

## **APPENDIX F**

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

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Up); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Right Slide Up (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Reference Value = 9.38 V/m; Power Drift = -0.028 dB

Peak SAR (extrapolated) = 0.395 W/kg

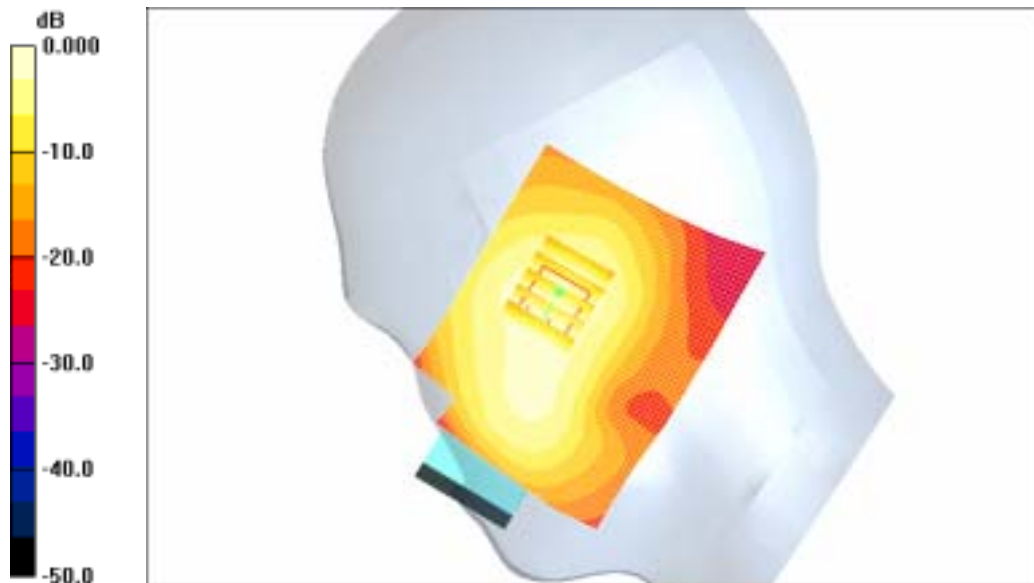
**SAR(1 g) = 0.256 mW/g**

Maximum value of SAR (measured) = 0.276 mW/g

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

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

Maximum value of SAR (interpolated) = 0.274 mW/g



0 dB = 0.274mW/g

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Up); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Right Slide Up (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.198 mW/g

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

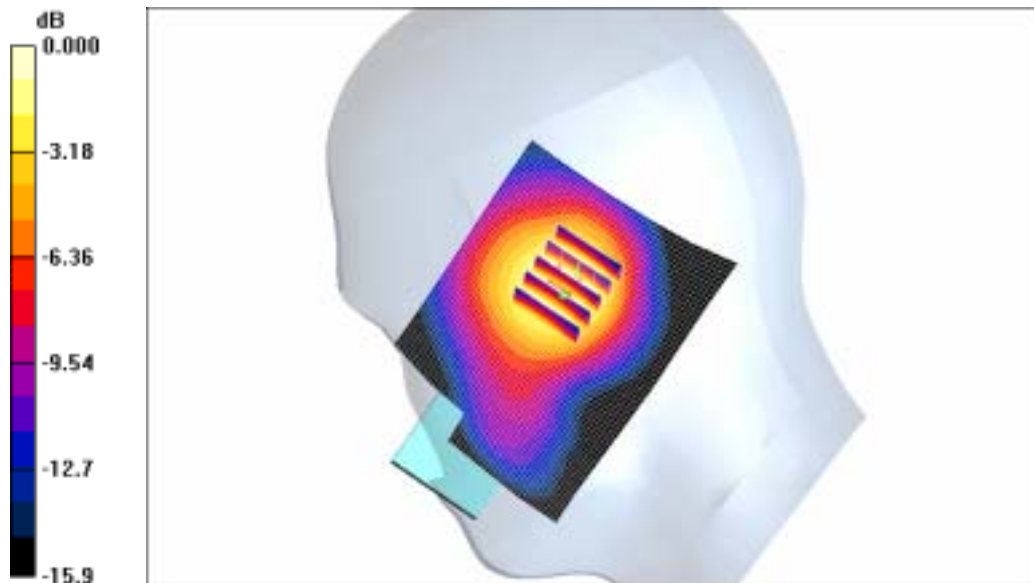
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.3 V/m; Power Drift = -0.038 dB

Peak SAR (extrapolated) = 0.247 W/kg

**SAR(1 g) = 0.167 mW/g**

Maximum value of SAR (measured) = 0.178 mW/g



0 dB = 0.178mW/g

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Down); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Right Slide Down (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Reference Value = 13.5 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.492 W/kg

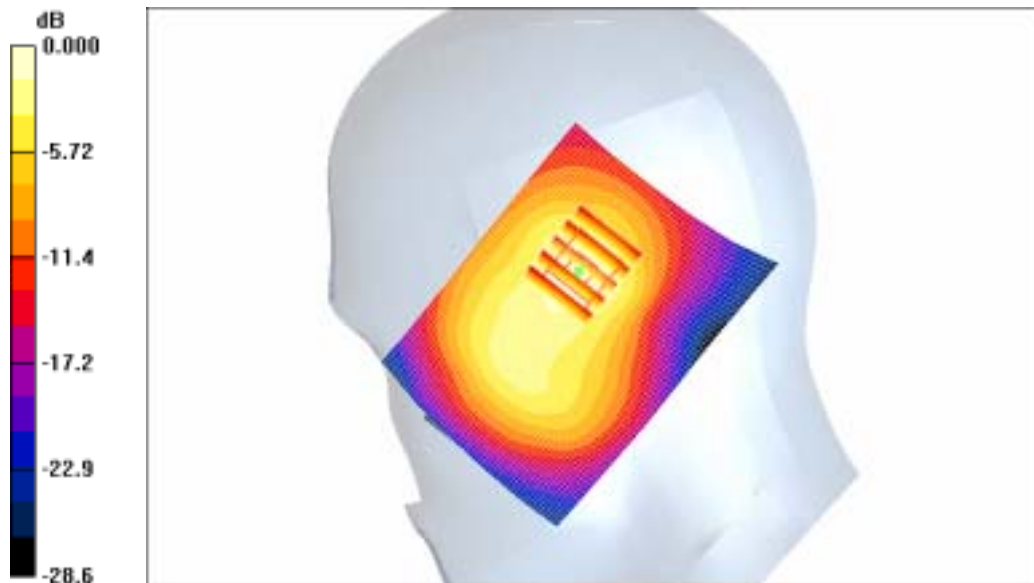
**SAR(1 g) = 0.300 mW/g**

Maximum value of SAR (measured) = 0.335 mW/g

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

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

Maximum value of SAR (interpolated) = 0.319 mW/g



0 dB = 0.319mW/g

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Down); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Right Slide Down (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Maximum value of SAR (interpolated) = 0.267 mW/g

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

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

Reference Value = 12.2 V/m; Power Drift = 0.044 dB

Peak SAR (extrapolated) = 0.410 W/kg

**SAR(1 g) = 0.250 mW/g**

Maximum value of SAR (measured) = 0.278 mW/g



0 dB = 0.278mW/g

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Up); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Left Slide Up(Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Reference Value = 8.97 V/m; Power Drift = -0.193 dB

Peak SAR (extrapolated) = 0.382 W/kg

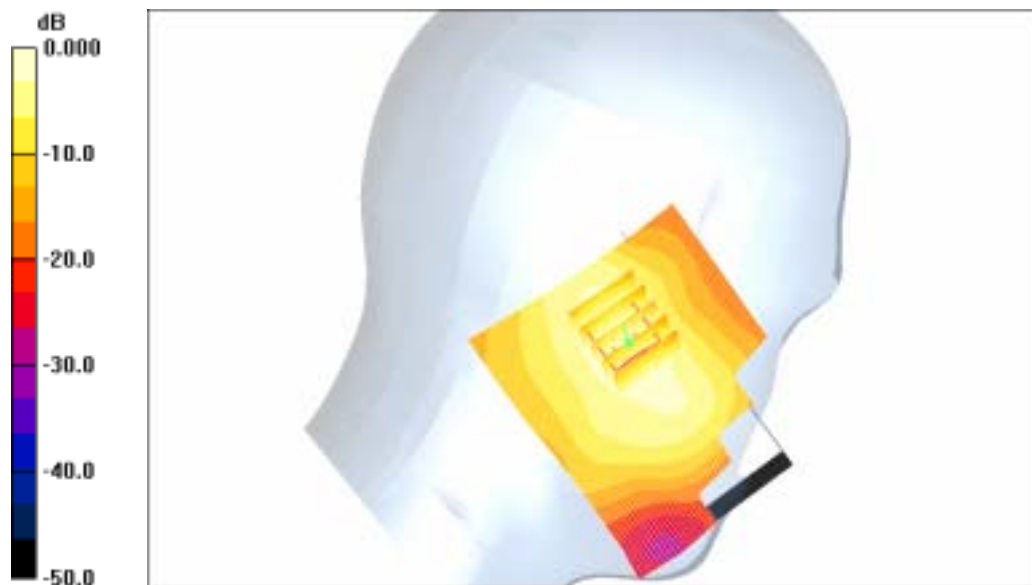
**SAR(1 g) = 0.276 mW/g**

Maximum value of SAR (measured) = 0.292 mW/g

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

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

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



0 dB = 0.350mW/g

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Up); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Left Slide Up(Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Maximum value of SAR (interpolated) = 0.193 mW/g

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

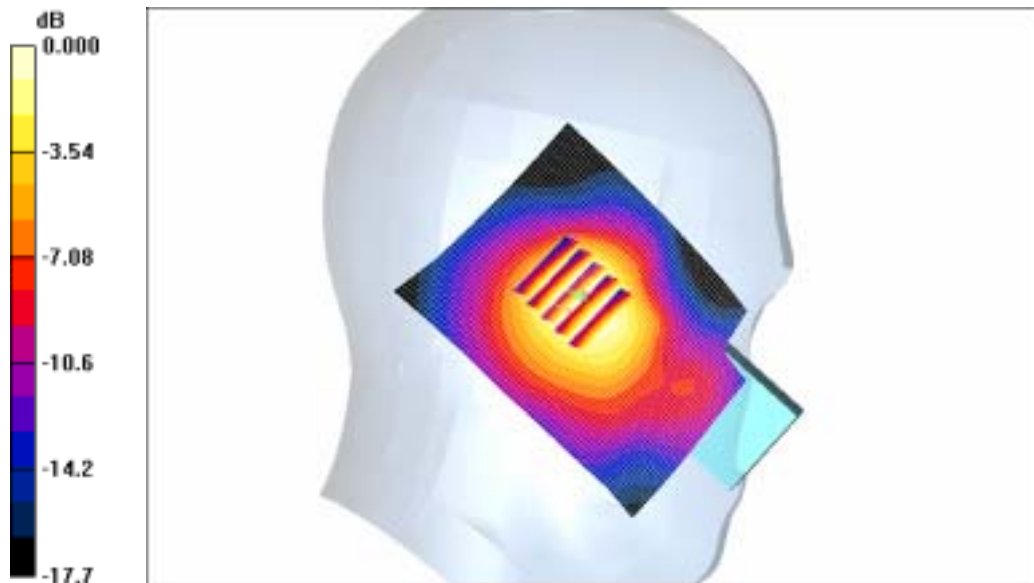
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 9.20 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 0.219 W/kg

**SAR(1 g) = 0.149 mW/g**

Maximum value of SAR (measured) = 0.161 mW/g



0 dB = 0.161mW/g

SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Down); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Left Slide Down (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Reference Value = 12.3 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 0.349 W/kg

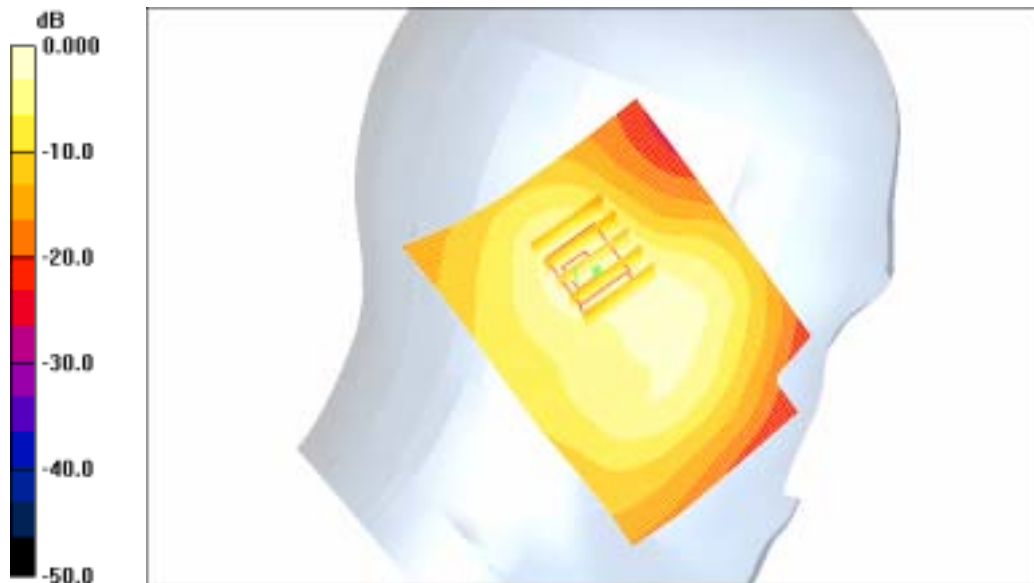
**SAR(1 g) = 0.220 mW/g**

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

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

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

Maximum value of SAR (interpolated) = 0.263 mW/g



0 dB = 0.263mW/g



SAMSUNG FCC ID : A3LSCHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Down); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Left Slide Down (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Maximum value of SAR (interpolated) = 0.227 mW/g

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

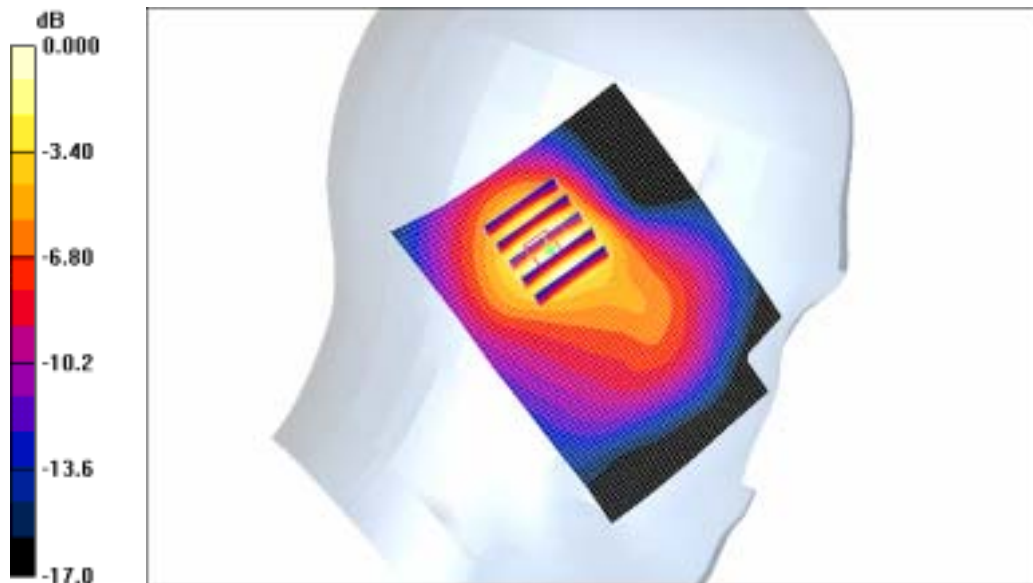
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.7 V/m; Power Drift = -0.198 dB

Peak SAR (extrapolated) = 0.334 W/kg

**SAR(1 g) = 0.208 mW/g**

Maximum value of SAR (measured) = 0.231 mW/g



0 dB = 0.231mW/g

**SAMSUNG FCC ID : A3LSGHE370 - - 1900MHz GSM1900 Body SAR**

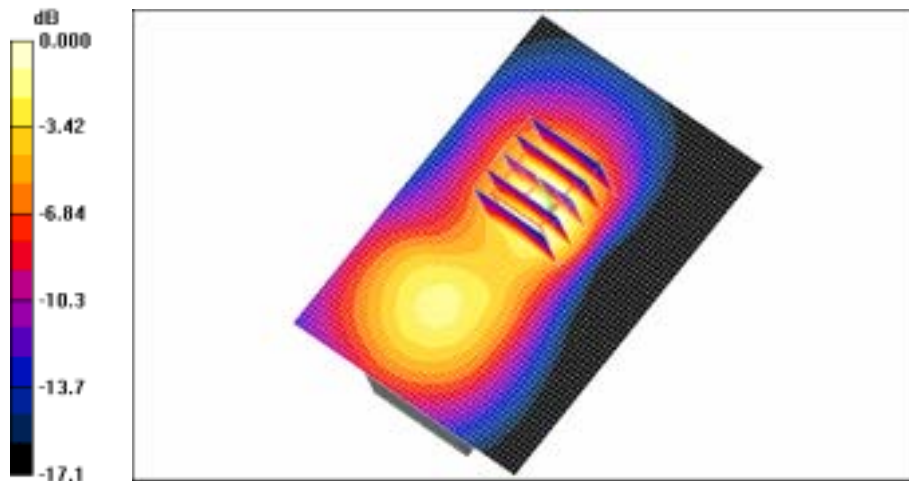
**DUT: SGH-E370(Down); Serial: FD-017-C**  
**Program Name: SGH-E370 GSM1900 Body (Job No. : FD-017)**  
**Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON**  
**Procedure Notes: Meas.Ambient Temp(celsius)-21.8, Tissue Temp(celsius)-21.4; Test Date-14/Feb/2006 [OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM 1900; 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/m<sup>3</sup>  
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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

**Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON/Area Scan (51x71x1):**  
Measurement grid: dx=20mm, dy=20mm  
Maximum value of SAR (interpolated) = 0.938 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 = 25.0 V/m; Power Drift = -0.083 dB  
Peak SAR (extrapolated) = 1.33 W/kg  
**SAR(1 g) = 0.865 mW/g**  
Maximum value of SAR (measured) = 0.955 mW/g



0 dB = 0.955mW/g

SAMSUNG FCC ID : A3LSGHE370 1900MHz GSM1900 Head SAR

DUT: SGH-E370(Down); Serial: FD-017-C

Program Name: SGH-E370 GSM1900 Right Slide Down (Job No. : FD-017)

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

Procedure Notes: Meas. Ambient Temp(celsius)-22.0, Tissue Temp(celsius)-21.3; Test Date-14/Feb/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #1; Type: SAM; Serial: TP-1143
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

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

Maximum value of SAR (interpolated) = 0.319 mW/g

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

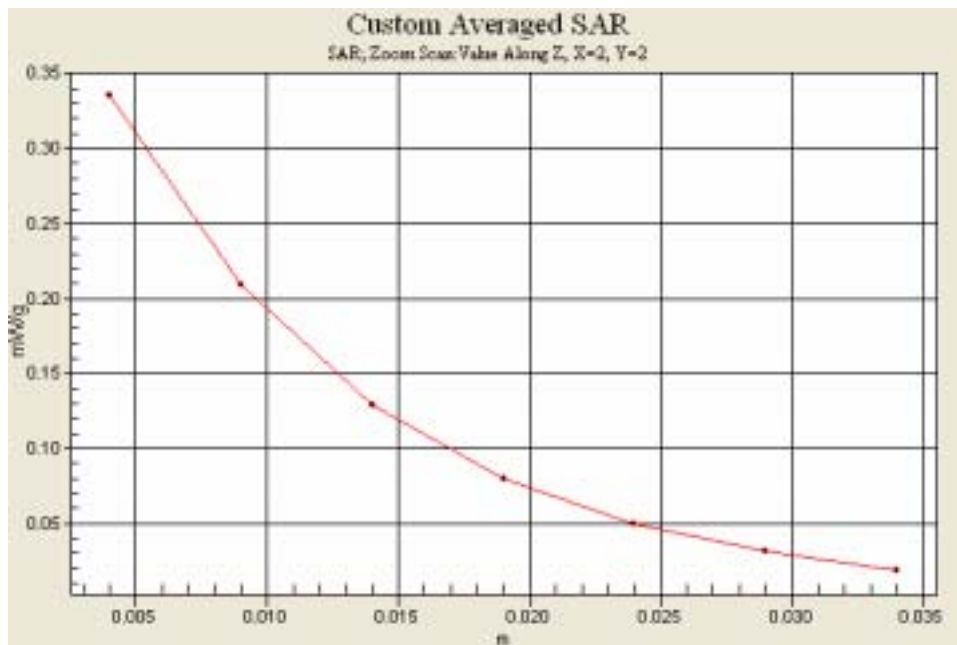
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.5 V/m; Power Drift = 0.001 dB

Peak SAR (extrapolated) = 0.492 W/kg

**SAR(1 g) = 0.300 mW/g**

Maximum value of SAR (measured) = 0.335 mW/g



SAMSUNG FCC ID : A3LSGHE370 - - 1900MHz GSM1900 Body SAR  
DUT: SGH-E370(Down); Serial: FD-017-C  
Program Name: SGH-E370 GSM1900 Body (Job No. : FD-017)  
Procedure Name: Body, Ch.512, Ant.Intenna, Bat.Standard With BT ON  
Procedure Notes: Meas.Ambient Temp(celsius)-21.8, Tissue Temp(celsius)-21.4; Test  
Date-14/Feb/2006 [OET Bulletin 65-Supplement C, July 2001]

Communication System: GSM 1900; 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/m<sup>3</sup>  
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 Sn533; Calibrated: 2005-11-21
- Phantom: PHANTOM #2; Type: SAM; Serial: TP-1141
- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

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

Measurement grid: dx=20mm, dy=20mm  
Maximum value of SAR (interpolated) = 0.938 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 = 25.0 V/m; Power Drift = -0.083 dB  
Peak SAR (extrapolated) = 1.33 W/kg  
SAR(1 g) = 0.865 mW/g  
Maximum value of SAR (measured) = 0.955 mW/g

