

SAMSUNG FCC ID : A3LSGHX510 -- 1900MHz GSM1900 Head SAR

DUT: SGH-X510; Serial: FD-174-B

Program Name: SGH-X510 GSM1900 Right (Job No. : FD-174)

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

Procedure Notes: Meas.Tissue Temp(celsius)-22.0, Ambient Temp-22.3;Test Date-07/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;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(5, 5, 5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- 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) = 0.621 mW/g

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

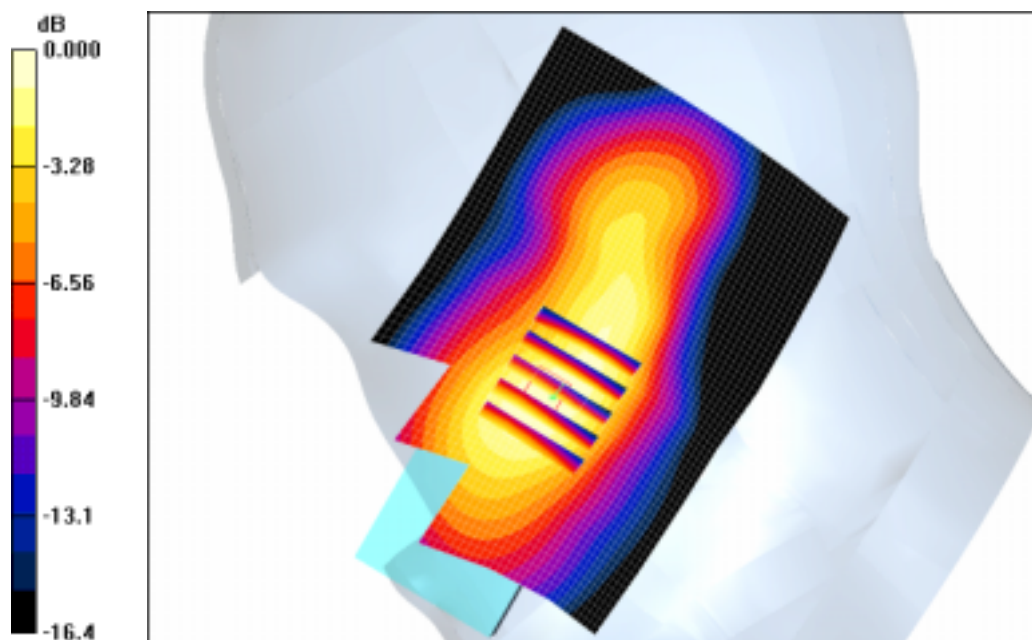
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.0 V/m; Power Drift = -0.077 dB

Peak SAR (extrapolated) = 0.884 W/kg

**SAR(1 g) = 0.562 mW/g**

Maximum value of SAR (measured) = 0.629 mW/g



0 dB = 0.629mW/g

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DUT: SGH-X510; Serial: FD-174-B

Program Name: SGH-X510 GSM1900 Right (Job No. : FD-174)

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

Procedure Notes: Meas.Tissue Temp(celsius)-22.0, Ambient Temp-22.3;Test Date-07/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;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Right Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(5, 5, 5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

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

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

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

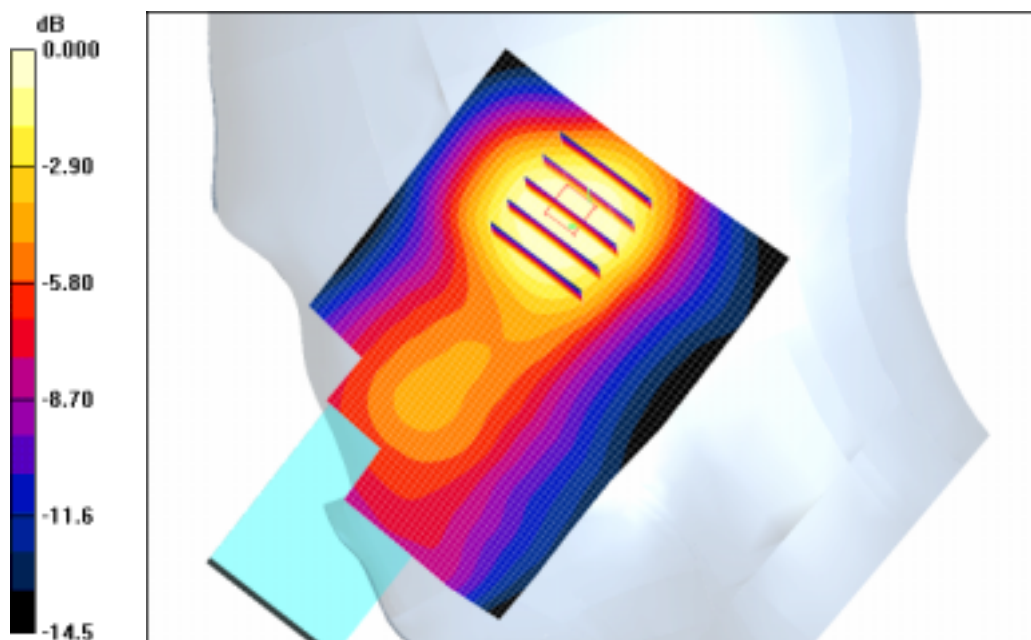
grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 9.70 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.183 W/kg

**SAR(1 g) = 0.134 mW/g**

Maximum value of SAR (measured) = 0.142 mW/g



0 dB = 0.142mW/g

SAMSUNG FCC ID : A3LSGHX510 -- 1900MHz GSM1900 Head SAR

DUT: SGH-X510; Serial: FD-174-B

Program Name: SGH-X510 GSM1900 Left (Job No. : FD-174)

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

Procedure Notes: Meas.Tissue Temp(celsius)-22.0, Ambient Temp-22.3;Test Date-07/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:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.37 \text{ mho/m}$ ;  $\epsilon_r = 39.6$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(5, 5, 5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (interpolated) = 0.650 mW/g

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

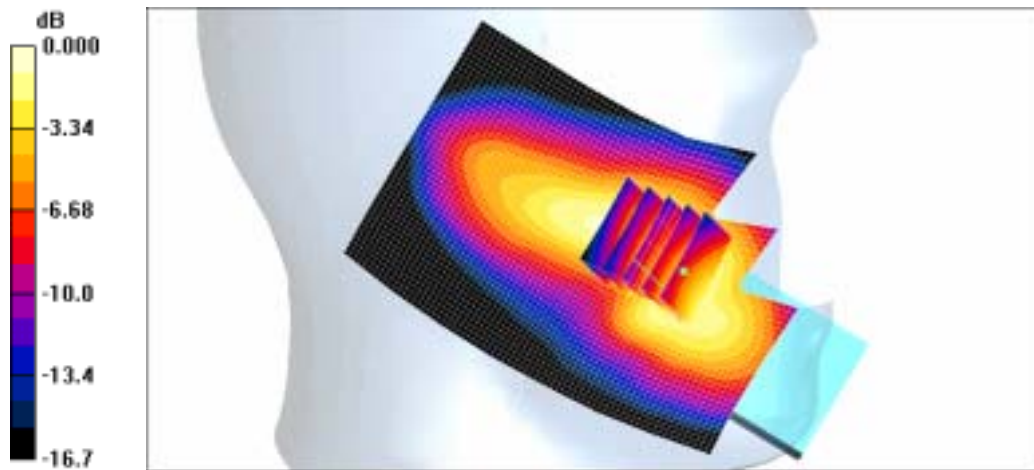
Measurement grid:  $dx=8\text{mm}$ ,  $dy=8\text{mm}$ ,  $dz=5\text{mm}$

Reference Value = 17.4 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.889 W/kg

**SAR(1 g) = 0.637 mW/g**

Maximum value of SAR (measured) = 0.700 mW/g



0 dB = 0.700mW/g

SAMSUNG FCC ID : A3LSGHX510 -- 1900MHz GSM1900 Head SAR

DUT: SGH-X510; Serial: FD-174-B

Program Name: SGH-X510 GSM1900 Left (Job No. : FD-174)

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

Procedure Notes: Meas.Tissue Temp(celsius)-22.0, Ambient Temp-22.3;Test Date-07/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;  $\sigma = 1.37$  mho/m;  $\epsilon_r = 39.6$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(5, 5, 5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- 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 = 5.72 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 0.193 W/kg

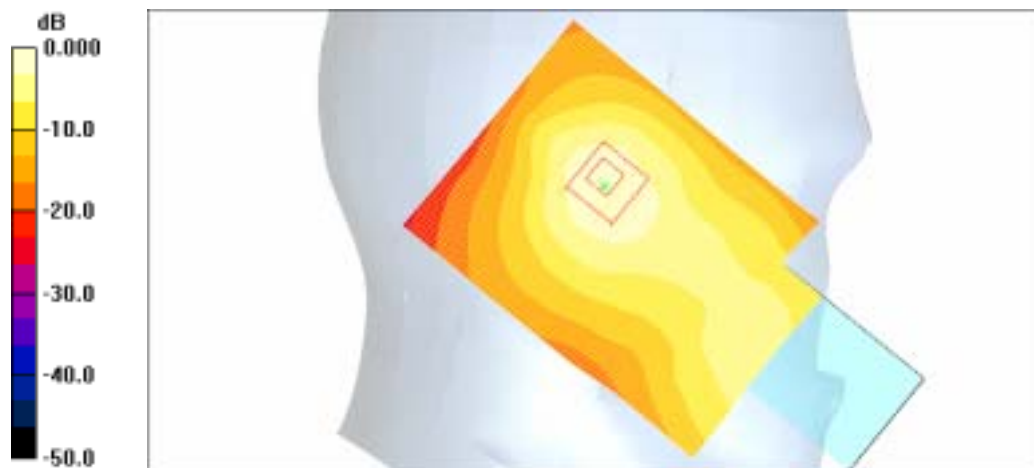
**SAR(1 g) = 0.140 mW/g**

Maximum value of SAR (measured) = 0.148 mW/g

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

dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.181 mW/g



0 dB = 0.181mW/g

**SAMSUNG FCC ID : A3LSGHX510 - - 1900MHz GPRS1900 Body SAR**

**DUT: SGH-X510(Body); Serial: FD-174-B**

**Program Name: SGH-X510 GPRS1900 Body (Job No. : FD-174)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.5, Ambient Temp-21.8;Test Date-07/Sep/2006[OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM1900 GPRS; Frequency: 1909.8 MHz;Duty Cycle: 1:4.15

Medium parameters used:  $f = 1909.8$  MHz;  $\sigma = 1.53$  mho/m;  $\epsilon_r = 52.5$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.5, 4.5, 4.5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1247
- 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) = 0.704 mW/g

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

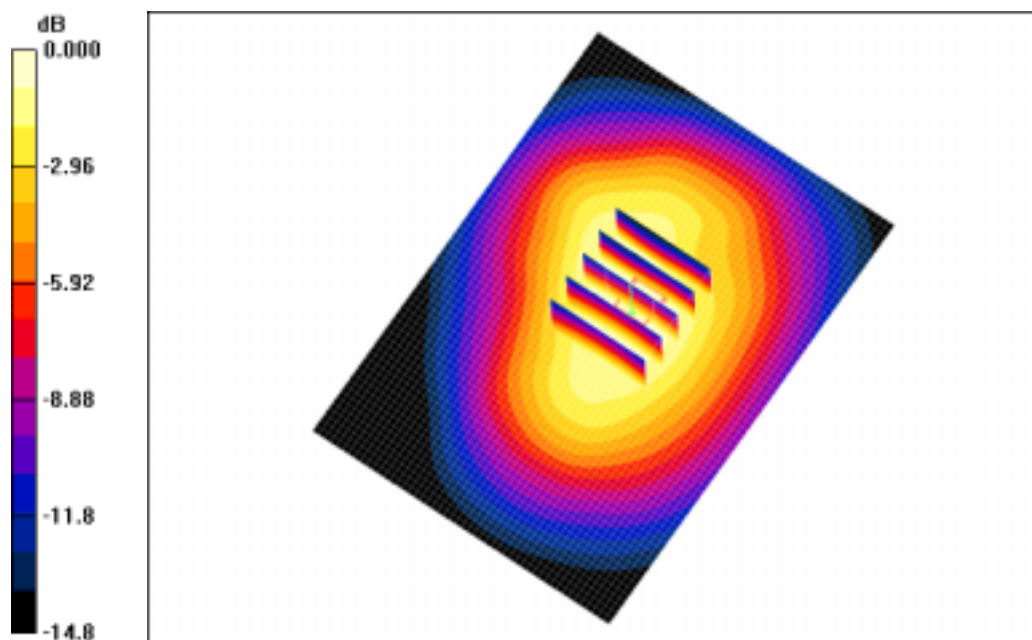
dx=8mm, dy=8mm, dz=5mm

Reference Value = 16.6 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.931 W/kg

**SAR(1 g) = 0.627 mW/g**

Maximum value of SAR (measured) = 0.672 mW/g



0 dB = 0.672mW/g

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DUT: SGH-X510; Serial: FD-174-B

Program Name: SGH-X510 GSM1900 Left (Job No. : FD-174)

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

Procedure Notes: Meas.Tissue Temp(celsius)-22.0, Ambient Temp-22.3;Test Date-07/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;  $\epsilon_r = 38.9$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Phantom section: Left Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(5, 5, 5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #2; Type: SAM; Serial: TP-1248
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

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

Maximum value of SAR (interpolated) = 0.659 mW/g

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

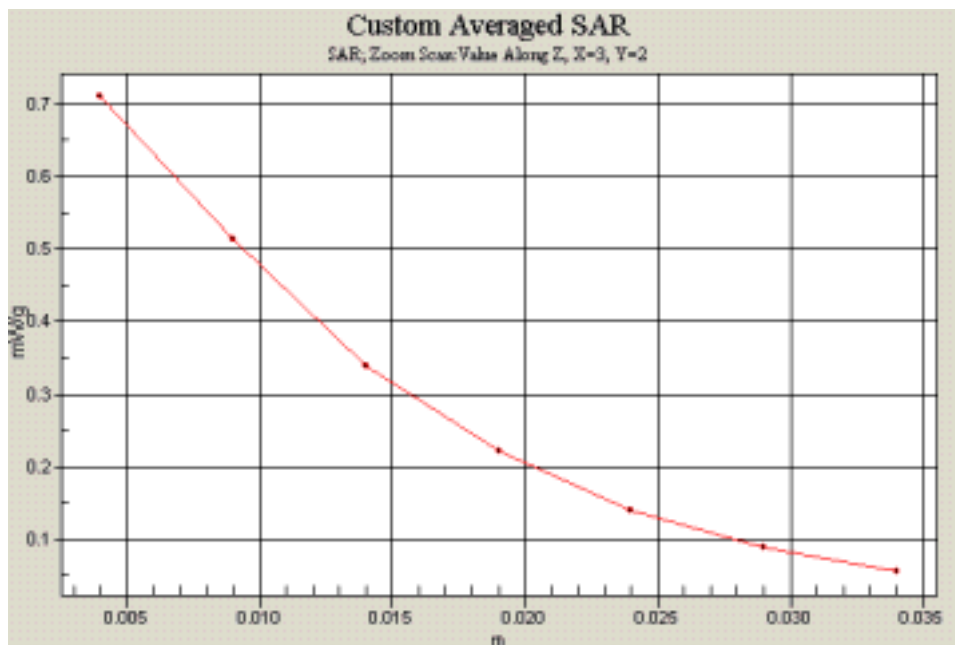
Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.4 V/m; Power Drift = -0.003 dB

Peak SAR (extrapolated) = 0.902 W/kg

**SAR(1 g) = 0.646 mW/g**

Maximum value of SAR (measured) = 0.710 mW/g



**SAMSUNG FCC ID : A3LSGHX510 - - 1900MHz GPRS1900 Body SAR**

**DUT: SGH-X510(Body); Serial: FD-174-B**

**Program Name: SGH-X510 GPRS1900 Body (Job No. : FD-174)**

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

**Procedure Notes: Meas.Tissue Temp(celsius)-21.5, Ambient Temp-21.8;Test Date-07/Sep/2006[OET Bulletin 65-Supplement C, July 2001]**

Communication System: GSM1900 GPRS; Frequency: 1909.8 MHz;Duty Cycle: 1:4.15  
Medium parameters used:  $f = 1909.8 \text{ MHz}$ ;  $\sigma = 1.53 \text{ mho/m}$ ;  $\epsilon_r = 52.5$ ;  $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: ES3DV3 - SN3080; ConvF(4.5, 4.5, 4.5); Calibrated: 2006-05-30
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn686; Calibrated: 2006-05-05
- Phantom: SAM PHANTOM #1; Type: SAM; Serial: TP-1247
- 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:**

$dx=20\text{mm}$ ,  $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.704 mW/g

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

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

Reference Value = 16.6 V/m; Power Drift = -0.016 dB

Peak SAR (extrapolated) = 0.931 W/kg

**SAR(1 g) = 0.627 mW/g**

Maximum value of SAR (measured) = 0.672 mW/g

