

SAMSUNG FCC ID : A3LSGHX640 -- 1900MHz GSM1900 Head SAR

DUT: SGH-X640; Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Right (Job No.: FC-002)

Procedure Name: Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.1;Test Date-18/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: GSM 1900; Frequency: 1850.2 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.11, 5.11, 5.11); Calibrated: 2004-09-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn533; Calibrated: 2004-12-03
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Cheek/Touch, Ch. 512, Ant. Intenna, Bat. Standard/Area Scan 2 (61x81x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.479 mW/g

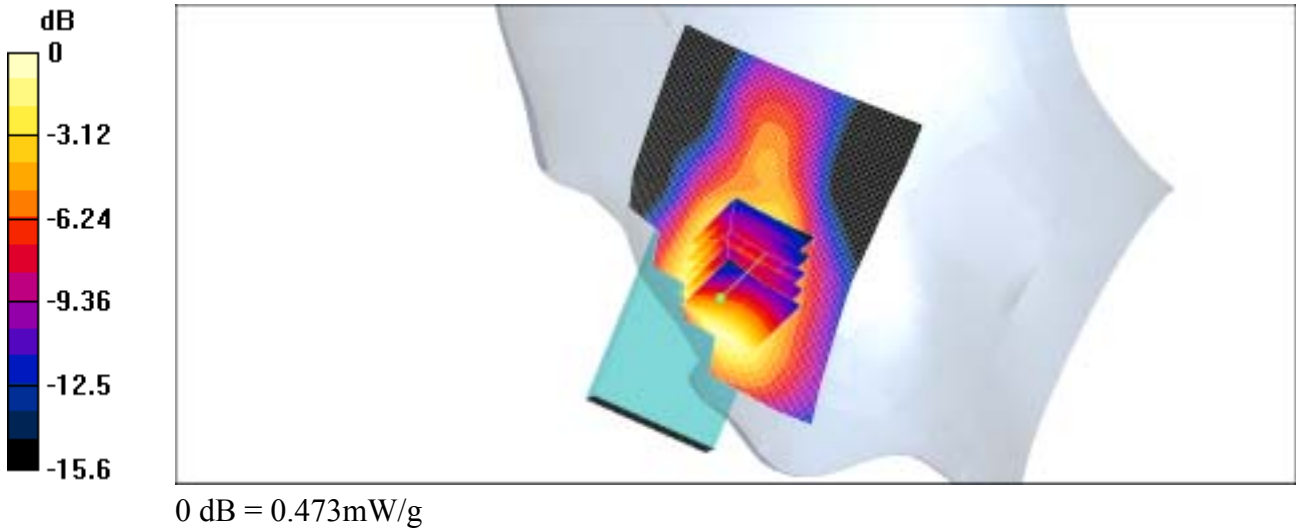
Cheek/Touch, Ch. 512, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.99 V/m; Power Drift = -0.1 dB

Peak SAR (extrapolated) = 0.583 W/kg

SAR(1 g) = 0.445 mW/g

Maximum value of SAR (measured) = 0.473 mW/g



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DUT: SGH-X640; Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Right (Job No.: FC-002)

Procedure Name: Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.1;Test Date-18/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Right Section

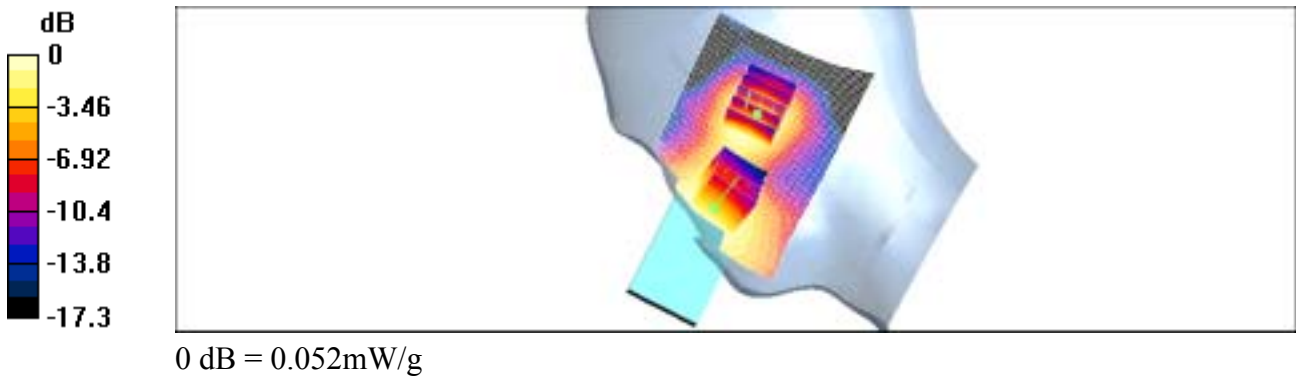
DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.11, 5.11, 5.11); Calibrated: 2004-09-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn533; Calibrated: 2004-12-03
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ear/Tilt, Ch. 661, Ant. Intenna, Bat. Standard/Area Scan (51x81x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.060 mW/g

Ear/Tilt, Ch. 661, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.37 V/m; Power Drift = 0.0 dB
Peak SAR (extrapolated) = 0.063 W/kg
SAR(1 g) = 0.041 mW/g
Maximum value of SAR (measured) = 0.044 mW/g

Ear/Tilt, Ch. 661, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.37 V/m; Power Drift = 0.0 dB
Peak SAR (extrapolated) = 0.068 W/kg
SAR(1 g) = 0.049 mW/g
Maximum value of SAR (measured) = 0.052 mW/g



SAMSUNG FCC ID : A3LSGHX640 -- 1900MHz GSM1900 Head SAR

DUT: SGH-X640; Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Left (Job No.: FC-002)

Procedure Name: Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.1;Test Date-18/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.11, 5.11, 5.11); Calibrated: 2004-09-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn533; Calibrated: 2004-12-03
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Cheek/Touch, Ch. 810, Ant. Intenna, Bat. Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.585 mW/g

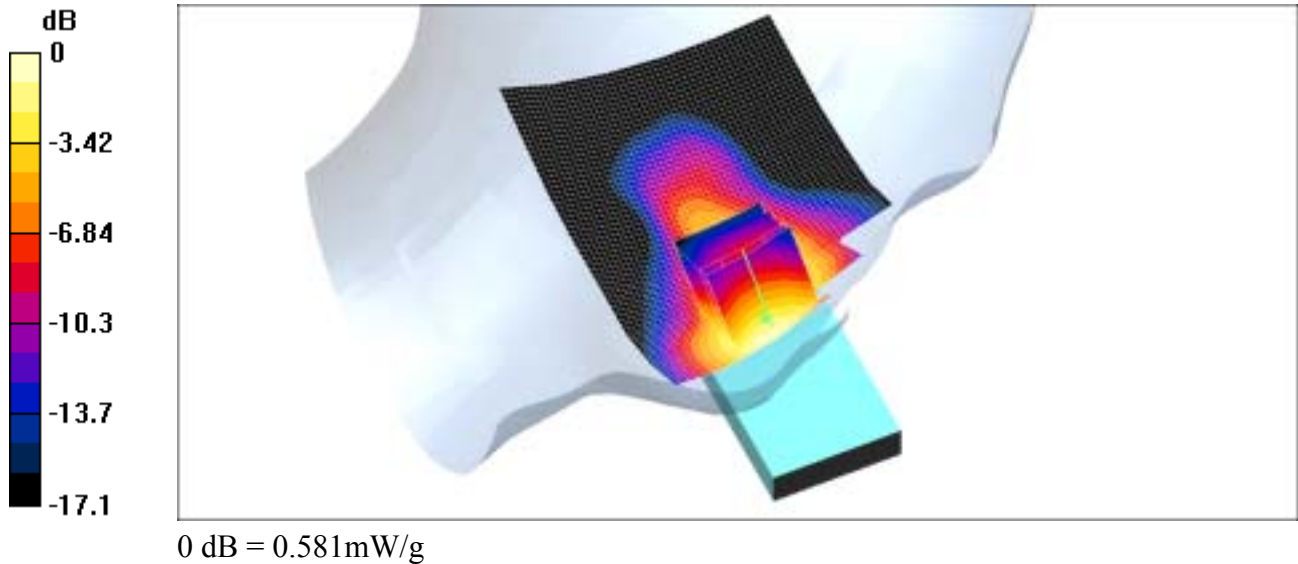
Cheek/Touch, Ch. 810, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.6 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 0.775 W/kg

SAR(1 g) = 0.560 mW/g

Maximum value of SAR (measured) = 0.581 mW/g



SAMSUNG FCC ID : A3LSGHX640 -- 1900MHz GSM1900 Head SAR

DUT: SGH-X640; Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Left (Job No.: FC-002)

Procedure Name: Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.1;Test Date-18/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: GSM 1900; Frequency: 1880 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

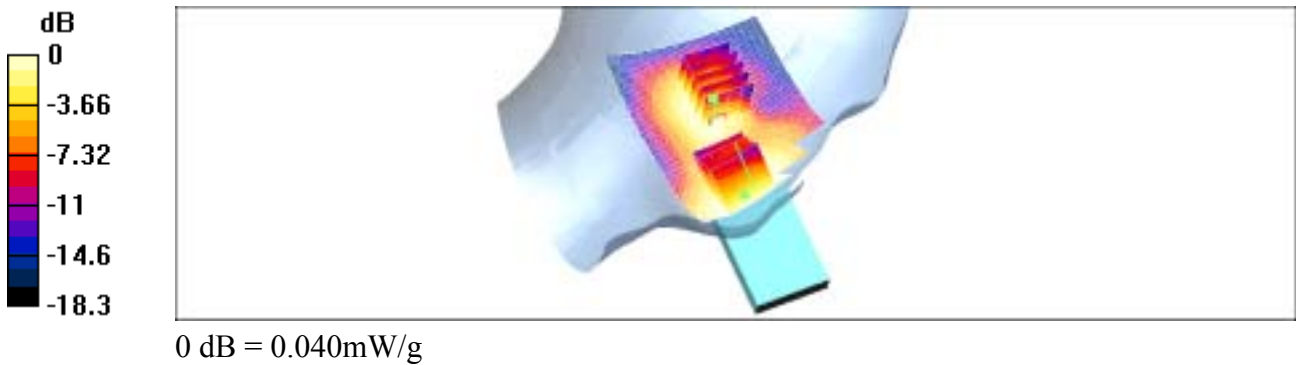
DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.11, 5.11, 5.11); Calibrated: 2004-09-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn533; Calibrated: 2004-12-03
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Ear/Tilt, Ch. 661, Ant. Intenna, Bat. Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.053 mW/g

Ear/Tilt, Ch. 661, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.19 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.068 W/kg
SAR(1 g) = 0.049 mW/g
Maximum value of SAR (measured) = 0.051 mW/g

Ear/Tilt, Ch. 661, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 1: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 4.19 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.057 W/kg
SAR(1 g) = 0.038 mW/g
Maximum value of SAR (measured) = 0.040 mW/g



SAMSUNG FCC ID : A3LSGHX640 -- 1900MHz GSM1900 Body SAR

DUT: SGH-X640(Body); Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Body (Job No.: FC-002)

Procedure Name: Body, Ch.810, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.0;Test Date-17/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

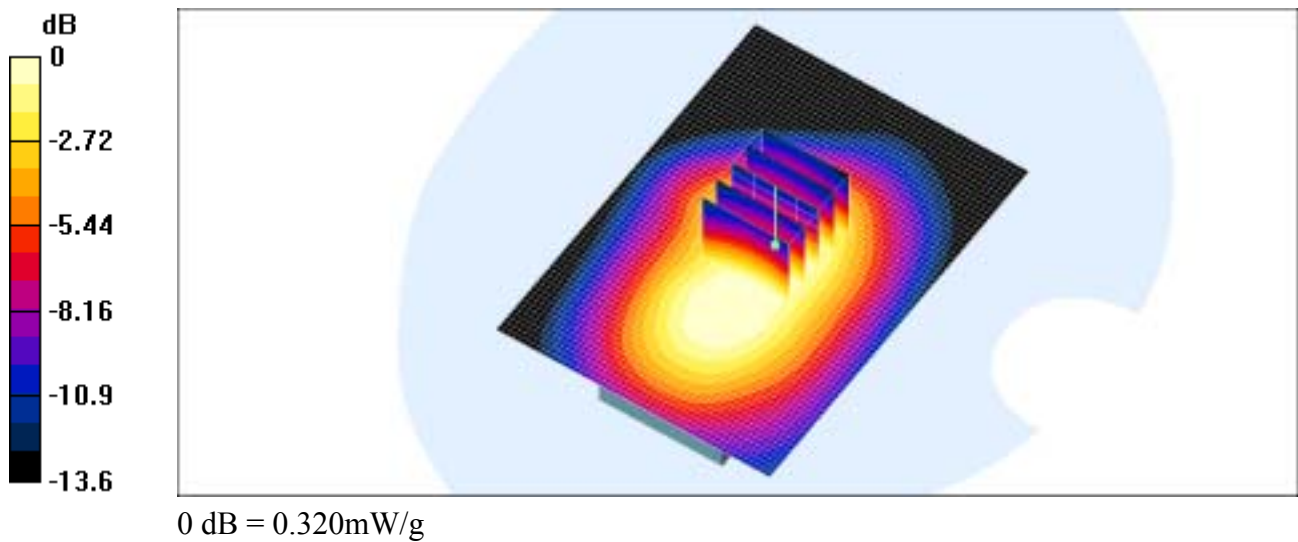
Communication System: Body GPRS ; Frequency: 1909.8 MHz;Duty Cycle: 1:4.15
Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 51.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1551; ConvF(4.51, 4.51, 4.51); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Body, Ch. 810, Ant. Intenna, Bat. Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.385 mW/g

Body, Ch. 810, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.450 W/kg
SAR(1 g) = 0.303 mW/g
Maximum value of SAR (measured) = 0.320 mW/g



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DUT: SGH-X640; Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Left (Job No.: FC-002)

Procedure Name: Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.1;Test Date-18/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: GSM 1900; Frequency: 1909.8 MHz;Duty Cycle: 1:8.3

Medium parameters used: $\sigma = 1.41$; mho/m, $\epsilon_r = 39.1$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.11, 5.11, 5.11); Calibrated: 2004-09-24
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn533; Calibrated: 2004-12-03
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Cheek/Touch, Ch. 810, Ant. Intenna, Bat. Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.585 mW/g

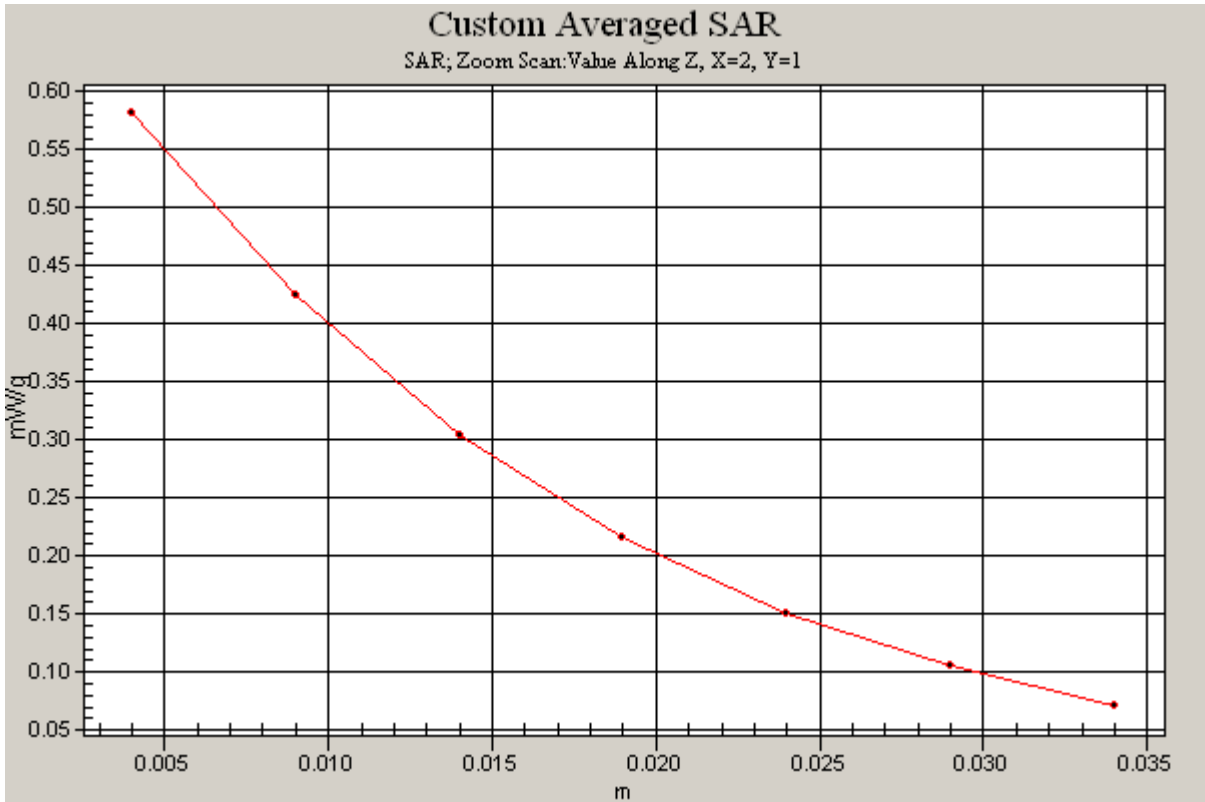
Cheek/Touch, Ch. 810, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.6 V/m; Power Drift = 0.0 dB

Peak SAR (extrapolated) = 0.775 W/kg

SAR(1 g) = 0.560 mW/g

Maximum value of SAR (measured) = 0.581 mW/g



SAMSUNG FCC ID : A3LSGHX640 -- 1900MHz GSM1900 Body SAR

DUT: SGH-X640(Body); Serial: FC-002-B

Program Name: SGH-X640 GSM1900 Body (Job No.: FC-002)

Procedure Name: Body, Ch.810, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-20.8;Test Date-17/Jan/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: Body GPRS ; Frequency: 1909.8 MHz;Duty Cycle: 1:4.15

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 51.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ET3DV6 - SN1551; ConvF(4.51, 4.51, 4.51); Calibrated: 2004-04-27
- Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.4 Build 3; Postprocessing SW: SEMCAD, V1.8 Build 130

Body, Ch. 810, Ant. Intenna, Bat. Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm
Maximum value of SAR (interpolated) = 0.385 mW/g

Body, Ch. 810, Ant. Intenna, Bat. Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 14.3 V/m; Power Drift = -0.1 dB
Peak SAR (extrapolated) = 0.450 W/kg
SAR(1 g) = 0.303 mW/g
Maximum value of SAR (measured) = 0.320 mW/g

