

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Head SAR

DUT: SGH-Z510; Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Right (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (interpolated) = 0.593 mW/g

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

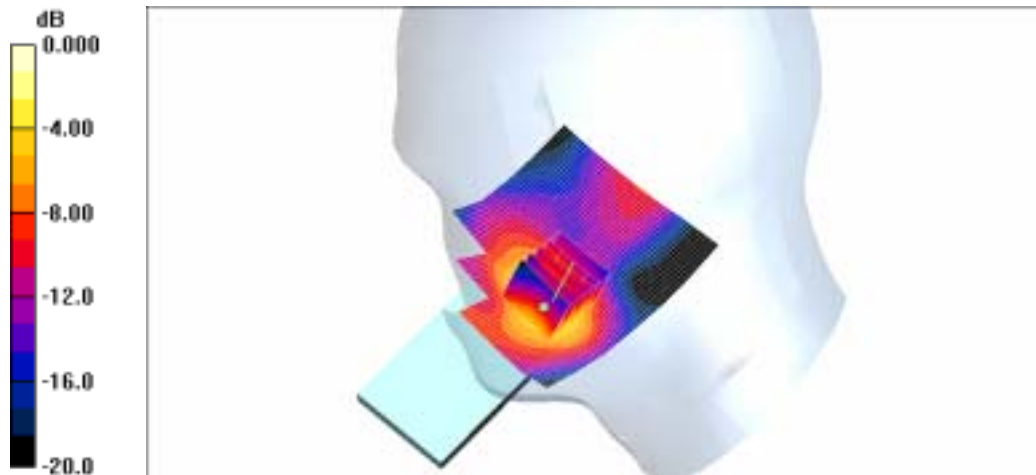
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.42 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.595 mW/g

Maximum value of SAR (measured) = 0.662 mW/g



0 dB = 0.662mW/g

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Head SAR

DUT: SGH-Z510; Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Right (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

Maximum value of SAR (interpolated) = 0.175 mW/g

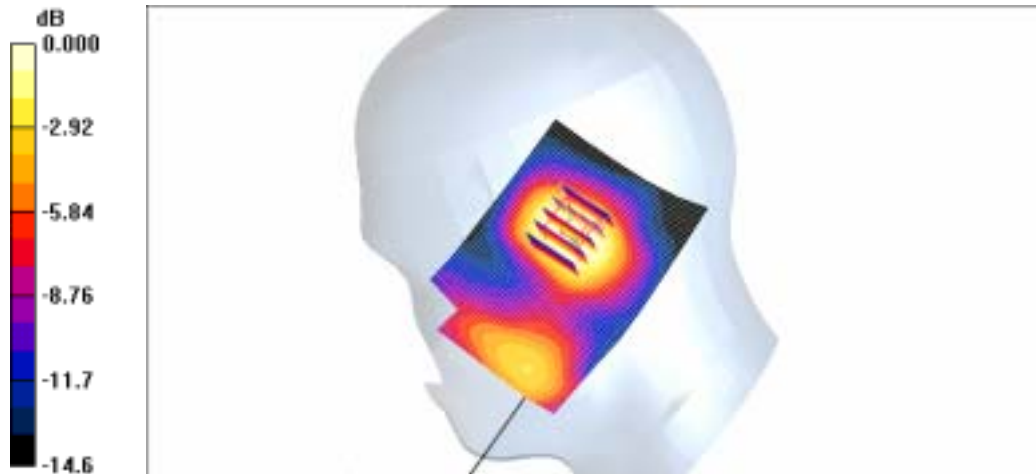
Ear/Tilt, Ch.661, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.30 V/m; Power Drift = -0.108 dB

Peak SAR (extrapolated) = 0.168 W/kg

SAR(1 g) = 0.115 mW/g

Maximum value of SAR (measured) = 0.119 mW/g



0 dB = 0.119mW/g

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Head SAR

DUT: SGH-Z510; Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Left (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Cheek/Touch, Ch.512, 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 = -0.197 dB

Peak SAR (extrapolated) = 0.601 W/kg

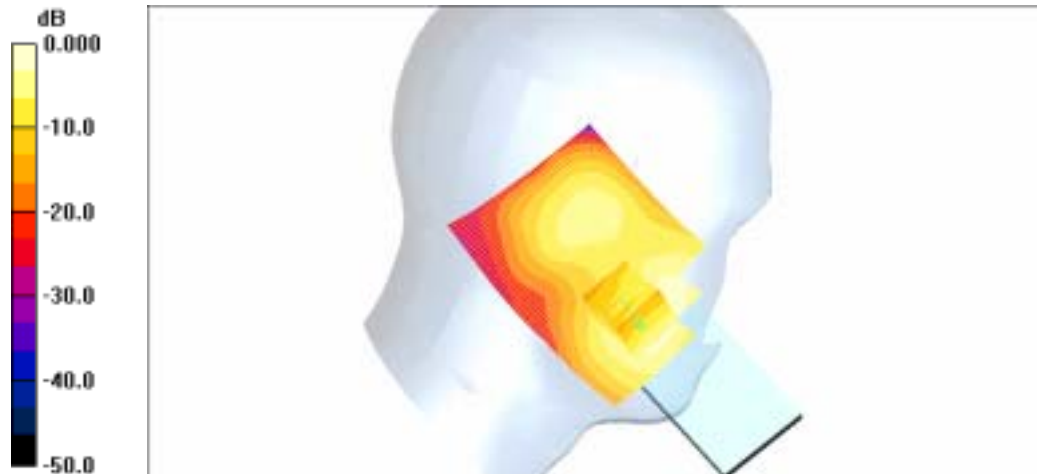
SAR(1 g) = 0.376 mW/g

Maximum value of SAR (measured) = 0.406 mW/g

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

grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.422 mW/g



0 dB = 0.422mW/g

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Head SAR

DUT: SGH-Z510; Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Left (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Left Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

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

Maximum value of SAR (interpolated) = 0.171 mW/g

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

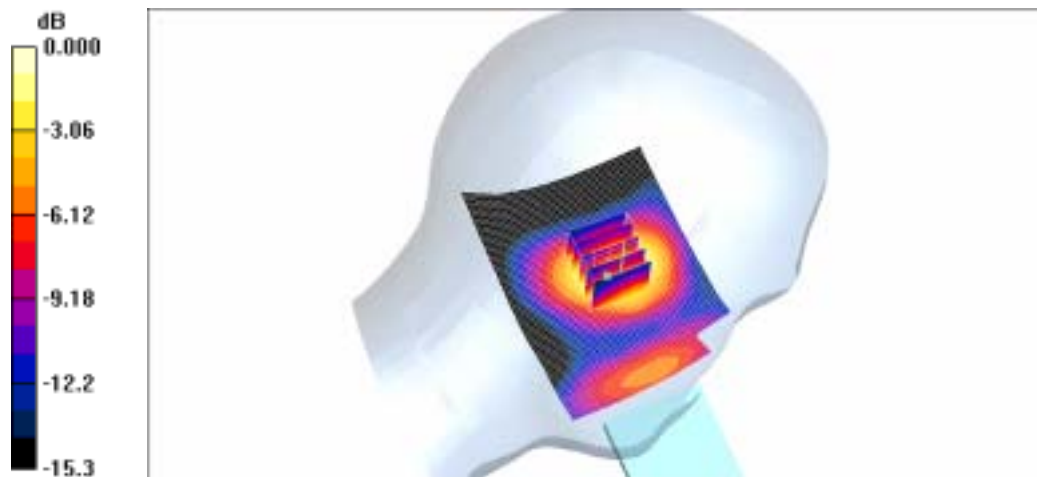
grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.16 V/m; Power Drift = -0.008 dB

Peak SAR (extrapolated) = 0.242 W/kg

SAR(1 g) = 0.164 mW/g

Maximum value of SAR (measured) = 0.173 mW/g



0 dB = 0.173mW/g

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Head SAR

DUT: SGH-Z510; Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Right (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube

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

Reference Value = 6.32 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 1.03 W/kg

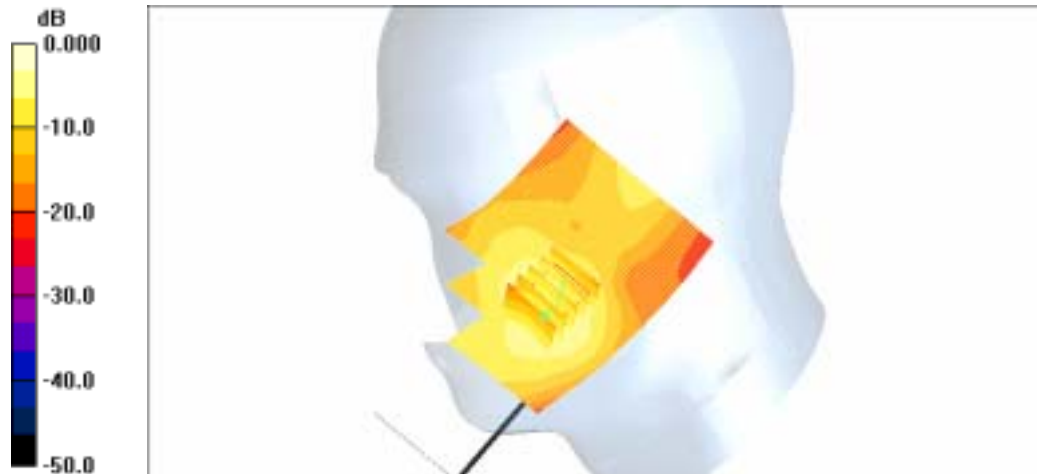
SAR(1 g) = 0.593 mW/g

Maximum value of SAR (measured) = 0.656 mW/g

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

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

Maximum value of SAR (interpolated) = 0.591 mW/g



0 dB = 0.591mW/g

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Body SAR

DUT: SGH-Z510(Body); Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Body (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(7.76, 7.76, 7.76); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.839 mW/g

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

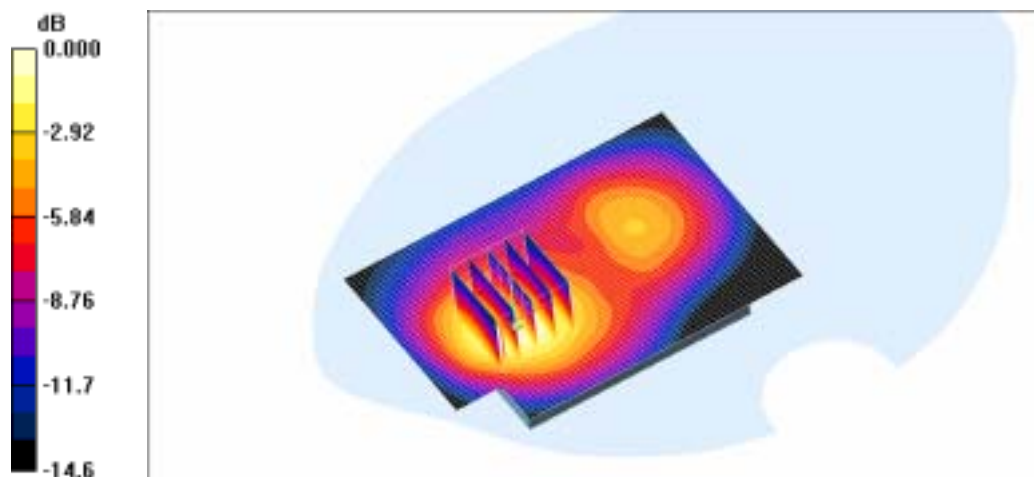
dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.5 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.764 mW/g

Maximum value of SAR (measured) = 0.823 mW/g



0 dB = 0.823mW/g

SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Body SAR

DUT: SGH-Z510(Body); Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Body (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(7.76, 7.76, 7.76); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Area Scan (51x71x1):

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

Maximum value of SAR (interpolated) = 0.836 mW/g

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube 0:

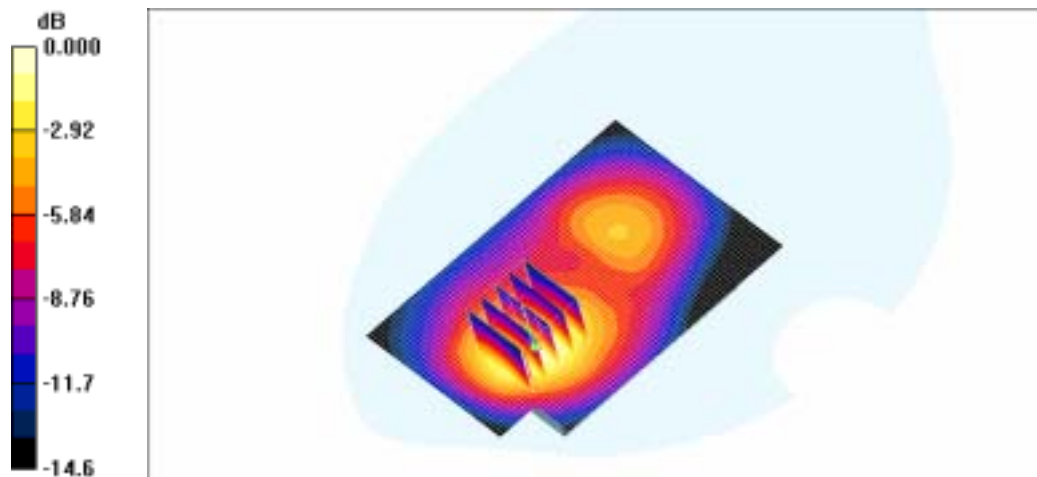
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.3 V/m; Power Drift = 0.094 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.756 mW/g

Maximum value of SAR (measured) = 0.817 mW/g



0 dB = 0.817mW/g

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DUT: SGH-Z510; Serial: FC-147-A

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Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\epsilon_r = 39.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(8.29, 8.29, 8.29); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
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Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard/Area Scan (51x71x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.593 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 = 6.42 V/m; Power Drift = -0.067 dB

Peak SAR (extrapolated) = 1.02 W/kg

SAR(1 g) = 0.595 mW/g

Maximum value of SAR (measured) = 0.662 mW/g



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Program Name: SGH-Z510 GSM1900 Right (Job No. : FC-147)

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

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Cheek/Touch, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube

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

Reference Value = 6.32 V/m; Power Drift = -0.009 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.593 mW/g

Maximum value of SAR (measured) = 0.656 mW/g



SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Body SAR

DUT: SGH-Z510(Body); Serial: FC-147-A

Program Name: SGH-Z510 GSM1900 Body (Job No. : FC-147)

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

Procedure Notes: Meas.Ambient Temp(celsius)-22.4; Tissue Temp(celsius)-21.7; Test Date-21/Oct/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; $\sigma = 1.55$ mho/m; $\epsilon_r = 52$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(7.76, 7.76, 7.76); Calibrated: 2004-12-15
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn468; Calibrated: 2004-12-07
- Phantom: SAM 1800/1900 MHz; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.6 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 159

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.839 mW/g

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

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

Reference Value = 11.5 V/m; Power Drift = 0.019 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.764 mW/g

Maximum value of SAR (measured) = 0.823 mW/g



SAMSUNG FCC ID : A3LSGHZ510 1900MHz GSM1900 Body SAR

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Program Name: SGH-Z510 GSM1900 Body (Job No. : FC-147)

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

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Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3537; ConvF(7.76, 7.76, 7.76); Calibrated: 2004-12-15
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Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Area Scan (51x71x1):

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

Maximum value of SAR (interpolated) = 0.836 mW/g

Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Zoom Scan (5x5x7)/Cube 0:

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

Reference Value = 11.3 V/m; Power Drift = 0.094 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.756 mW/g

Maximum value of SAR (measured) = 0.817 mW/g

