

## **APPENDIX G**

### **Plots of The SAR Measurements**

**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Right (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/2005 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

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

Reference Value = 13.7 V/m; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 0.385 W/kg

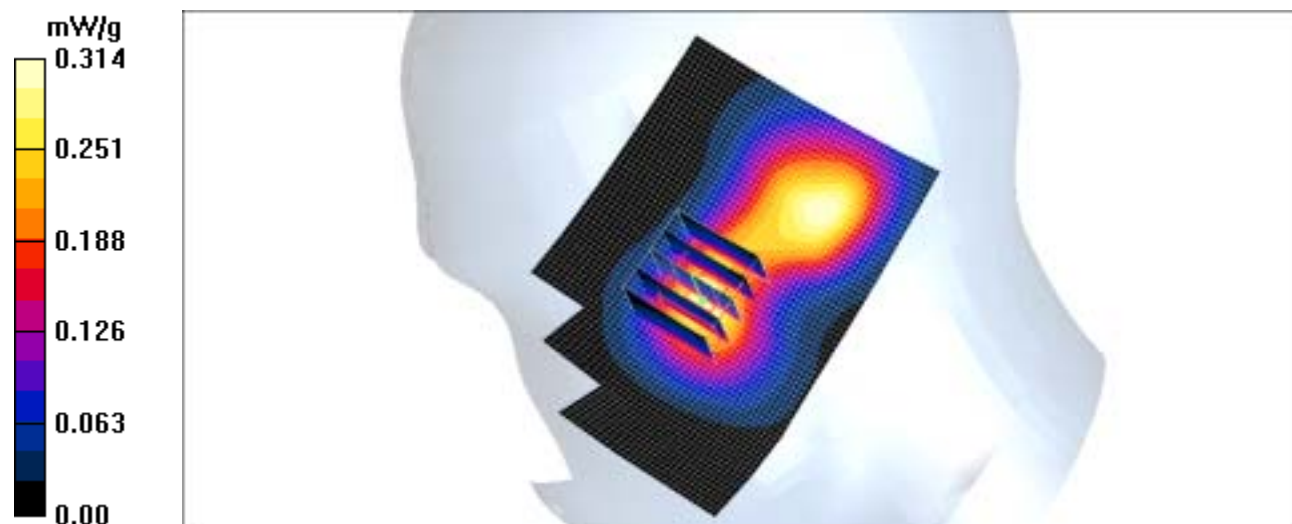
**SAR(1 g) = 0.267 mW/g**

Maximum value of SAR (measured) = 0.284 mW/g

**Cheek/Touch, Ch.810, Ant.Intenna, Bat.Standard/Area Scan (51x71x1):** Measurement

grid: dx=20mm, dy=20mm

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



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Right (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

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

Maximum value of SAR (interpolated) = 0.222 mW/g

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

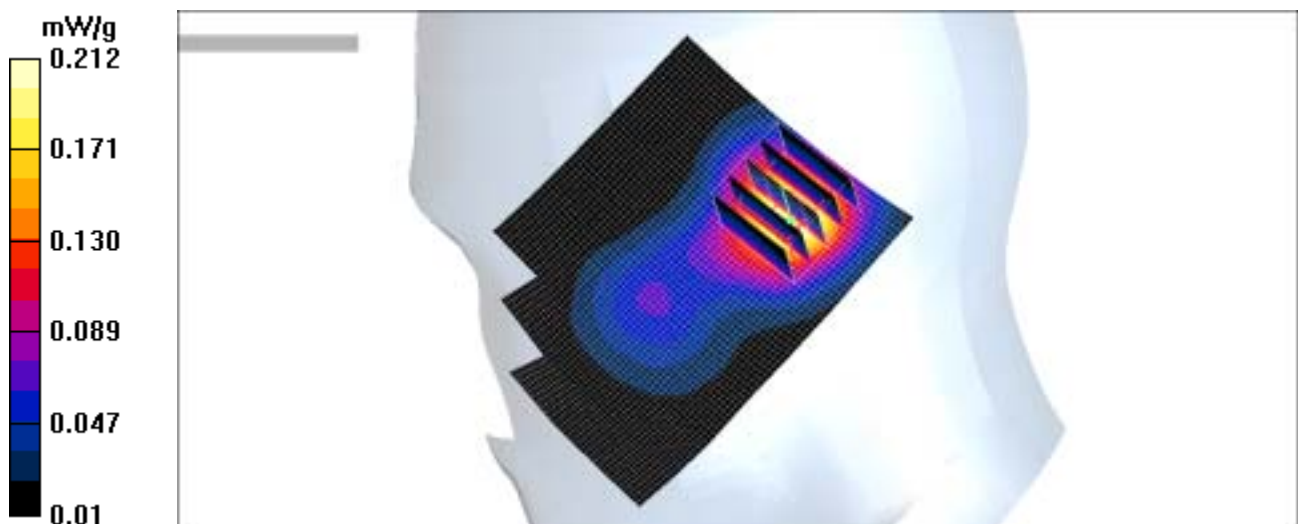
Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 10.9 V/m; Power Drift = 0.137 dB

Peak SAR (extrapolated) = 0.311 W/kg

**SAR(1 g) = 0.195 mW/g**

Maximum value of SAR (measured) = 0.212 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Left (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/2005 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Maximum value of SAR (interpolated) = 0.336 mW/g

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

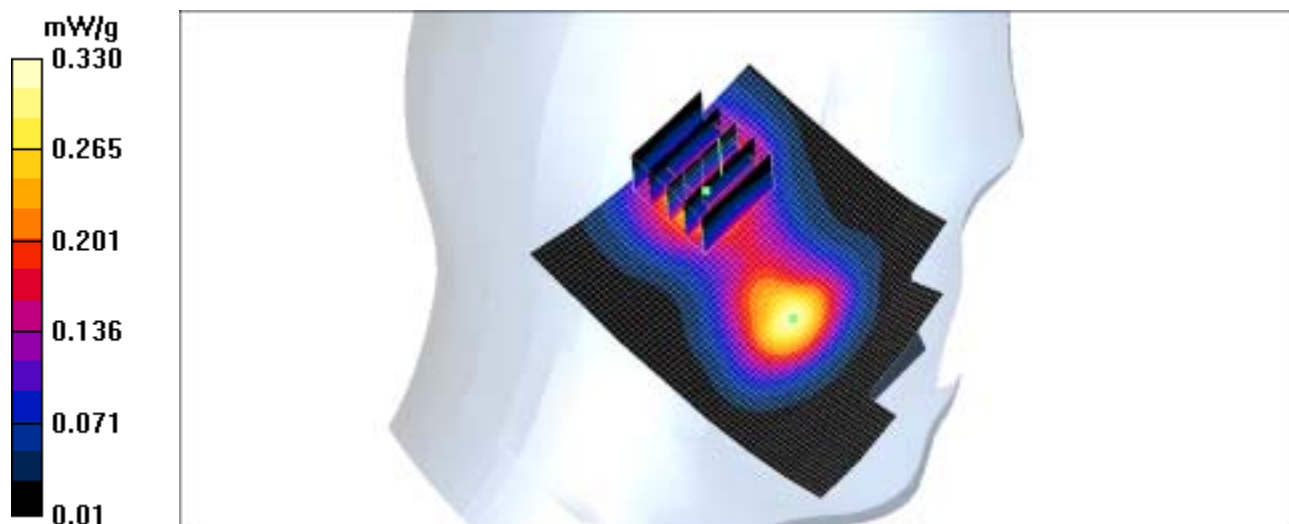
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.512 W/kg

**SAR(1 g) = 0.311 mW/g**

Maximum value of SAR (measured) = 0.330 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Left (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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, V4.5 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 = 11.2 V/m; Power Drift = -0.018 dB

Peak SAR (extrapolated) = 0.319 W/kg

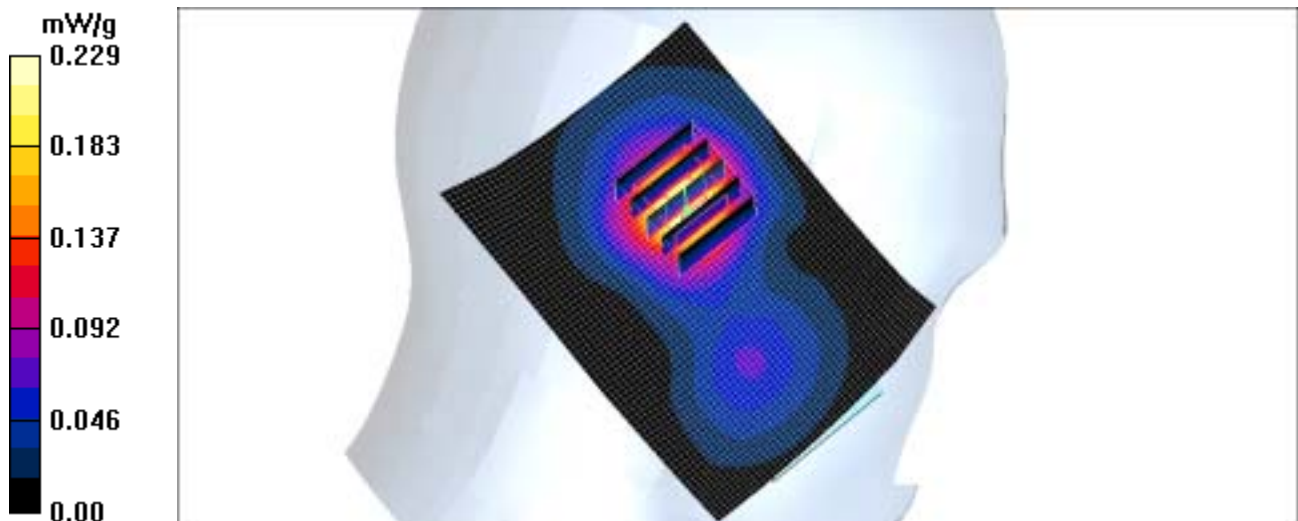
**SAR(1 g) = 0.197 mW/g**

Maximum value of SAR (measured) = 0.213 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.229 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Left (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/2005 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

**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 = 13.7 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.534 W/kg

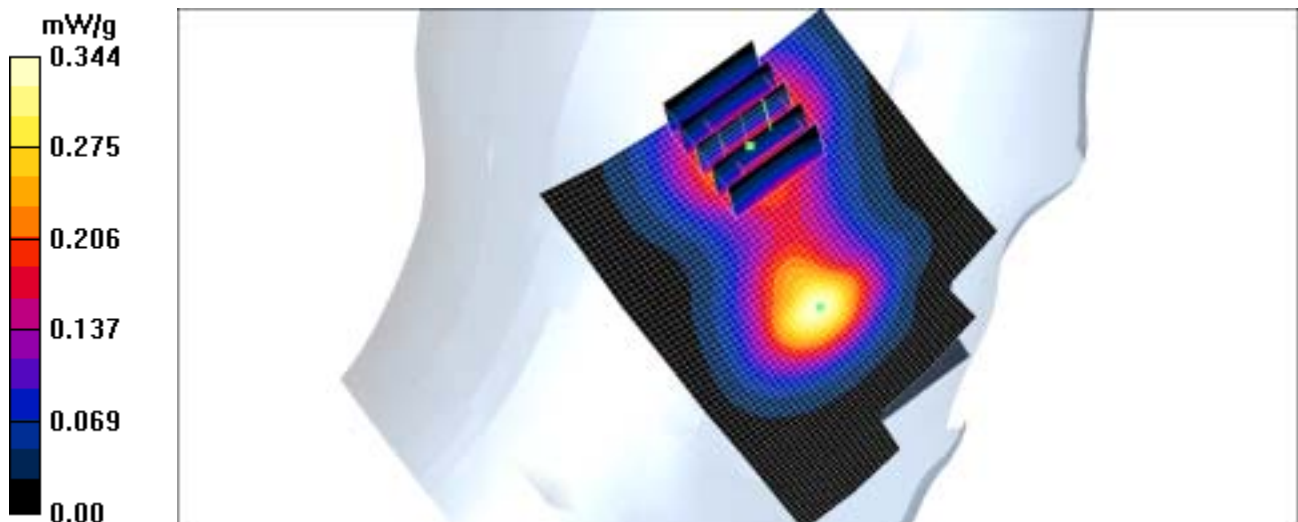
**SAR(1 g) = 0.323 mW/g**

Maximum value of SAR (measured) = 0.345 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) = 0.344 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Body); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Body (Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-10/June/2005 [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;  $\sigma = 1.55$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

**Body, Ch.810, Ant.Intenna, Bat.Standard/Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.3 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 1.23 W/kg

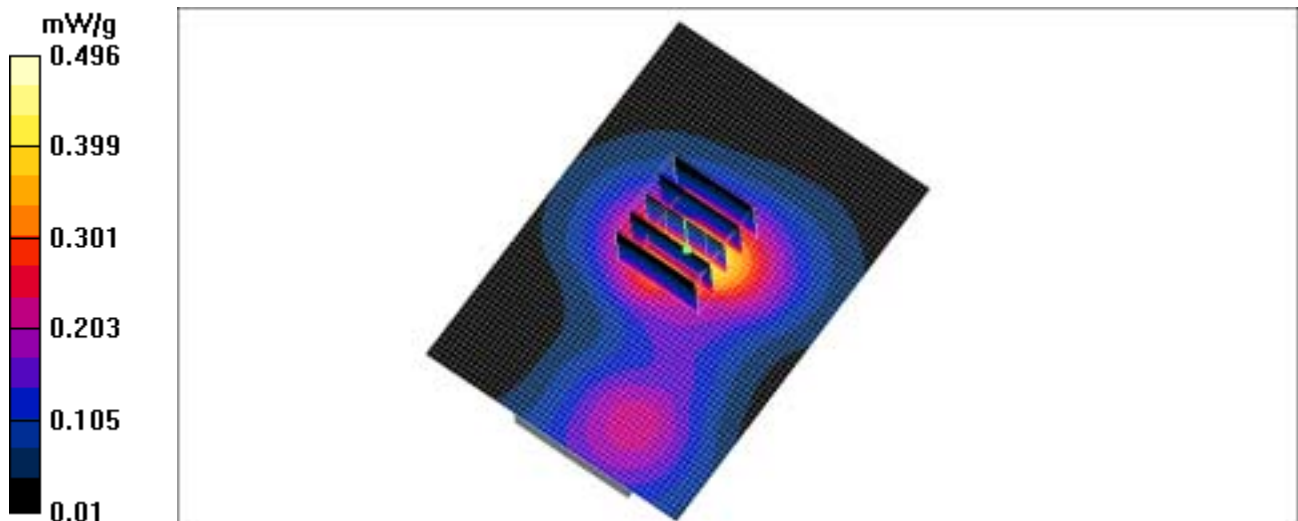
**SAR(1 g) = 0.430 mW/g;**

Maximum value of SAR (measured) = 0.440 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.496 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Body); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Body (Job No. : FC-080)**

**Procedure Name: Body, Ch.810, Ant.Intenna, Bat.Standard With BT on**

**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-10/June/2005 [OET Bulletin 65-Supplement C, July 2001]**

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

Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.55 \text{ mho/m}$ ;  $\epsilon_r = 51.2$ ;  $\rho = 1000 \text{ kg/m}^3$

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

**Body, Ch.810, Ant.Intenna, Bat.Standard With BT on/Area Scan (51x71x1):**

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

Maximum value of SAR (interpolated) = 0.538 mW/g

**Body, Ch.810, Ant.Intenna, Bat.Standard With BT on/Zoom Scan (5x5x7)/Cube 0:**

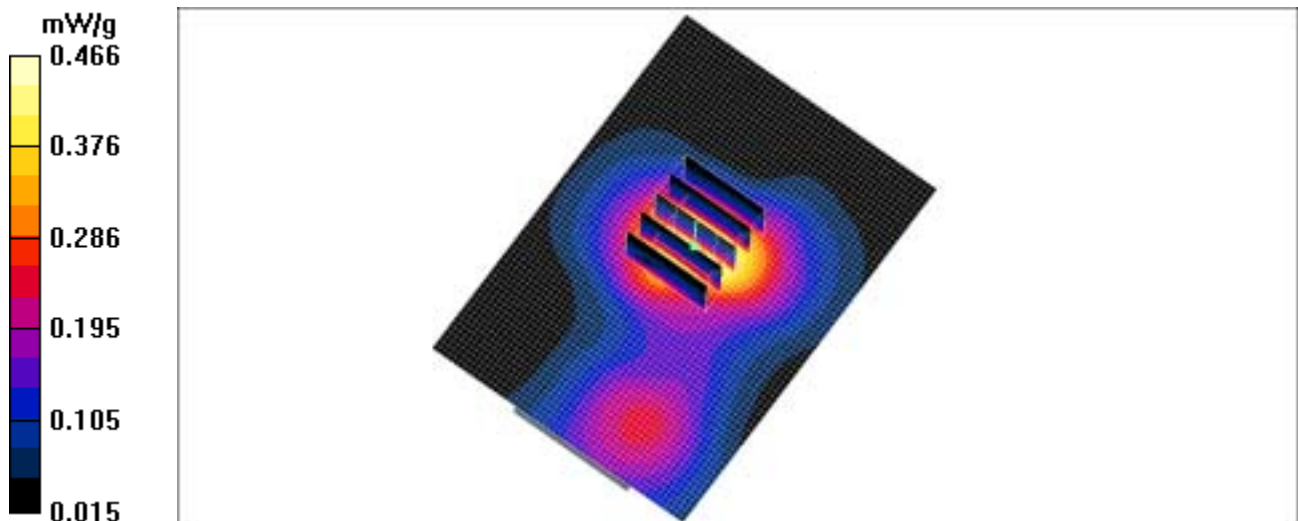
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 15.6 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 0.637 W/kg

**SAR(1 g) = 0.429 mW/g**

Maximum value of SAR (measured) = 0.466 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Left (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/2005 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

Maximum value of SAR (interpolated) = 0.336 mW/g

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

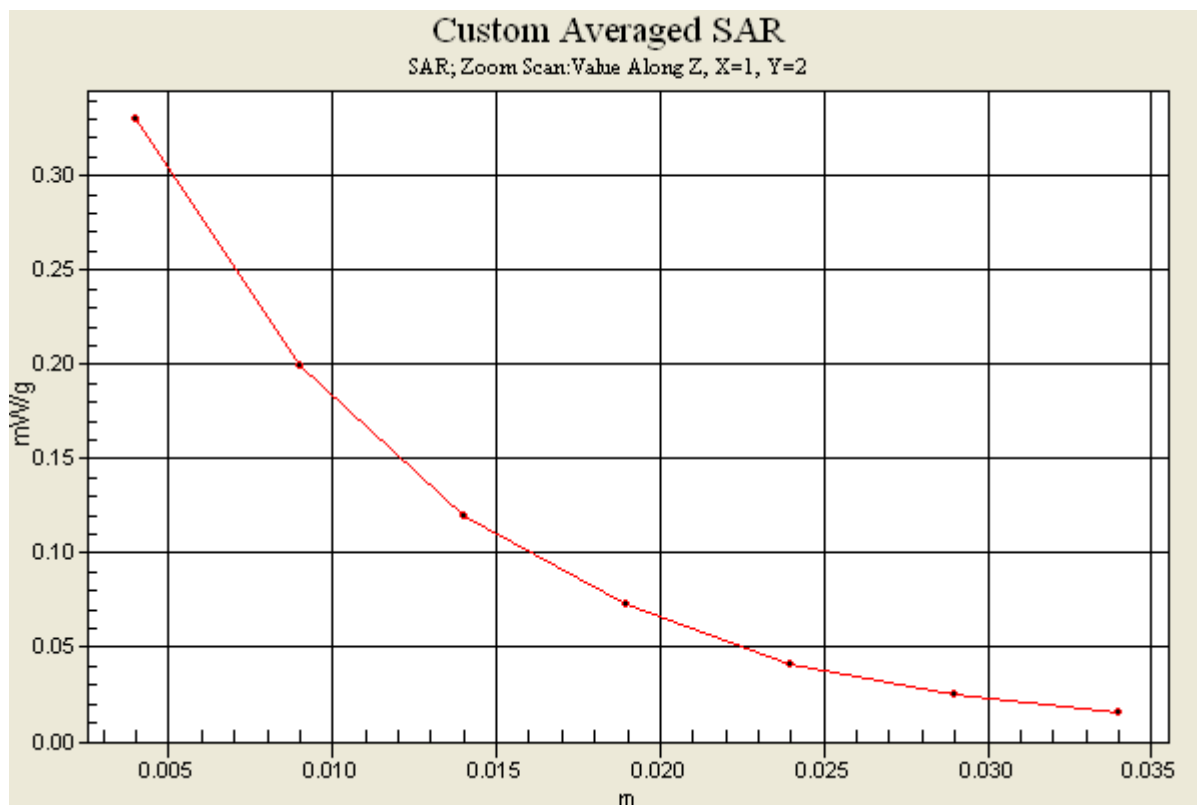
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.512 W/kg

**SAR(1 g) = 0.311 mW/g**

Maximum value of SAR (measured) = 0.330 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Down); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Left (Slide.Down, Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.7; Test Date-10/June/2005 [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;  $\sigma = 1.41$  mho/m;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

**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 = 13.7 V/m; Power Drift = 0.064 dB

Peak SAR (extrapolated) = 0.534 W/kg

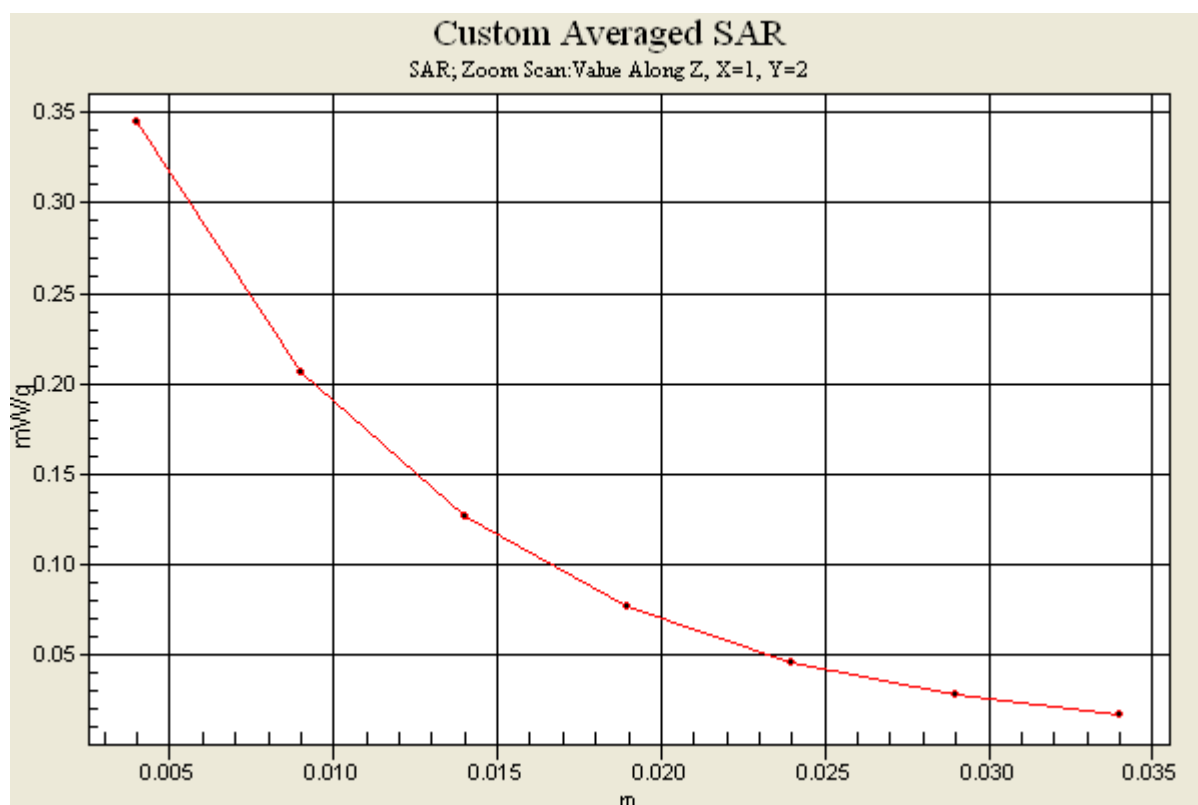
**SAR(1 g) = 0.323 mW/g**

Maximum value of SAR (measured) = 0.345 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) = 0.344 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Body); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Body (Job No. : FC-080)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-10/June/2005[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;  $\sigma = 1.55$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

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

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

Reference Value = 15.3 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 1.23 W/kg

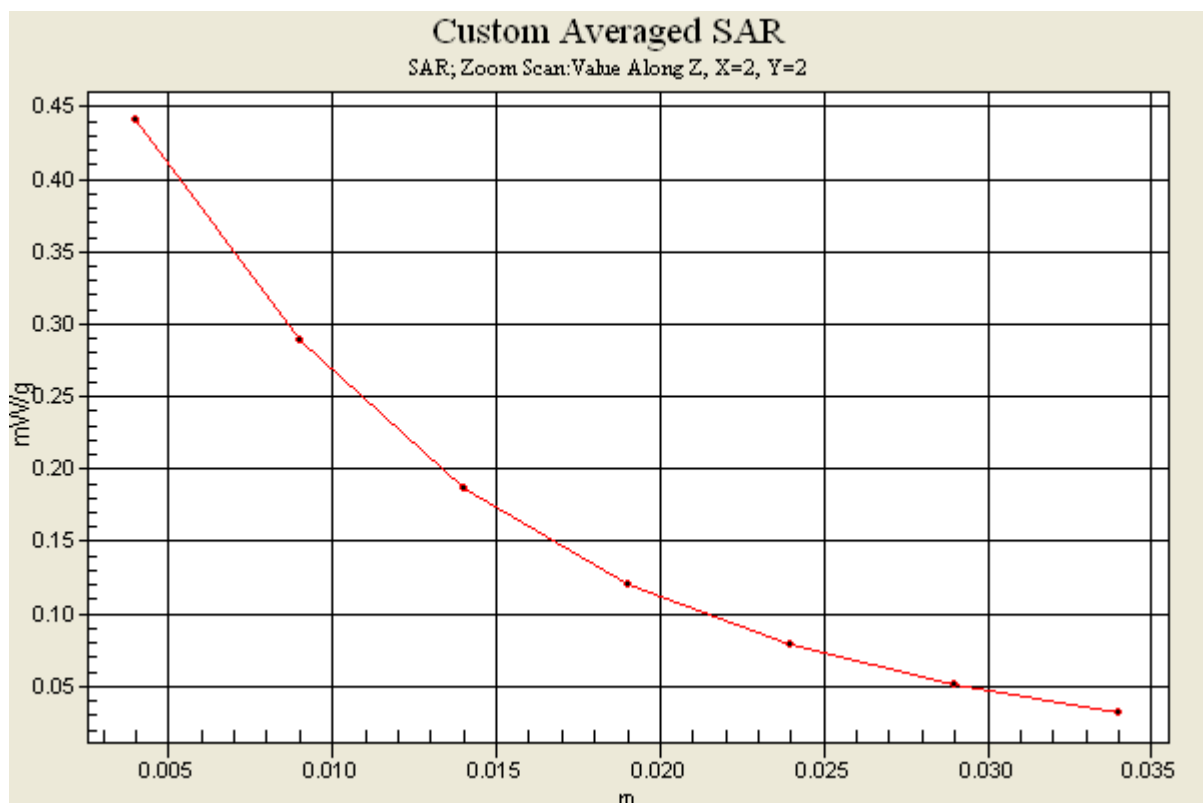
**SAR(1 g) = 0.430 mW/g**

Maximum value of SAR (measured) = 0.440 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.496 mW/g



**SAMSUNG FCC ID : A3LSGHD720 1900MHz GSM1900 Head SAR**

**DUT: SGH-D720 (Body); Serial: FC-080-B**

**Program Name: SGH-D720 GSM1900 Body (Job No. : FC-080)**

**Procedure Name: Body, Ch.810, Ant.Intenna, Bat.Standard With BT on**

**Procedure Notes: Meas.Tissue Temp(celsius)-21.5; Test Date-10/June/2005 [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;  $\sigma = 1.55$  mho/m;  $\epsilon_r = 51.2$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

**Body, Ch.810, Ant.Intenna, Bat.Standard With BT on/Area Scan (51x71x1):**

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

Maximum value of SAR (interpolated) = 0.538 mW/g

**Body, Ch.810, Ant.Intenna, Bat.Standard With BT on/Zoom Scan (5x5x7)/Cube 0:**

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

Reference Value = 15.6 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 0.637 W/kg

**SAR(1 g) = 0.429 mW/g**

Maximum value of SAR (measured) = 0.466 mW/g

