

SAMSUNG FCC ID : A3LSGHE640 1900MHz GSM1900 Head SAR

DUT: SGH-E640; Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Right (Job No. : FC-050)

Procedure Name: Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.36 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 2.15 W/kg

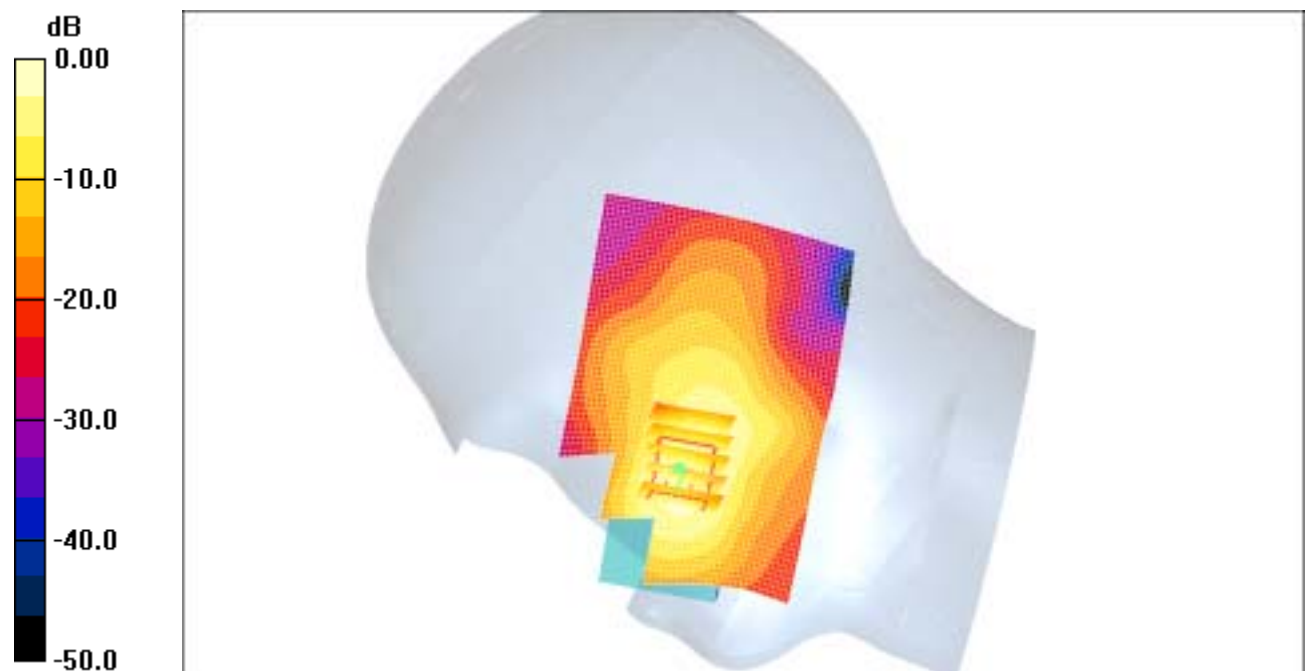
SAR(1 g) = 1.3 mW/g

Maximum value of SAR (measured) = 1.46 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement

grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.29 mW/g



0 dB = 1.29mW/g

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DUT: SGH-E640; Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Right (Job No. : FC-050)

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

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ kg/m³

Phantom section: Right Section

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- 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (6x6x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.97 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.103 W/kg

SAR(1 g) = 0.072 mW/g

Maximum value of SAR (measured) = 0.075 mW/g

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.076 mW/g



0 dB = 0.076mW/g

SAMSUNG FCC ID : A3LSGHE640 1900MHz GSM1900 Head SAR

DUT: SGH-E640; Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Left (Job No. : FC-050)

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

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.26 V/m; Power Drift = -0.118 dB

Peak SAR (extrapolated) = 1.97 W/kg

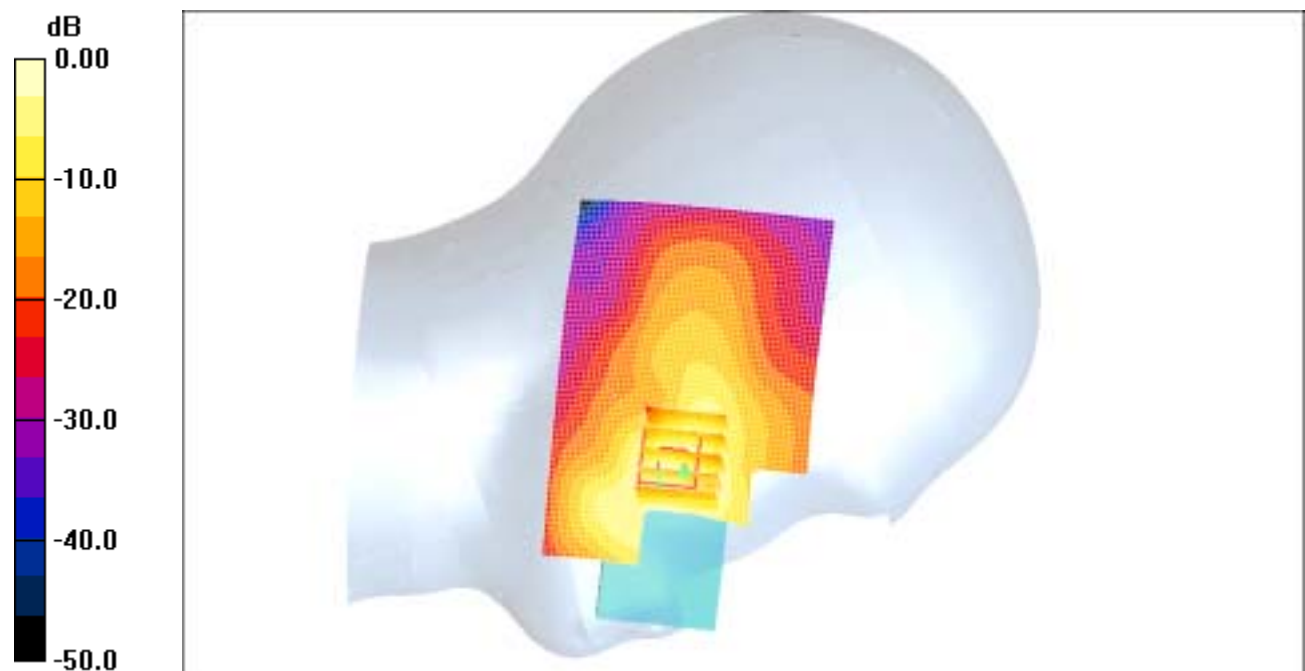
SAR(1 g) = 1.3 mW/g

Maximum value of SAR (measured) = 1.32 mW/g

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement

grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.26 mW/g



0 dB = 1.26mW/g

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DUT: SGH-E640; Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Left (Job No. : FC-050)

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

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.46 V/m; Power Drift = 0.025 dB

Peak SAR (extrapolated) = 0.076 W/kg

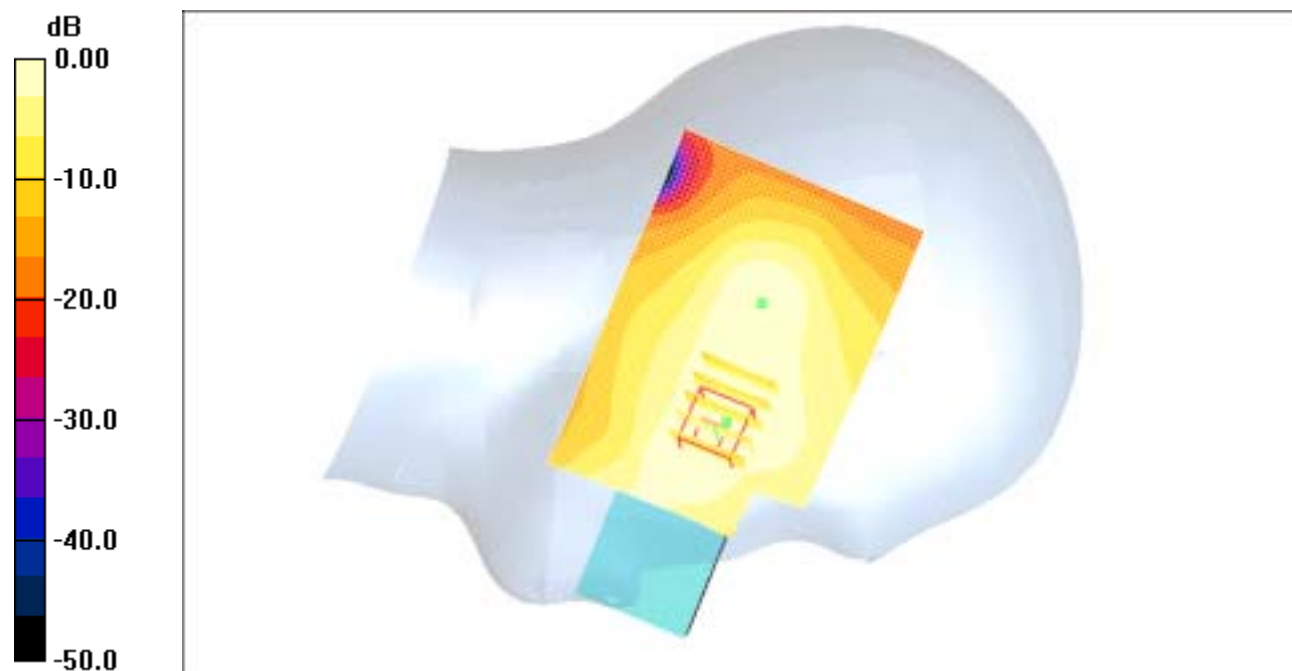
SAR(1 g) = 0.055 mW/g

Maximum value of SAR (measured) = 0.057 mW/g

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.058 mW/g



0 dB = 0.058mW/g

SAMSUNG FCC ID : A3LSGHE640 1900MHz GSM1900 Head SAR

DUT: SGH-E640; Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Right (Job No. : FC-050)

Procedure Name: Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard With BT ON

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan

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

Reference Value = 3.29 V/m; Power Drift = -0.086 dB

Peak SAR (extrapolated) = 2.18 W/kg

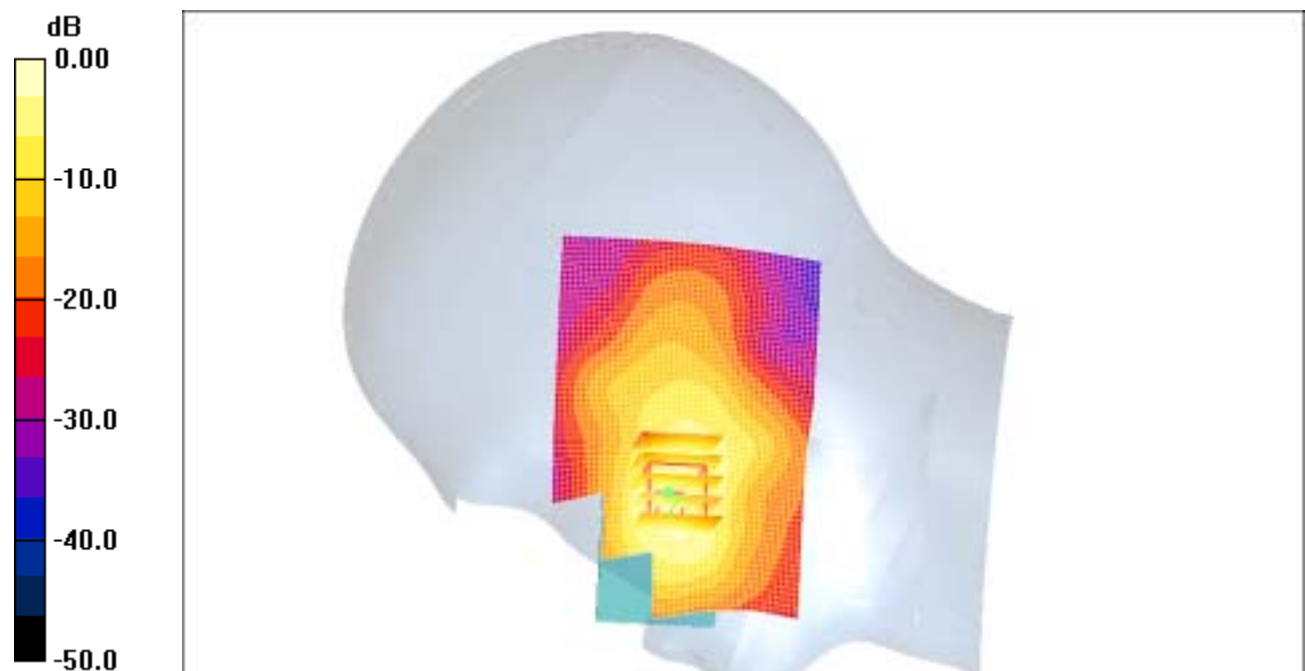
SAR(1 g) = 1.3 mW/g

Maximum value of SAR (measured) = 1.49 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Area Scan

(51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.38 mW/g



SAMSUNG FCC ID : A3LSGHE640 1900MHz GSM1900 Body SAR

DUT: SGH-E640(body); Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Body (Job No. : FC-050)

Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.6; Test Date-22/Apr/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: Body GPRS ; Frequency: 1880 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(4.46, 4.46, 4.46); Calibrated: 2004-09-24

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

- Electronics: DAE3 Sn533; Calibrated: 2004-12-03

- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1141

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.8 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 0.544 W/kg

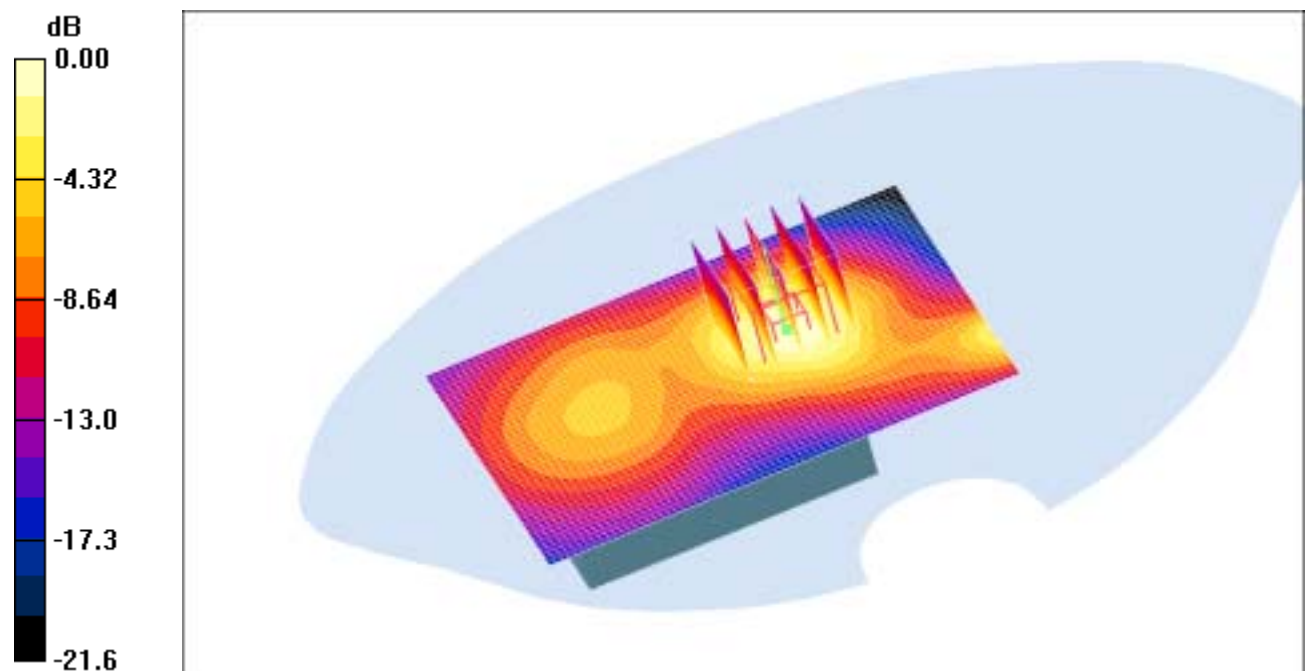
SAR(1 g) = 0.373 mW/g

Maximum value of SAR (measured) = 0.407 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.467 mW/g



0 dB = 0.467mW/g

SAMSUNG FCC ID : A3LSGHE640 1900MHz GSM1900 Body SAR

DUT: SGH-E640(body); Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Body (Job No. : FC-050)

Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard With BT ON

Procedure Notes: Meas.Tissue Temp(celsius)-21.6;Test Date-22/Apr/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: Body GPRS ; Frequency: 1880 MHz;Duty Cycle: 1:4.15

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(4.46, 4.46, 4.46); Calibrated: 2004-09-24

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

- Electronics: DAE3 Sn533; Calibrated: 2004-12-03

- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1141

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Area Scan (51x71x1):

Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.451 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube 0:

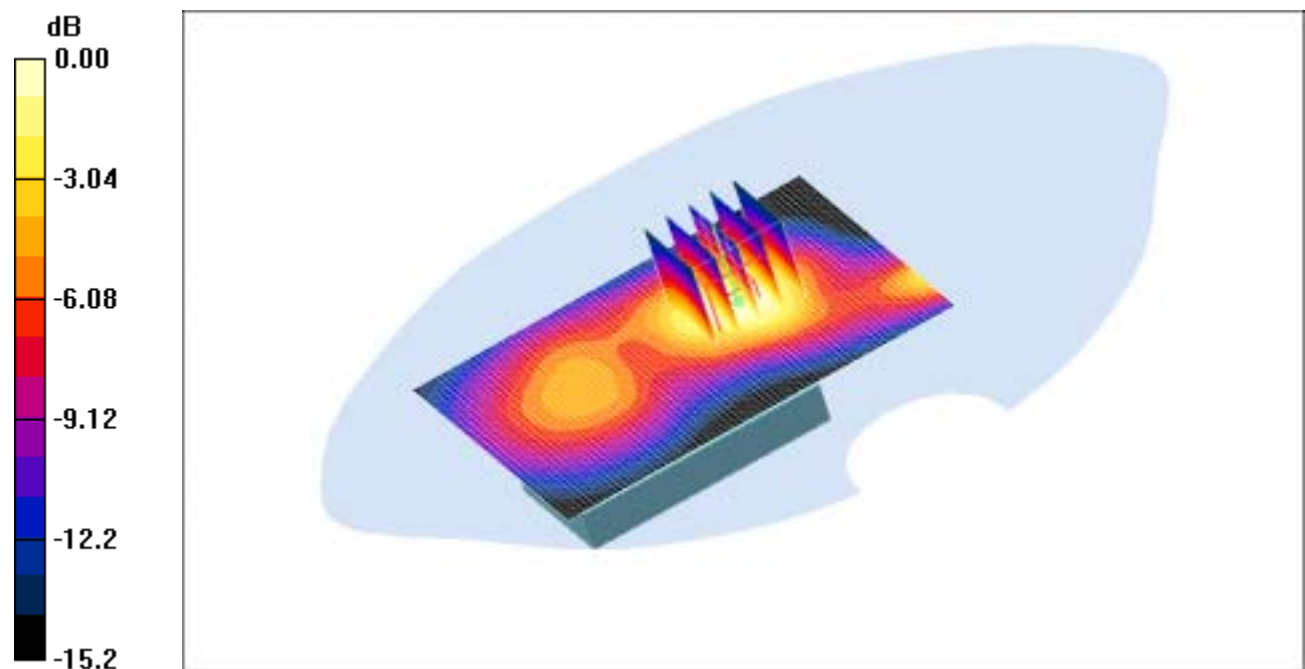
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.2 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.366 mW/g

Maximum value of SAR (measured) = 0.395 mW/g



0 dB = 0.395mW/g

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DUT: SGH-E640; Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Right (Job No. : FC-050)

Procedure Name: Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ 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, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.29 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

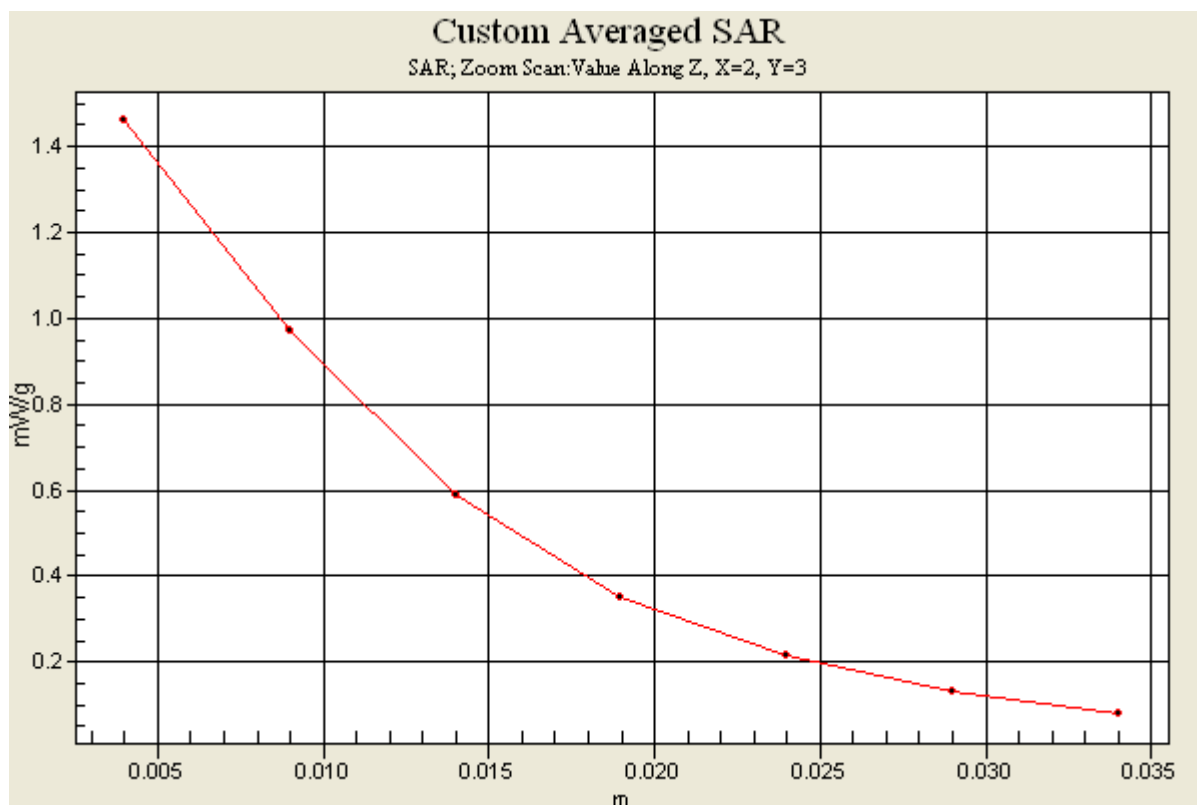
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.36 V/m; Power Drift = 0.032 dB

Peak SAR (extrapolated) = 2.15 W/kg

SAR(1 g) = 1.3 mW/g

Maximum value of SAR (measured) = 1.46 mW/g



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Program Name: SGH-E640 GSM1900 Right (Job No. : FC-050)

Procedure Name: Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard With BT ON

Procedure Notes: Meas.Tissue Temp(celsius)-21.3; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.42$ mho/m; $\epsilon_r = 39.6$; $\rho = 1000$ 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

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Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Area Scan

(51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 1.38 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan

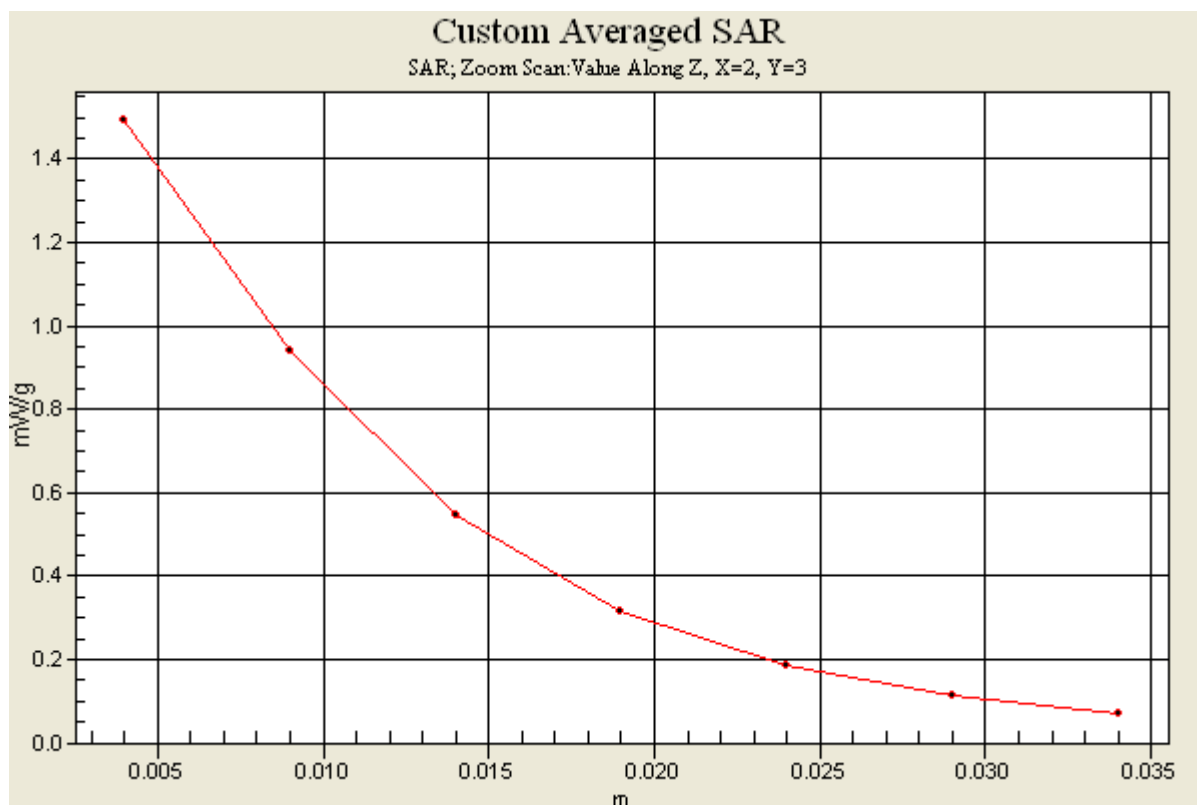
(5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

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SAR(1 g) = 1.3 mW/g

Maximum value of SAR (measured) = 1.49 mW/g



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DUT: SGH-E640(body); Serial: FC-050-B

Program Name: SGH-E640 GSM1900 Body (Job No. : FC-050)

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Procedure Notes: Meas.Tissue Temp(celsius)-21.6; Test Date-22/Apr/2005 [OET Bulletin 65-Supplement C, July 2001]

Communication System: Body GPRS ; Frequency: 1880 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(4.46, 4.46, 4.46); Calibrated: 2004-09-24

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

- Electronics: DAE3 Sn533; Calibrated: 2004-12-03

- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1141

- Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 146

Body, Ch.661, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:
dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.467 mW/g

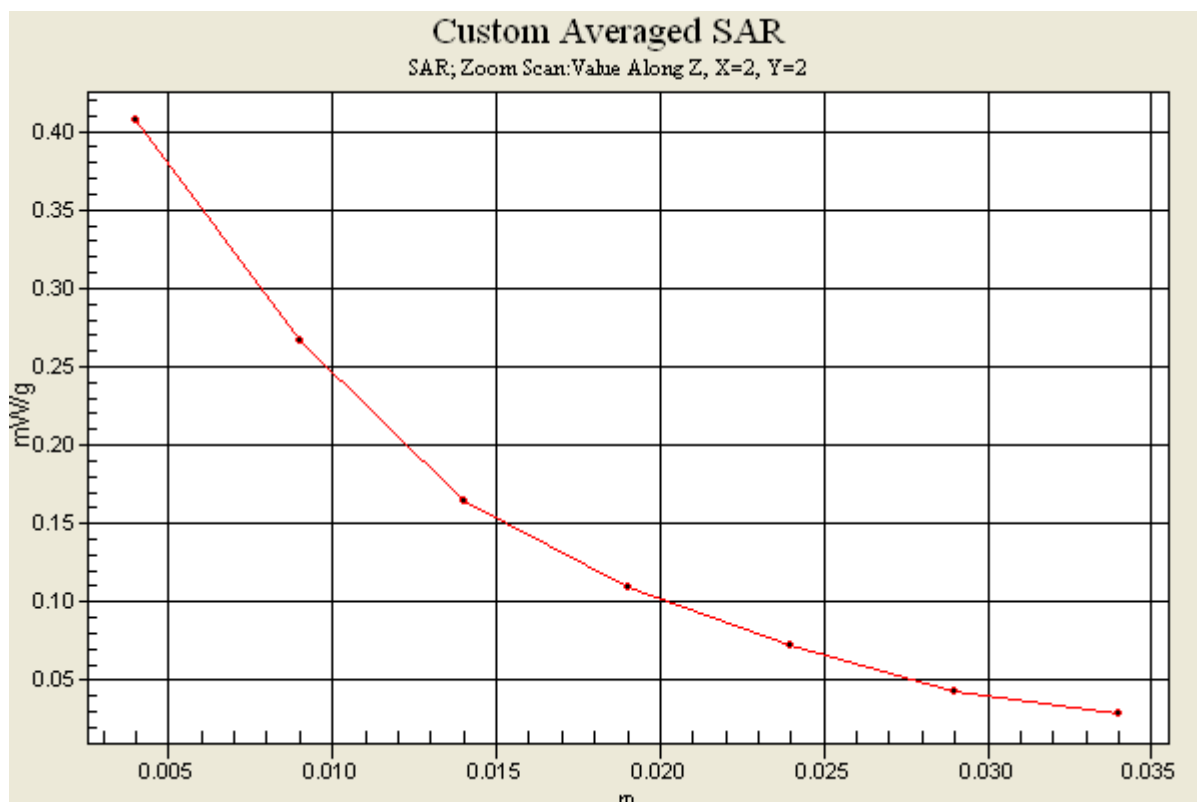
Body, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.8 V/m; Power Drift = -0.036 dB

Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.373 mW/g

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Procedure Name: Body, Ch.661, Ant.Intenna, Bat.Standard With BT ON

Procedure Notes: Meas.Tissue Temp(celsius)-21.6;Test Date-22/Apr/2005[OET Bulletin 65-Supplement C, July 2001]

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Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ mho/m; $\epsilon_r = 51.7$; $\rho = 1000$ kg/m³

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- Probe: ES3DV2 - SN3017; ConvF(4.46, 4.46, 4.46); Calibrated: 2004-09-24

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- Electronics: DAE3 Sn533; Calibrated: 2004-12-03

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Maximum value of SAR (interpolated) = 0.451 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.2 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 0.554 W/kg

SAR(1 g) = 0.366 mW/g

Maximum value of SAR (measured) = 0.395 mW/g

