

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Right (Job No. : FC-152)

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

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

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.350 mW/g

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

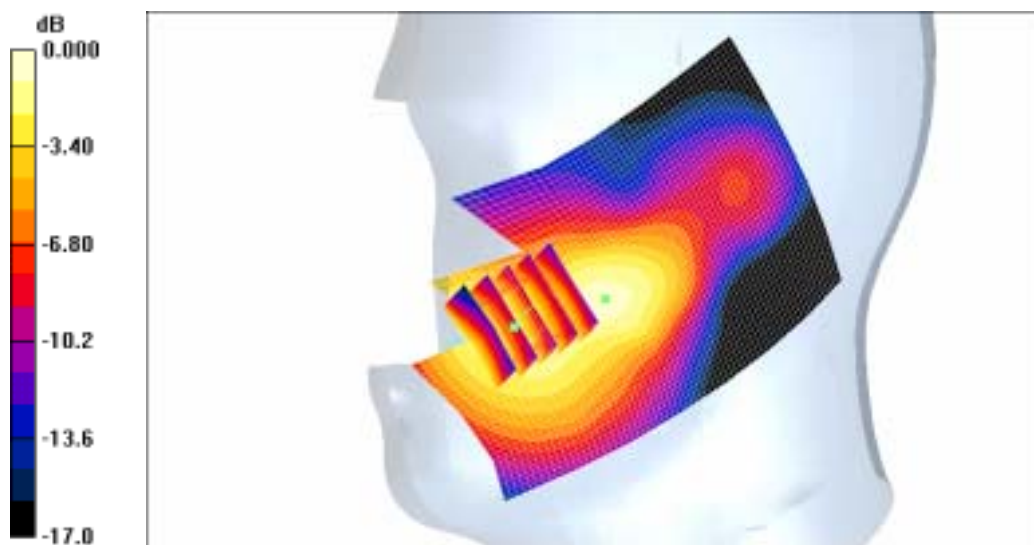
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.88 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.358 mW/g

Maximum value of SAR (measured) = 0.384 mW/g



0 dB = 0.384mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Right (Job No. : FC-152)

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

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.271 mW/g

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

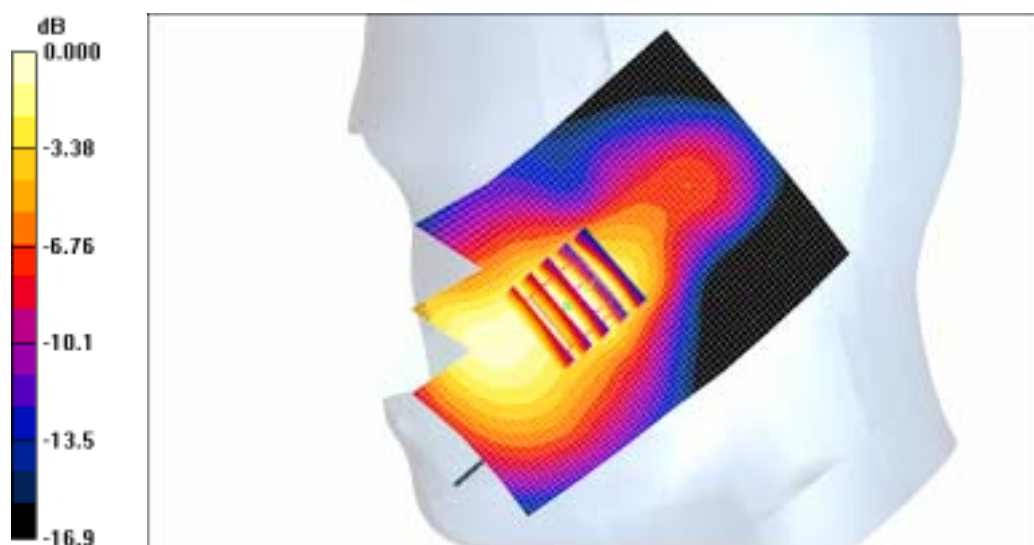
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.91 V/m; Power Drift = 0.073 dB

Peak SAR (extrapolated) = 0.437 W/kg

SAR(1 g) = 0.267 mW/g

Maximum value of SAR (measured) = 0.291 mW/g



0 dB = 0.291mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Right (Job No. : FC-152)

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

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

Medium parameters used: $f = 1909.8 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.241 mW/g

Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

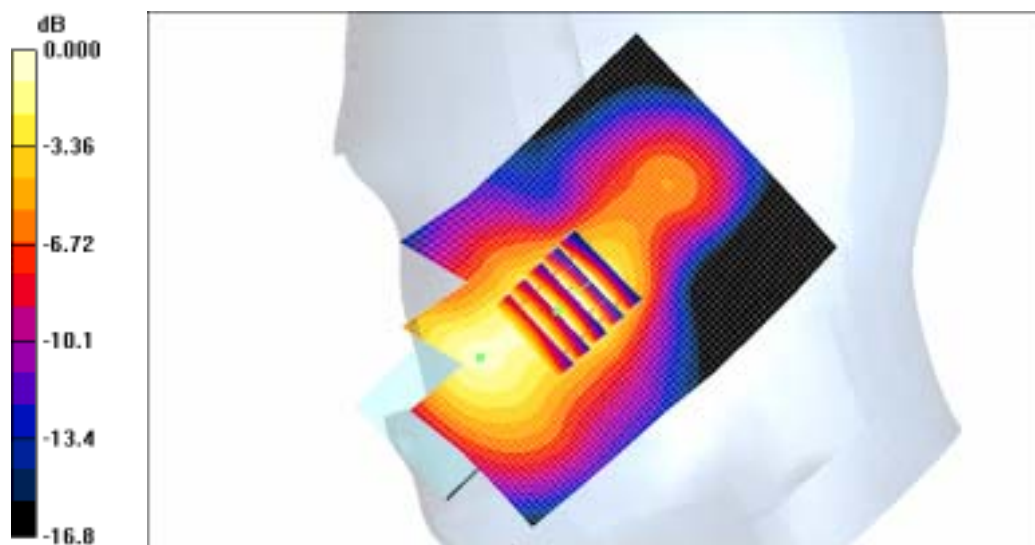
Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.36 V/m; Power Drift = 0.056 dB

Peak SAR (extrapolated) = 0.395 W/kg

SAR(1 g) = 0.240 mW/g

Maximum value of SAR (measured) = 0.260 mW/g



0 dB = 0.260mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Right (Job No. : FC-152)

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

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

$dx=20$ mm, $dy=20$ mm

Maximum value of SAR (interpolated) = 0.035 mW/g

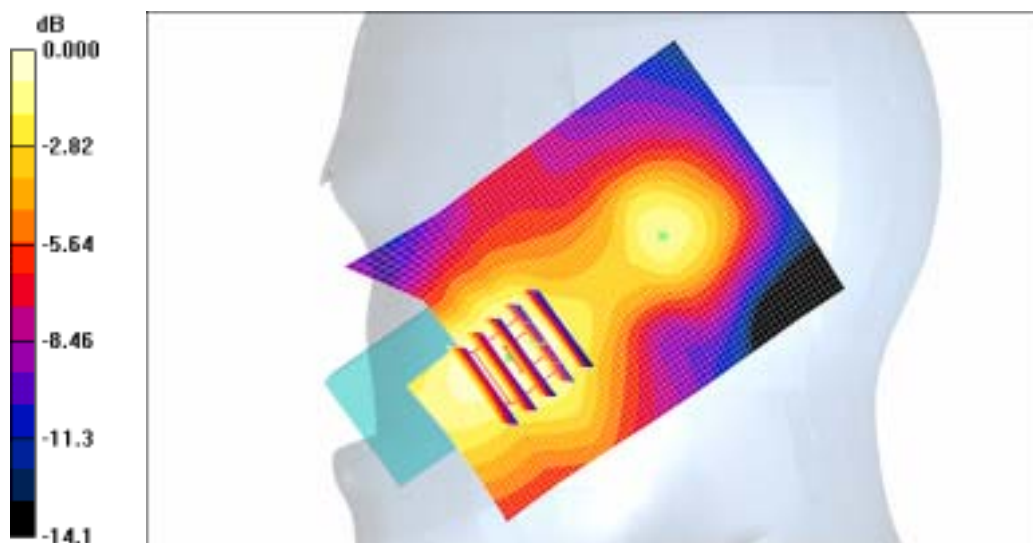
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.48 V/m; Power Drift = -0.141 dB

Peak SAR (extrapolated) = 0.047 W/kg

SAR(1 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.035 mW/g



0 dB = 0.035mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Left (Job No. : FC-152)

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

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

Medium parameters used: $f = 1850.2 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan 2 (5x5x7)/Cube 0:

Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 5.73 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 0.612 W/kg

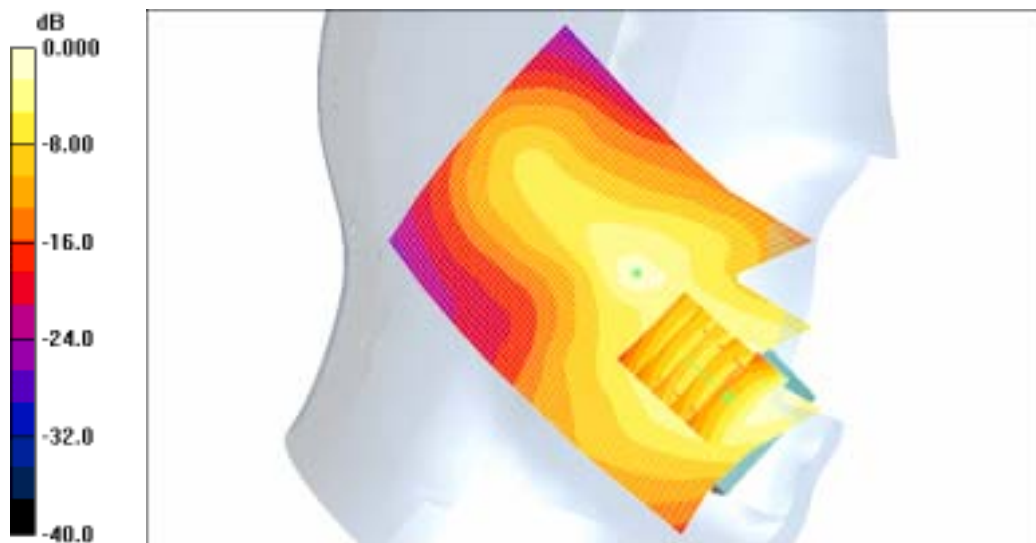
SAR(1 g) = 0.418 mW/g

Maximum value of SAR (measured) = 0.446 mW/g

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

grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.517 mW/g



0 dB = 0.517mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Left (Job No. : FC-152)

Procedure Name: Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard 2 2

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard 2 2/Zoom Scan 2 (5x5x7)/Cube 0:

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

Reference Value = 6.35 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 0.546 W/kg

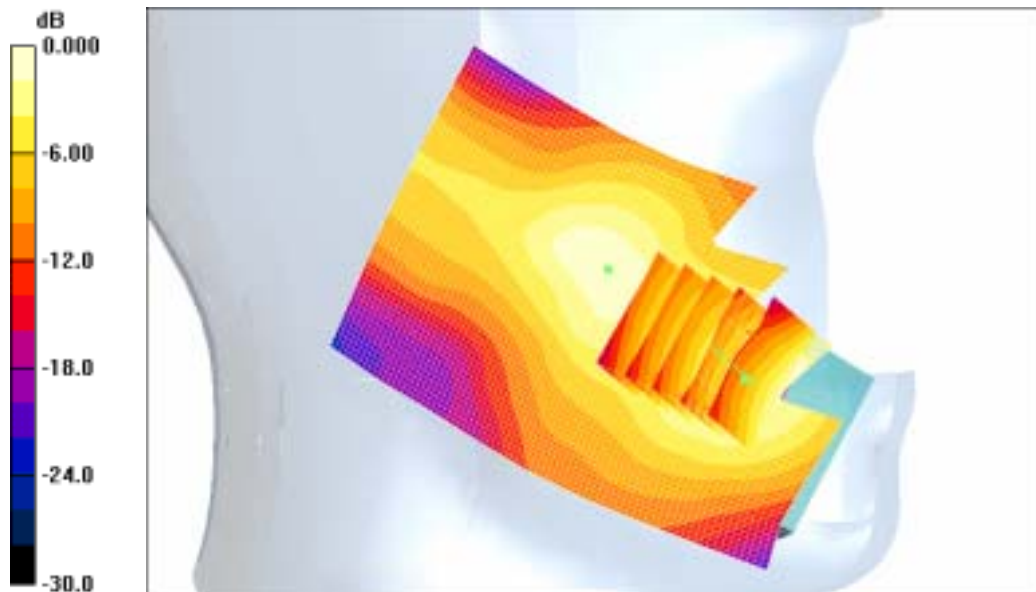
SAR(1 g) = 0.345 mW/g

Maximum value of SAR (measured) = 0.370 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard 2 2/Area Scan (61x81x1):

Measurement grid: dx=15mm, dy=15mm

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



0 dB = 0.376mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Left (Job No. : FC-152)

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

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

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.327 mW/g

Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:

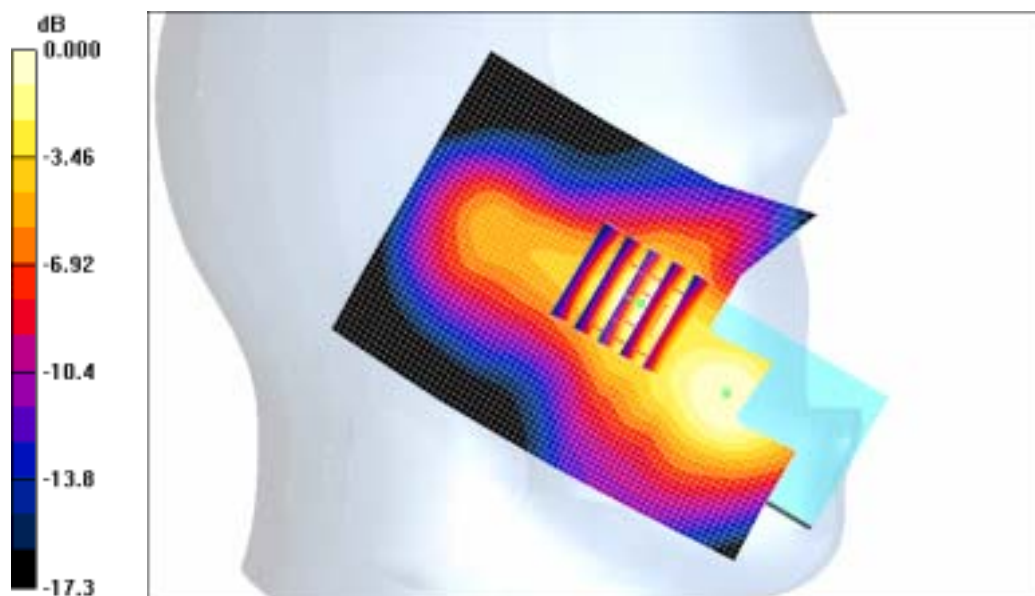
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.27 V/m; Power Drift = 0.170 dB

Peak SAR (extrapolated) = 0.464 W/kg

SAR(1 g) = 0.282 mW/g

Maximum value of SAR (measured) = 0.311 mW/g



0 dB = 0.311mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Left (Job No. : FC-152)

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

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

$dx=20$ mm, $dy=20$ mm

Maximum value of SAR (interpolated) = 0.048 mW/g

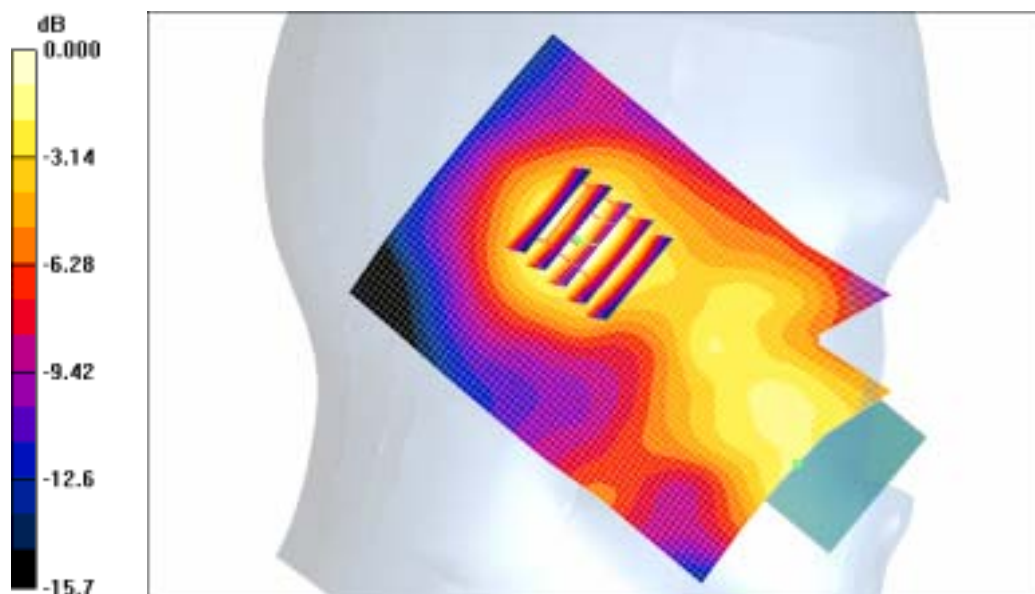
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 4.66 V/m; Power Drift = 0.193 dB

Peak SAR (extrapolated) = 0.062 W/kg

SAR(1 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.044 mW/g



0 dB = 0.044mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Body SAR

DUT: SGH-X660(BODY); Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Body (Job No. : FC-152)

Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard

Communication System: Body GPRS ; Frequency: 1850.2 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.42, 4.42, 4.42); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Body, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.1 V/m; Power Drift = -0.165 dB

Peak SAR (extrapolated) = 0.522 W/kg

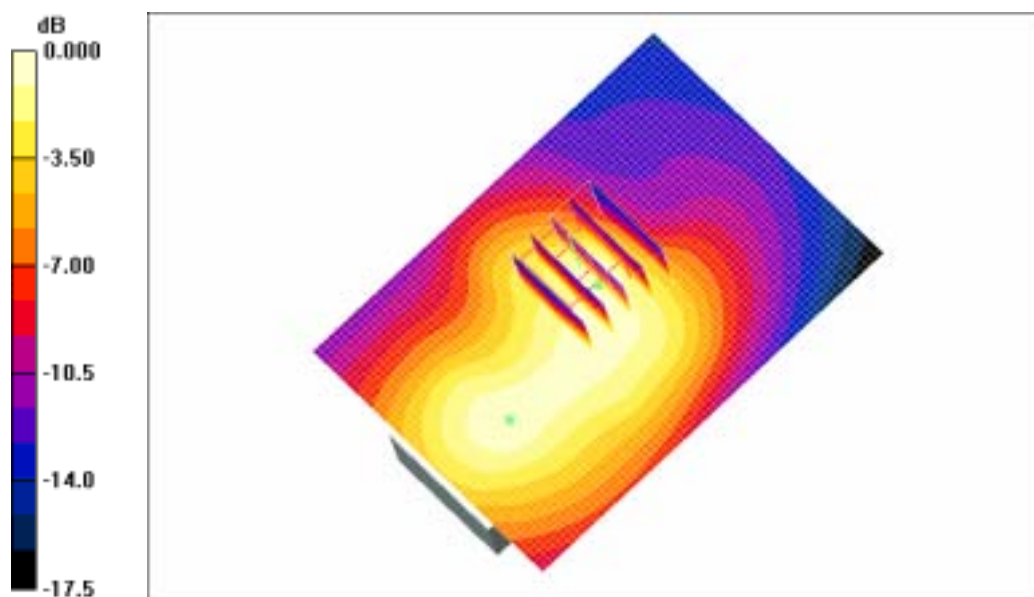
SAR(1 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.378 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.394 mW/g



0 dB = 0.394mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Body SAR

DUT: SGH-X660(BODY); Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Body (Job No. : FC-152)

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

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

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.42, 4.42, 4.42); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.334 mW/g

Body, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

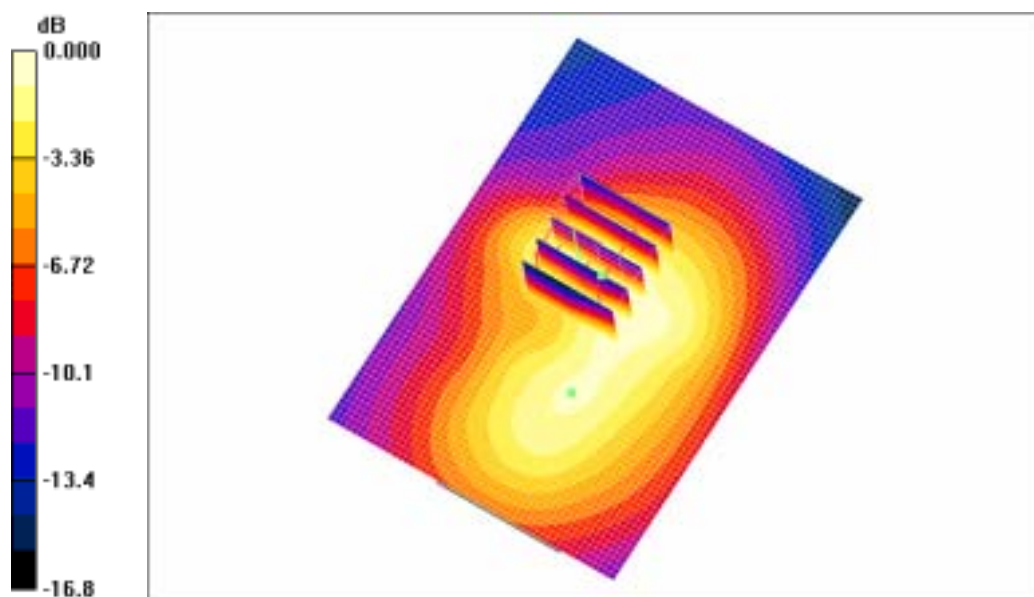
dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.62 V/m; Power Drift = 0.070 dB

Peak SAR (extrapolated) = 0.456 W/kg

SAR(1 g) = 0.284 mW/g

Maximum value of SAR (measured) = 0.314 mW/g



0 dB = 0.314mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Body SAR

DUT: SGH-X660(BODY); Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Body (Job No. : FC-152)

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

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

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.42, 4.42, 4.42); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Body, Ch.810, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.84 V/m; Power Drift = -0.056 dB

Peak SAR (extrapolated) = 0.427 W/kg

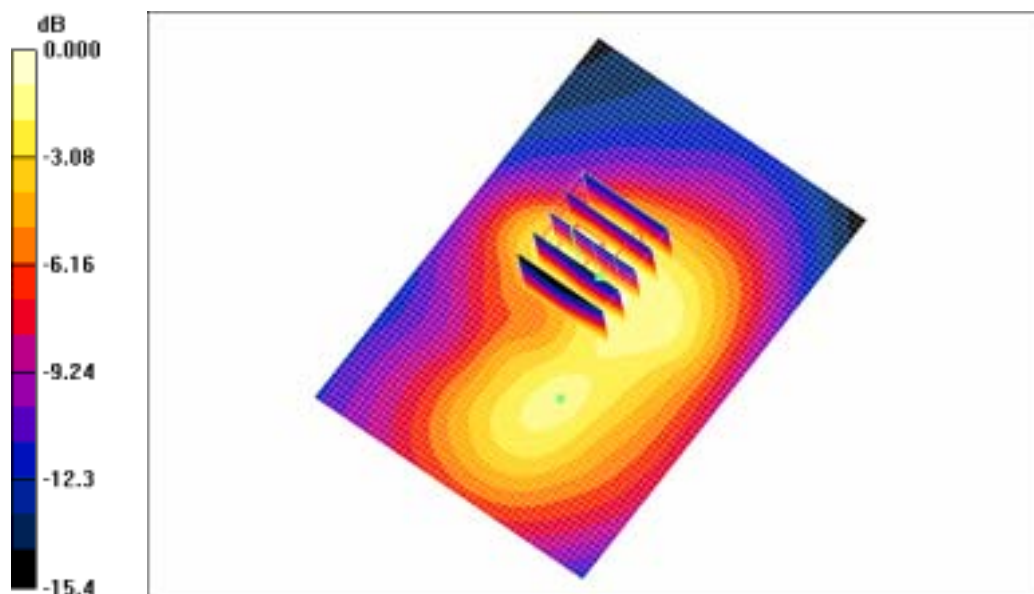
SAR(1 g) = 0.269 mW/g

Maximum value of SAR (measured) = 0.294 mW/g

Body, Ch.810, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid:

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.300 mW/g



0 dB = 0.300mW/g

SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660; Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Left (Job No. : FC-152)

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

Procedure Notes: Meas.Tissue Temp(celsius)-22.3, Ambient Temp-22.6;Test Date-08/Nov/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; $\sigma = 1.4$ mho/m; $\epsilon_r = 39.7$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.92, 4.92, 4.92); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan 2 (5x5x7)/Cube 0:

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

Reference Value = 5.73 V/m; Power Drift = -0.083 dB

Peak SAR (extrapolated) = 0.612 W/kg

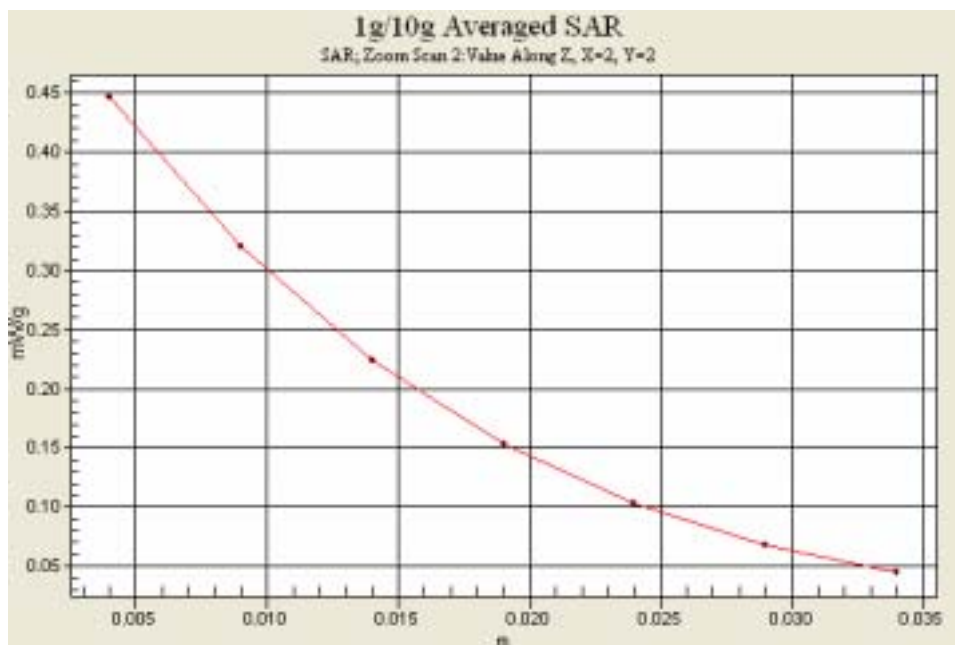
SAR(1 g) = 0.418 mW/g

Maximum value of SAR (measured) = 0.446 mW/g

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

grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.517 mW/g



SAMSUNG FCC ID : A3LSGHX660 1900MHz GSM1900 Head SAR

DUT: SGH-X660(BODY); Serial: FC-152-C

Program Name: SGH-X660 GSM1900 Body (Job No. : FC-152)

Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard

Procedure Notes: Meas.Tissue Temp(celsius)-22.3, Ambient Temp-22.6;Test Date-08/Nov/2005[OET Bulletin 65-Supplement C, July 2001]

Communication System: Body GPRS ; Frequency: 1850.2 MHz;Duty Cycle: 1:4.15

Medium parameters used: $f = 1850.2$ MHz; $\sigma = 1.51$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.42, 4.42, 4.42); Calibrated: 2005-05-26
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn670; Calibrated: 2005-04-05
- Phantom: SAM 835/900 MHz; Type: SAM; Serial: TP-1247
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Body, Ch.512, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid:

dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.1 V/m; Power Drift = -0.165 dB

Peak SAR (extrapolated) = 0.522 W/kg

SAR(1 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.378 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.394 mW/g

