

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Up); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Right Slide Up (Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

Reference Value = 4.95 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 0.172 W/kg

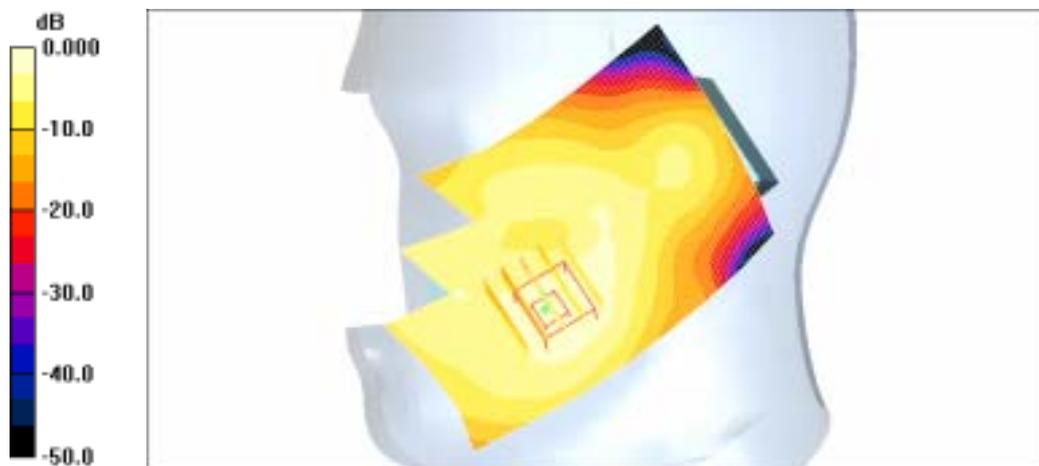
SAR(1 g) = 0.112 mW/g

Maximum value of SAR (measured) = 0.122 mW/g

Cheek/Touch, Ch.661, Ant.Intenna, Bat.Standard 2/Area Scan (51x71x1): Measurement

grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.121 mW/g



0 dB = 0.121mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Up); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Right Slide Up (Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Reference Value = 2.07 V/m; Power Drift = -0.080 dB

Peak SAR (extrapolated) = 0.085 W/kg

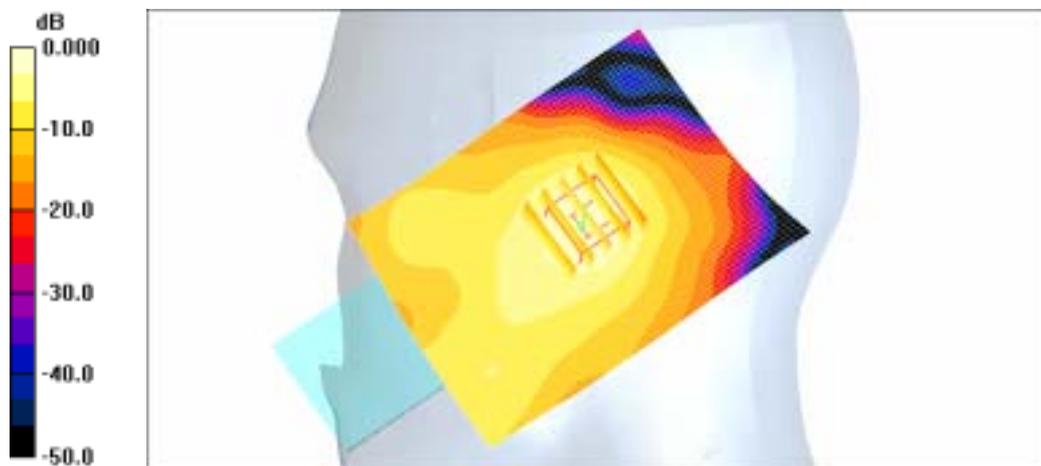
SAR(1 g) = 0.055 mW/g

Maximum value of SAR (measured) = 0.059 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.068 mW/g



0 dB = 0.068mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Up); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Left Slide Up(Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (interpolated) = 0.052 mW/g

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

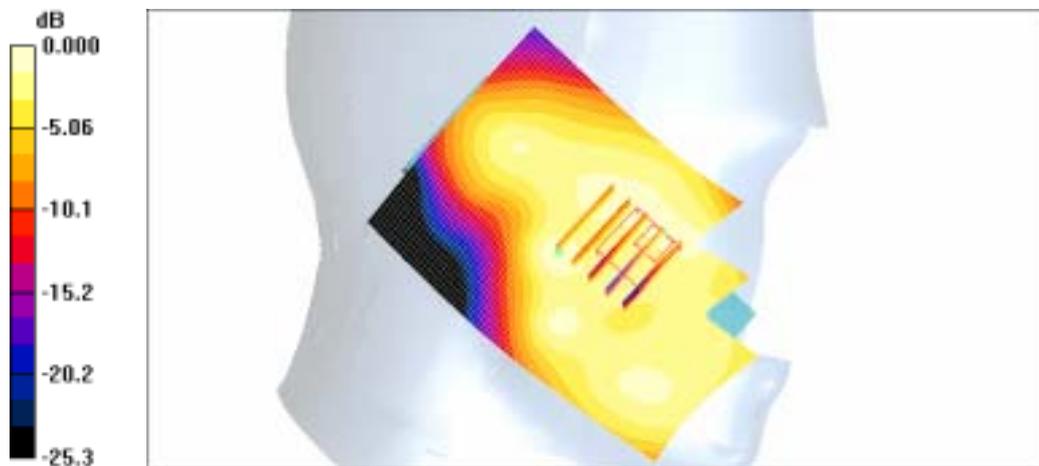
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.02 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 0.086 W/kg

SAR(1 g) = 0.057 mW/g

Maximum value of SAR (measured) = 0.060 mW/g



0 dB = 0.060mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Up); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Left Slide Up(Job No. : FD-180)

Procedure Name: Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard 3

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard 3/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.069 mW/g

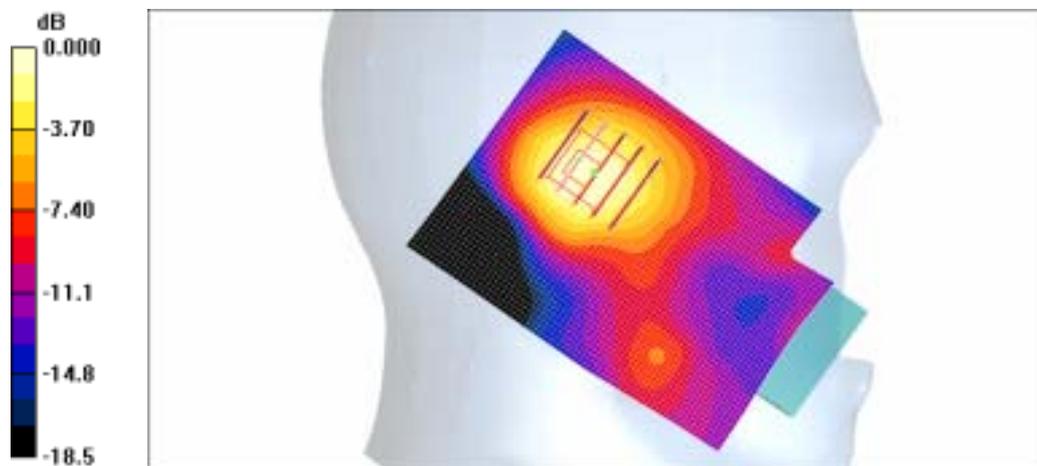
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard 3/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.99 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.100 W/kg

SAR(1 g) = 0.065 mW/g

Maximum value of SAR (measured) = 0.070 mW/g



0 dB = 0.070mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Down); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Right Slide Down (Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

Reference Value = 14.8 V/m; Power Drift = -0.050 dB

Peak SAR (extrapolated) = 0.541 W/kg

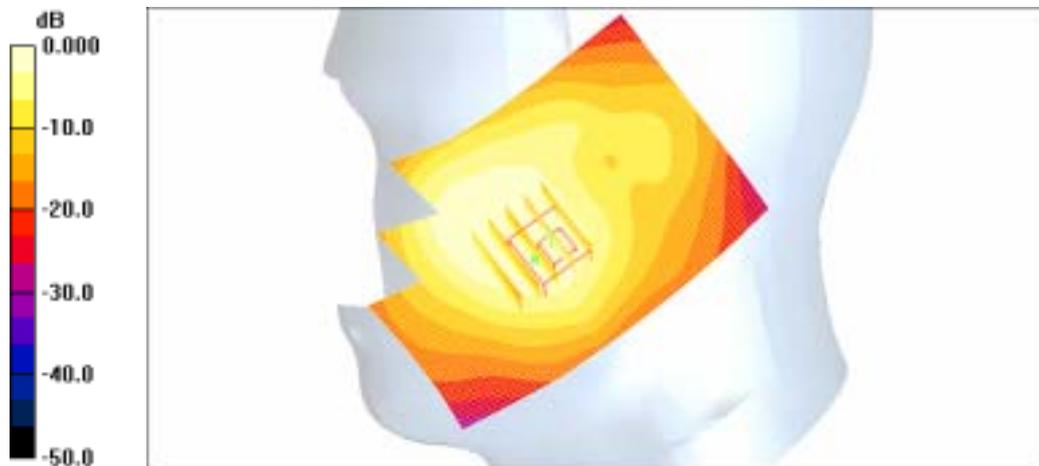
SAR(1 g) = 0.360 mW/g

Maximum value of SAR (measured) = 0.389 mW/g

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

grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.413 mW/g



0 dB = 0.413mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Down); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Right Slide Down (Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Reference Value = 4.39 V/m; Power Drift = -0.066 dB

Peak SAR (extrapolated) = 0.105 W/kg

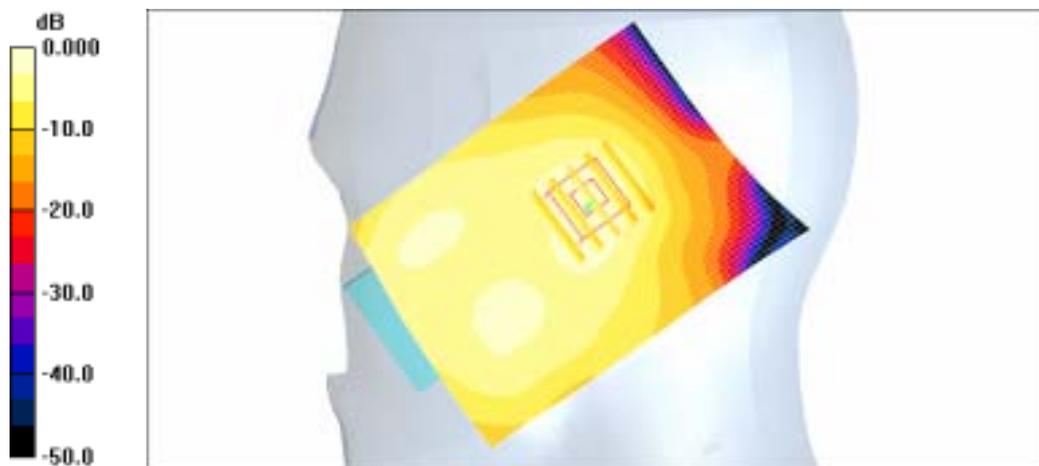
SAR(1 g) = 0.068 mW/g

Maximum value of SAR (measured) = 0.074 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.074 mW/g



0 dB = 0.074mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Down); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Left Slide Down(Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard with BT ON/Zoom Scan (5x5x7)/Cube

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

Reference Value = 12.7 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.721 W/kg

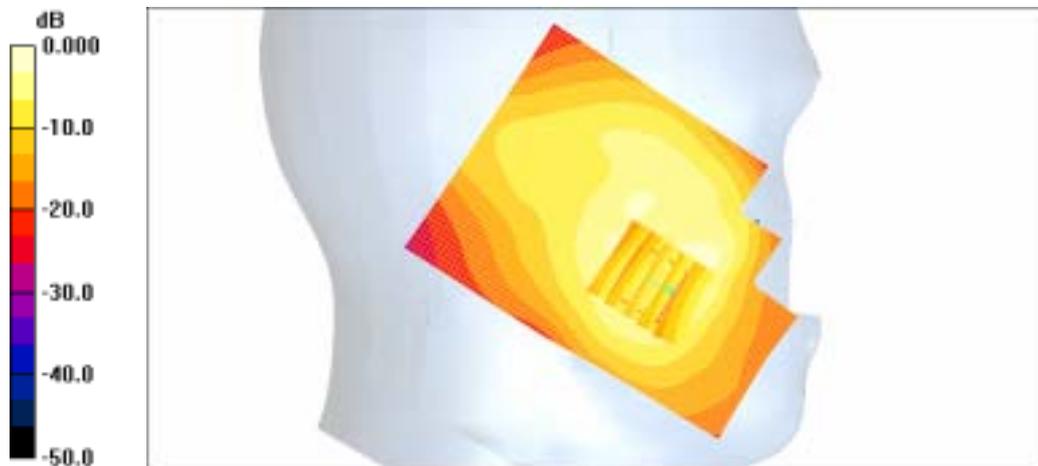
SAR(1 g) = 0.440 mW/g

Maximum value of SAR (measured) = 0.495 mW/g

Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard with BT ON/Area Scan (51x71x1):

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

Maximum value of SAR (interpolated) = 0.530 mW/g



0 dB = 0.530mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Down); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Left Slide Down(Job No. : FD-180)

Procedure Name: Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard 3

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [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; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard 3/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.077 mW/g

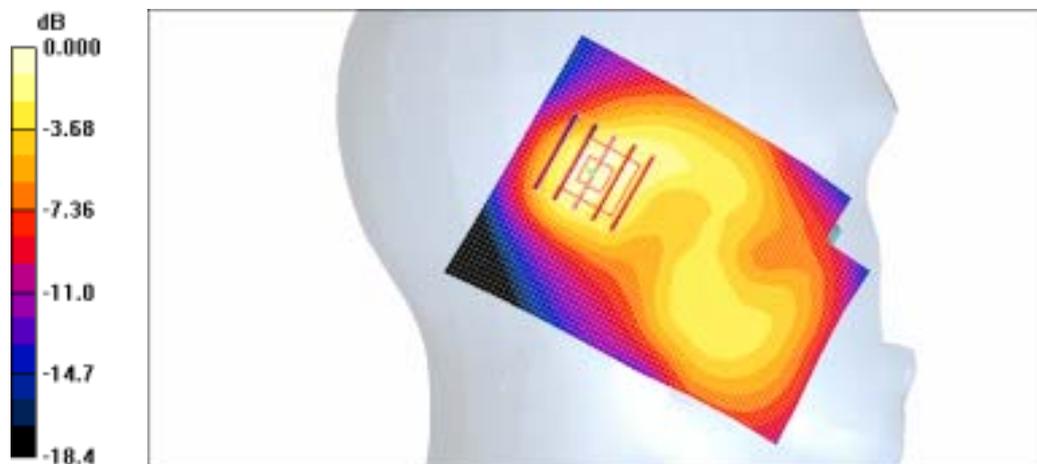
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard 3/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.86 V/m; Power Drift = 0.131 dB

Peak SAR (extrapolated) = 0.114 W/kg

SAR(1 g) = 0.076 mW/g

Maximum value of SAR (measured) = 0.082 mW/g



0 dB = 0.082mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Body SAR

DUT: SGH-Z650i(Body); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Body (Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.3, Tissue Temp(celsius)-21.6; Test Date-14/Sep/2006 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.44, 4.44, 4.44); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.393 mW/g

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

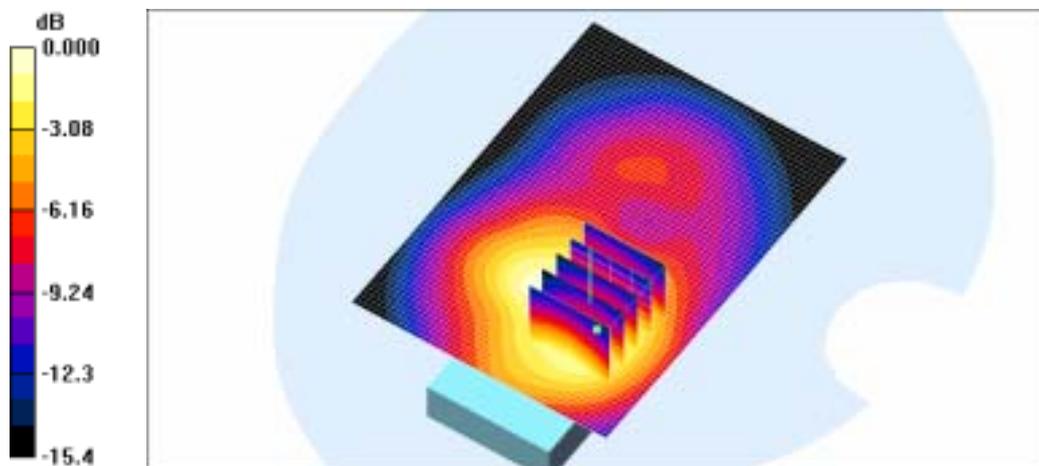
dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.44 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.569 W/kg

SAR(1 g) = 0.354 mW/g

Maximum value of SAR (measured) = 0.386 mW/g



0 dB = 0.386mW/g

SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Head SAR

DUT: SGH-Z650i(Down); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Left Slide Down(Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-21.8; Test Date-14/Sep/2006 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.39$ mho/m; $\epsilon_r = 38.8$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.81, 4.81, 4.81); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard with BT ON/Zoom Scan (5x5x7)/Cube

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

Reference Value = 12.7 V/m; Power Drift = 0.011 dB

Peak SAR (extrapolated) = 0.721 W/kg

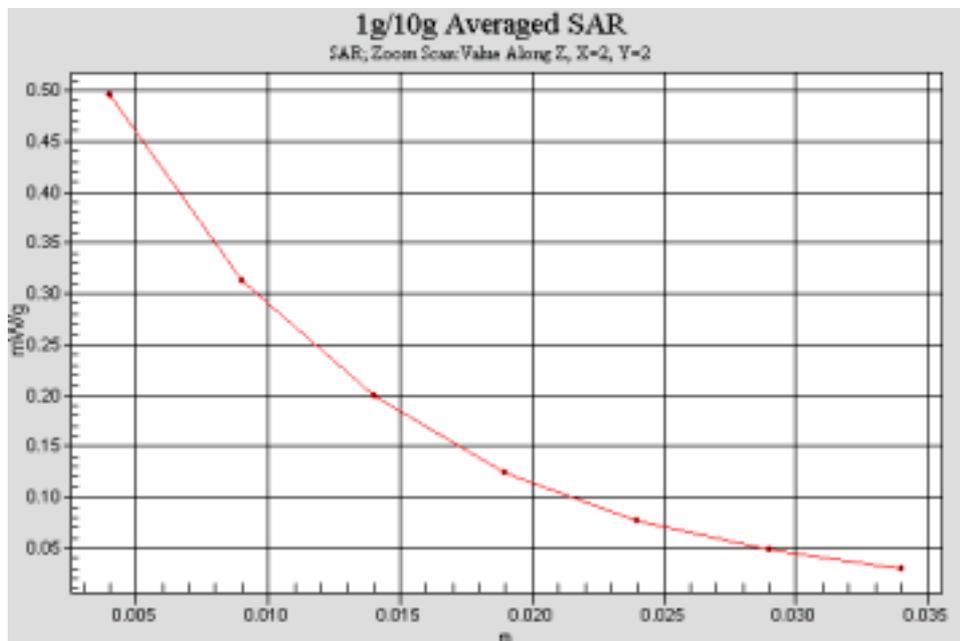
SAR(1 g) = 0.440 mW/g

Maximum value of SAR (measured) = 0.495 mW/g

Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard with BT ON/Area Scan (51x71x1):

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

Maximum value of SAR (interpolated) = 0.530 mW/g



SAMSUNG FCC ID : A3LSGHZ650I 1900MHz GSM1900 Body SAR

DUT: SGH-Z650i(Body); Serial: FD-180-A

Program Name: SGH-Z650i GSM1900 Body (Job No. : FD-180)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.3, Tissue Temp(celsius)-21.6; Test Date-14/Sep/2006 [OET Bulletin 65-Supplement C, July 2001]

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

Medium parameters used: $f = 1909.8$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3085; ConvF(4.44, 4.44, 4.44); Calibrated: 2005-11-22
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn486; Calibrated: 2006-07-17
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.393 mW/g

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

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

Reference Value = 6.44 V/m; Power Drift = -0.166 dB

Peak SAR (extrapolated) = 0.569 W/kg

SAR(1 g) = 0.354 mW/g

Maximum value of SAR (measured) = 0.386 mW/g

