

SAMSUNG FCC ID : A3LSGHZ230 1900MHz GSM1900 Head SAR

DUT: SGH-Z230; Serial: FD-104-C

Program Name: SGH-Z230 GSM1900 Right (Job No. : FD-104)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-22.0; Test Date-13/Jun/2006 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.02, 5.02, 5.02); Calibrated: 2005-09-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- 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) = 0.602 mW/g

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

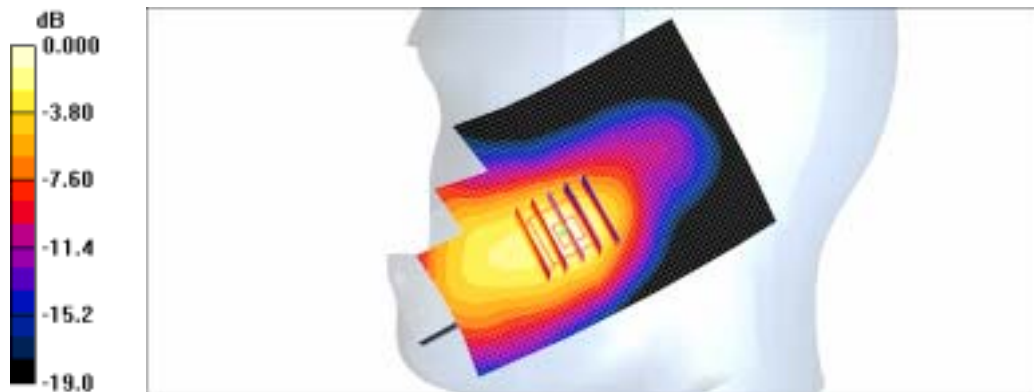
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.2 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.839 W/kg

**SAR(1 g) = 0.533 mW/g**

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



0 dB = 0.581mW/g

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DUT: SGH-Z230; Serial: FD-104-C

Program Name: SGH-Z230 GSM1900 Right (Job No. : FD-104)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-22.0; Test Date-13/Jun/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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.02, 5.02, 5.02); Calibrated: 2005-09-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Reference Value = 4.76 V/m; Power Drift = -0.164 dB

Peak SAR (extrapolated) = 0.108 W/kg

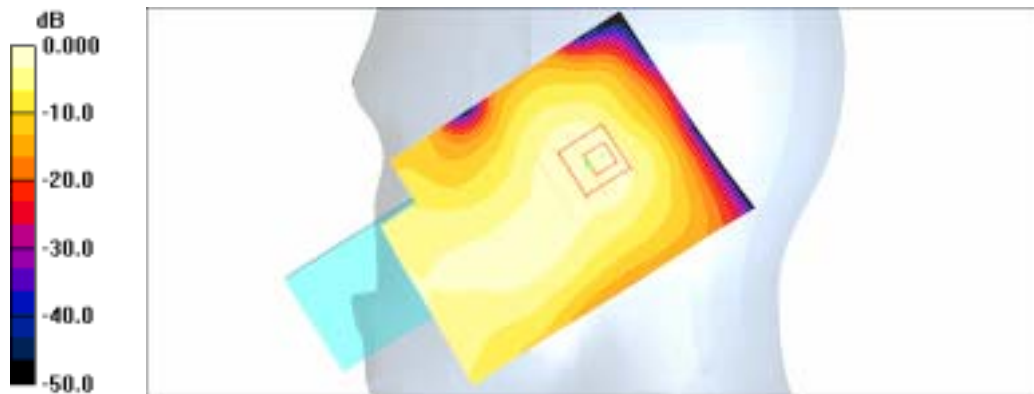
**SAR(1 g) = 0.073 mW/g**

Maximum value of SAR (measured) = 0.081 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.092 mW/g



0 dB = 0.092mW/g

SAMSUNG FCC ID : A3LSGHZ230 1900MHz GSM1900 Head SAR

DUT: SGH-Z230; Serial: FD-104-C

Program Name: SGH-Z230 GSM1900 Left (Job No. : FD-104)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-22.0; Test Date-13/Jun/2006 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.02, 5.02, 5.02); Calibrated: 2005-09-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- 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) = 0.537 mW/g

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

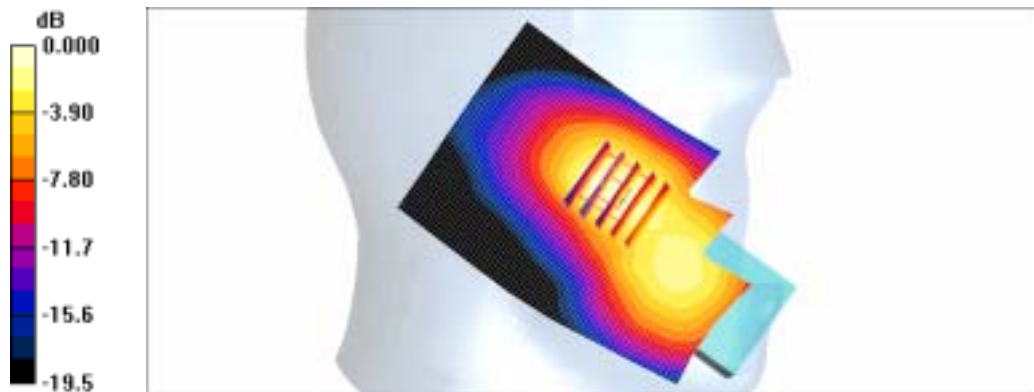
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.13 V/m; Power Drift = -0.096 dB

Peak SAR (extrapolated) = 0.816 W/kg

**SAR(1 g) = 0.515 mW/g**

Maximum value of SAR (measured) = 0.555 mW/g



0 dB = 0.555mW/g

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DUT: SGH-Z230; Serial: FD-104-C

Program Name: SGH-Z230 GSM1900 Left (Job No. : FD-104)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.1, Tissue Temp(celsius)-22.0; Test Date-13/Jun/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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 39.4$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.02, 5.02, 5.02); Calibrated: 2005-09-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Reference Value = 6.09 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 0.110 W/kg

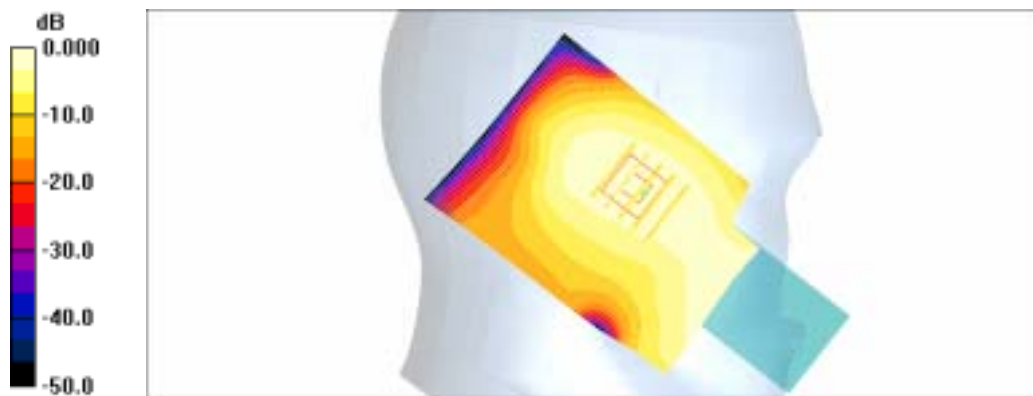
**SAR(1 g) = 0.074 mW/g**

Maximum value of SAR (measured) = 0.079 mW/g

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

dx=20mm, dy=20mm

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



0 dB = 0.075mW/g

SAMSUNG FCC ID : A3LSGHZ230 1900MHz GSM1900 Body SAR

DUT: SGH-Z230(BODY); Serial: FD-104-C

Program Name: SGH-Z230 GSM1900 Body (Job No. : FD-104)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.6, Tissue Temp(celsius)-22.4; Test Date-13/Jun/2006 [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;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(4.47, 4.47, 4.47); Calibrated: 2005-09-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.235 mW/g

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

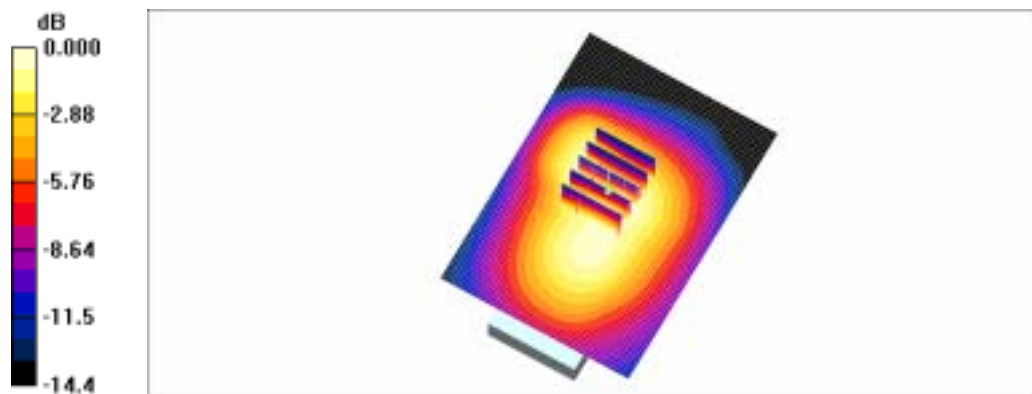
dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.9 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 0.320 W/kg

**SAR(1 g) = 0.202 mW/g**

Maximum value of SAR (measured) = 0.218 mW/g



0 dB = 0.218mW/g

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Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(5.02, 5.02, 5.02); Calibrated: 2005-09-20
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- 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) = 0.602 mW/g

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

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

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Peak SAR (extrapolated) = 0.839 W/kg

**SAR(1 g) = 0.533 mW/g**

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



SAMSUNG FCC ID : A3LSGHZ230 1900MHz GSM1900 Body SAR

DUT: SGH-Z230(BODY); Serial: FD-104-C

Program Name: SGH-Z230 GSM1900 Body (Job No. : FD-104)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.6, Tissue Temp(celsius)-22.4; Test Date-13/Jun/2006 [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;  $\sigma = 1.54$  mho/m;  $\epsilon_r = 51.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV2 - SN3017; ConvF(4.47, 4.47, 4.47); Calibrated: 2005-09-20
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- Electronics: DAE3 Sn468; Calibrated: 2006-01-27
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
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dx=8mm, dy=8mm, dz=5mm

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