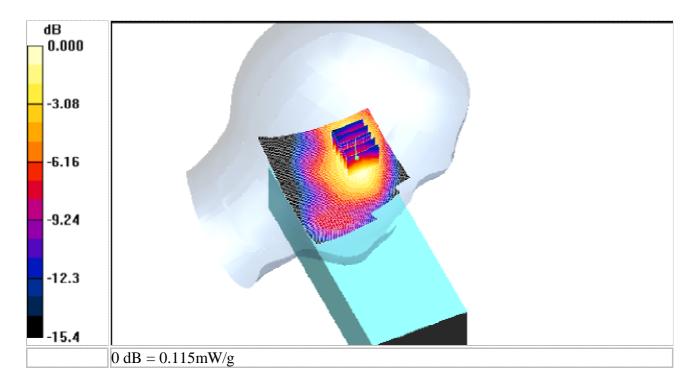
Maximum value of SAR (interpolated) = 0.118 mW/g

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

Reference Value = 3.92 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 0.182 W/kg

SAR(1 g) = 0.108 mW/g; SAR(10 g) = 0.066 mW/gMaximum value of SAR (measured) = 0.115 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 661-GSM

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

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

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)

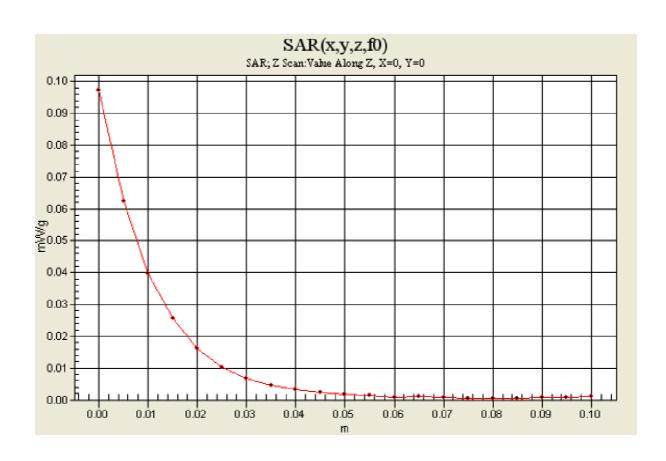
• Electronics: DAE4 Sn551; Calibrated: 2009-04-28

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

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

• Temperature : 23 , Humidity : 48%

.



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 661-GPRS

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

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): f = 1880 MHz; $\sigma = 1.37 \text{ mho/m}$; $\varepsilon_r = 38.4$; $\rho = 1000 \text{ kg/m}^3$

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

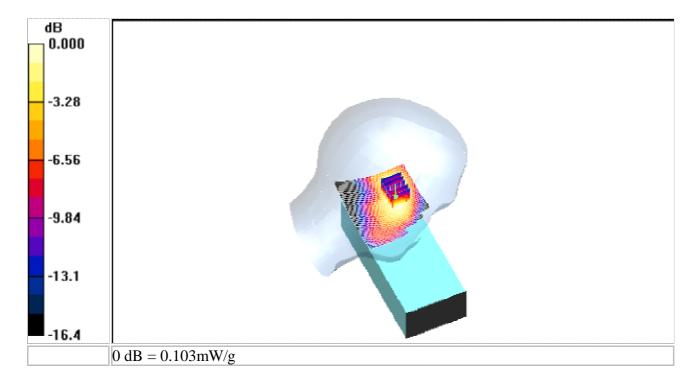
Maximum value of SAR (interpolated) = 0.106 mW/g

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

Reference Value = 3.61 V/m; Power Drift = 0.106 dB

Peak SAR (extrapolated) = 0.161 W/kg

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.058 mW/gMaximum value of SAR (measured) = 0.103 mW/g



Test Laboratory: ESTECH

HEAD-LEFT TOUCH 661-GPRS

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

Communication System: GSM1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used (interpolated): f = 1880 MHz; $\sigma = 1.37 \text{ mho/m}$; $\varepsilon_r = 38.4$; $\rho = 1000 \text{ kg/m}^3$

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

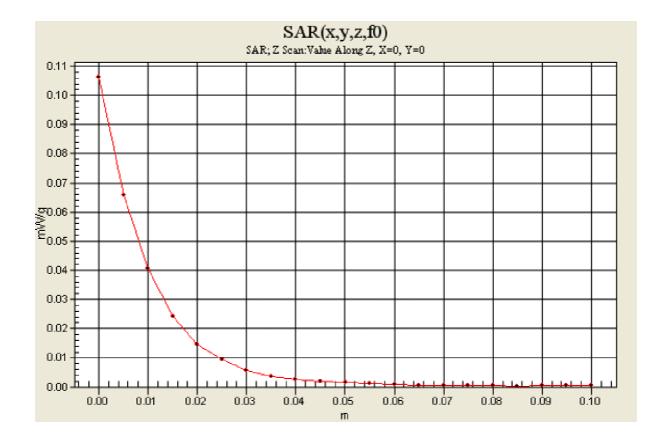
Sensor-Surface: 0mm (Fix Surface)

• 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

• Temperature: 23 , Humidity: 48%



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; $\sigma = 0.973$ 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) = 0.945 mW/g

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

Reference Value = 28.1 V/m; Power Drift = 0.132 dB

Peak SAR (extrapolated) = 1.30 W/kg

SAR(1 g) = 0.832 mW/g; SAR(10 g) = 0.558 mW/gMaximum value of SAR (measured) = 0.906 mW/g

