

LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.973$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH4182, Front, Slider Up, Fixed Ant, Standard Battery

WCDMA/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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

WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

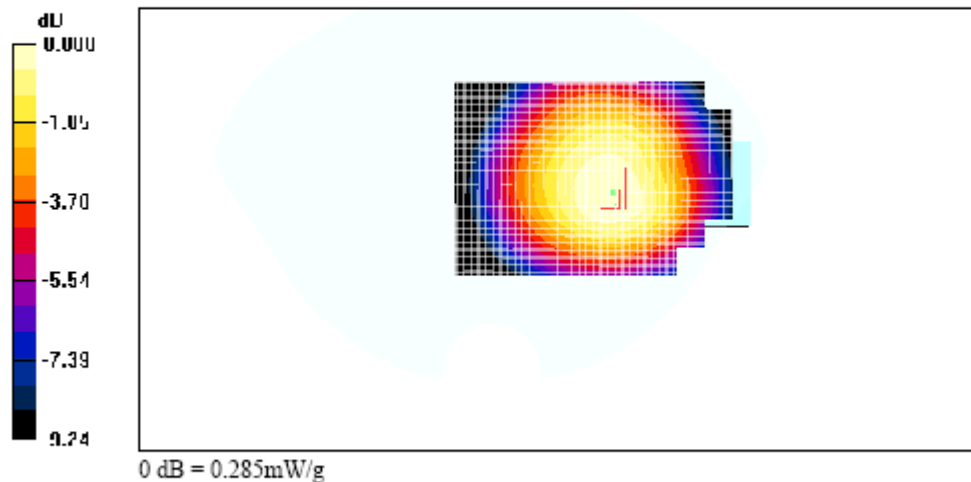
Reference Value = 8.91 V/m; Power Drift = 0.038 dB

Peak SAR (extrapolated) = 0.344 W/kg

SAR(1 g) = 0.257 mW/g; SAR(10 g) = 0.190 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.285 mW/g



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Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.973$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH4182, Rear, Slider Down, Fixed Ant, Standard Battery

WCDMA/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.584 mW/g

WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

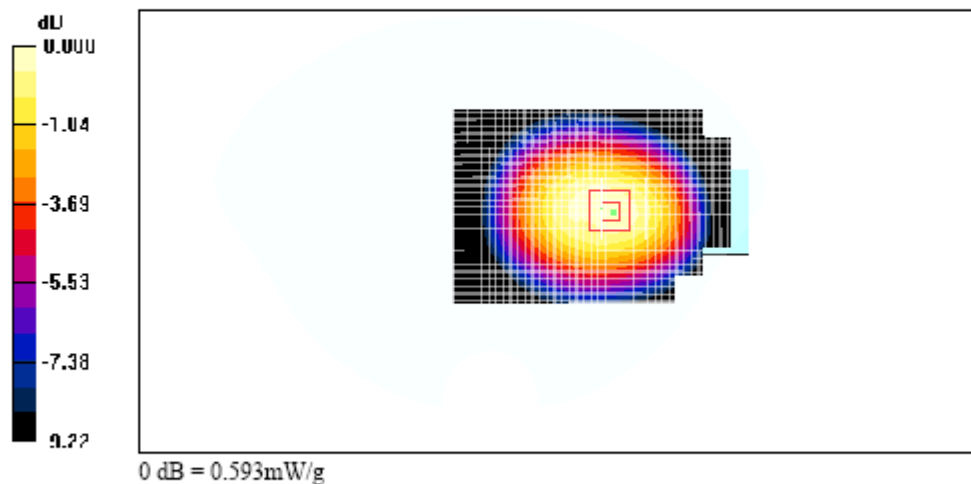
Reference Value = 11.0 V/m; Power Drift = 0.356 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.533 mW/g; SAR(10 g) = 0.392 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.5 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH9400, Front, Slider Down, Fixed Ant, Standard Battery

WCDMA/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.243 mW/g

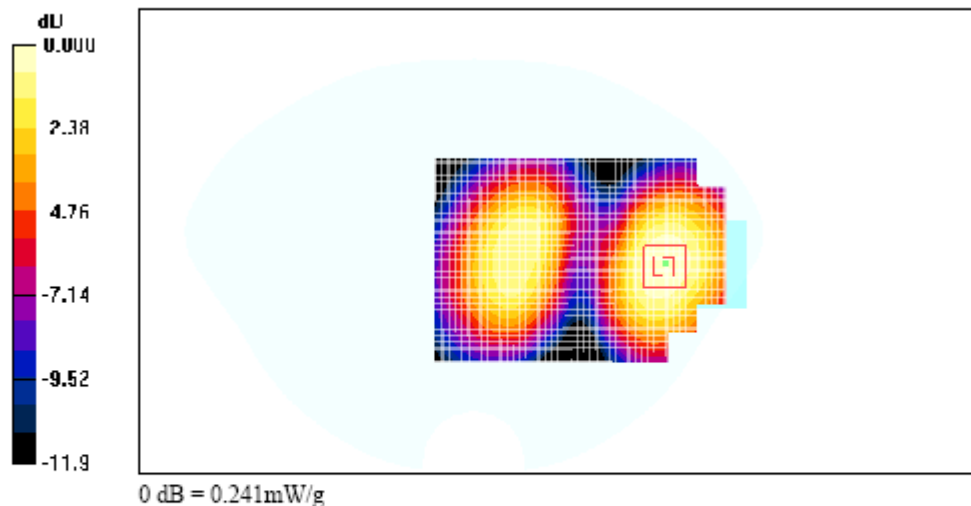
WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 9.23 V/m; Power Drift = -0.021 dB

Peak SAR (extrapolated) = 0.292 W/kg

SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.142 mW/g

Maximum value of SAR (measured) = 0.241 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.5$ mho/m; $\epsilon_r = 53.7$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH9400, Front, Slider UP, Fixed Ant, Standard Battery

WCDMA/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.242 mW/g

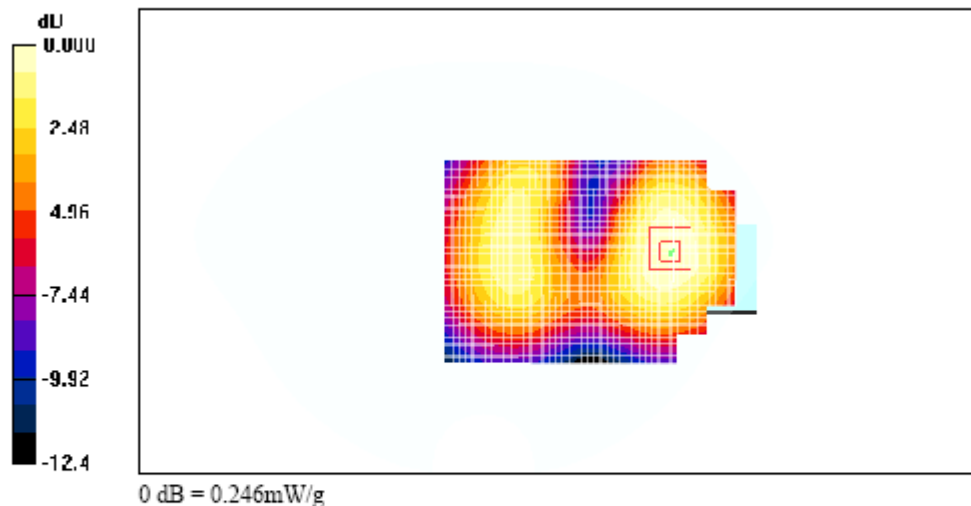
WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = 0.091 dB

Peak SAR (extrapolated) = 0.302 W/kg

SAR(1 g) = 0.215 mW/g; SAR(10 g) = 0.146 mW/g

Maximum value of SAR (measured) = 0.246 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.5 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

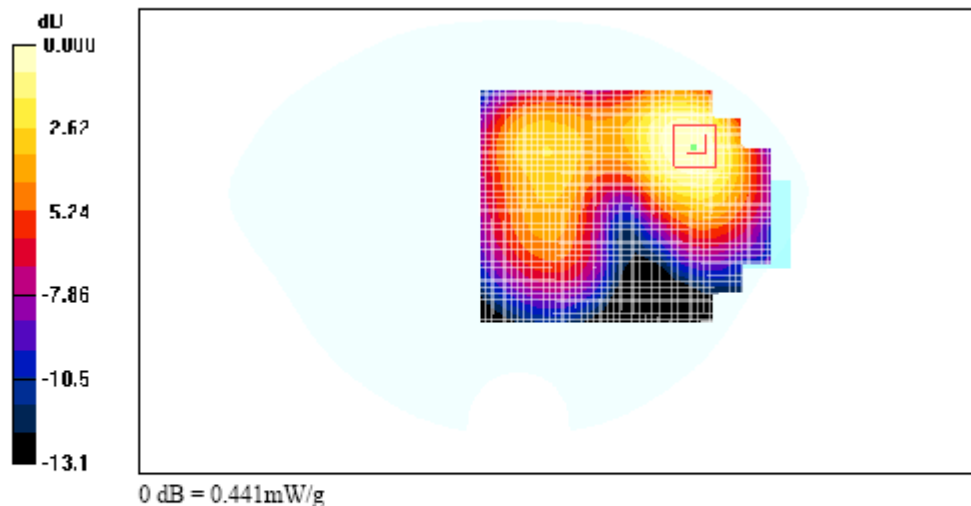
Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH9400, Rear, Slider UP, Fixed Ant, Standard Battery

WCDMA/Area Scan (81x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.445 mW/g

WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.4 V/m; Power Drift = -0.215 dB
Peak SAR (extrapolated) = 0.549 W/kg
SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.251 mW/g
Maximum value of SAR (measured) = 0.441 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 51.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 06/02/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch, Ch6, Front, Slider Down, Fixed Ant, Standard Battery

WLAN/Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.031 mW/g

WLAN/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

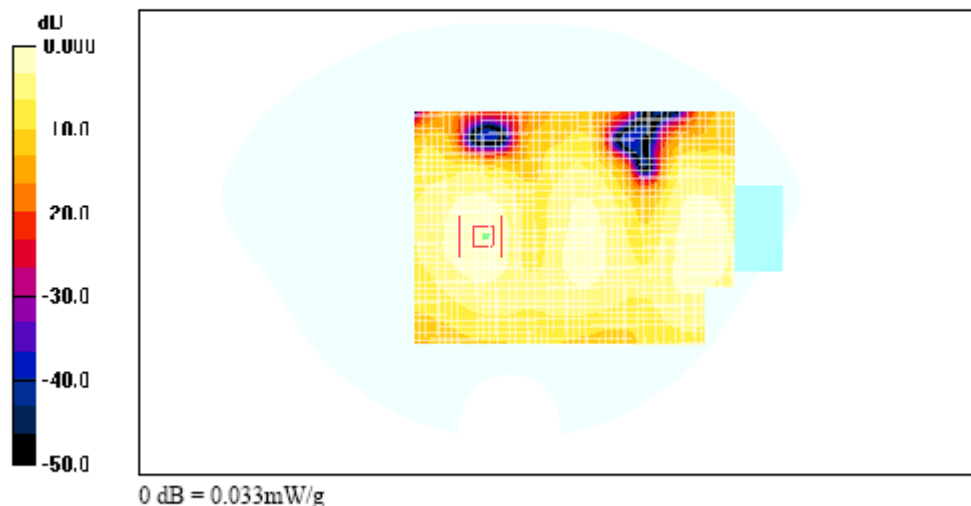
Reference Value = 2.79 V/m; Power Drift = 0.358 dB

Peak SAR (extrapolated) = 0.048 W/kg

SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.015 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.033 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 51.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 06/02/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch, Ch6, Front, Slider Up, Fixed Ant, Standard Battery

WLAN/Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.037 mW/g

WLAN/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

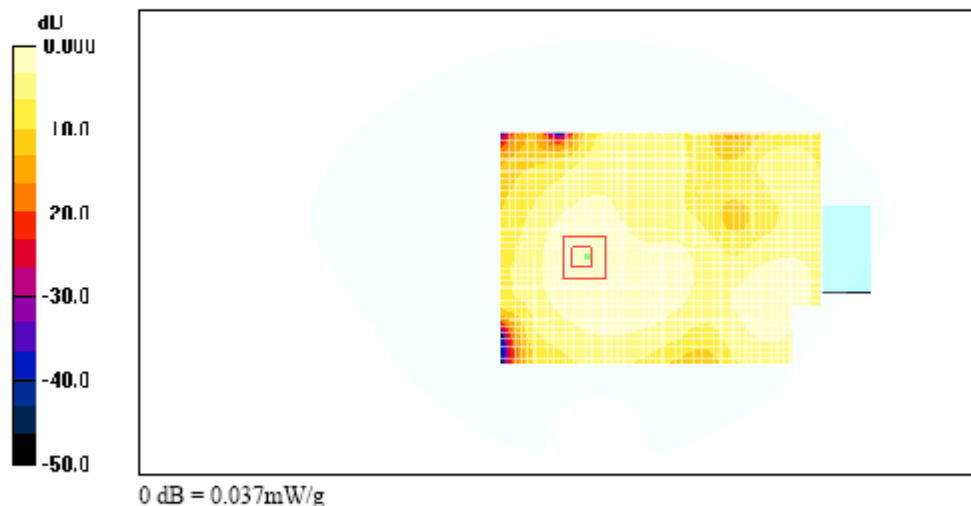
Reference Value = 4.21 V/m; Power Drift = 0.084 dB

Peak SAR (extrapolated) = 0.057 W/kg

SAR(1 g) = 0.031 mW/g; SAR(10 g) = 0.017 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.037 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 51.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 06/02/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch, Ch6, Rear, Slider Up, Fixed Ant, Standard Battery

WLAN/Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.050 mW/g

WLAN/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

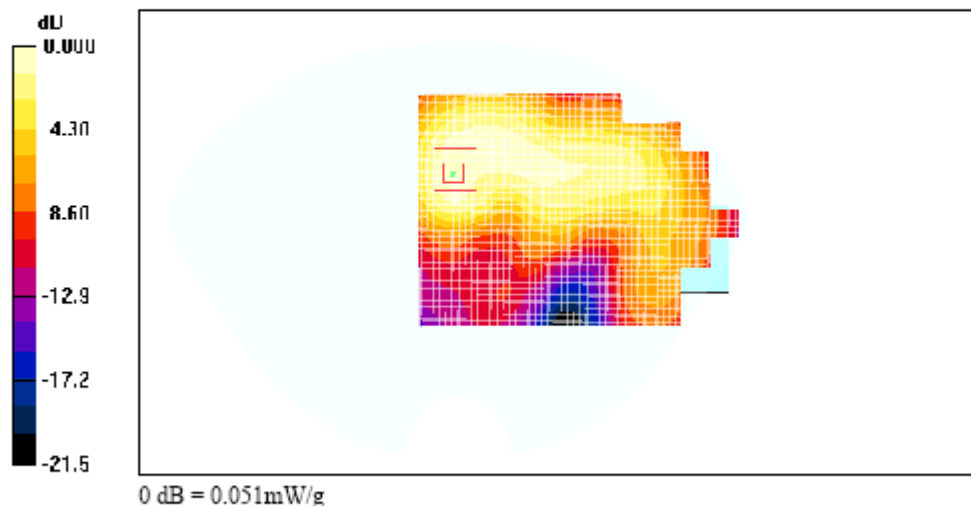
Reference Value = 1.93 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.073 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.023 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.051 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WLAN; Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2412$ MHz; $\sigma = 1.97$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 06/02/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch, Ch1, Rear, Slider Up, Fixed Ant, Standard Battery

WLAN/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.046 mW/g

WLAN/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

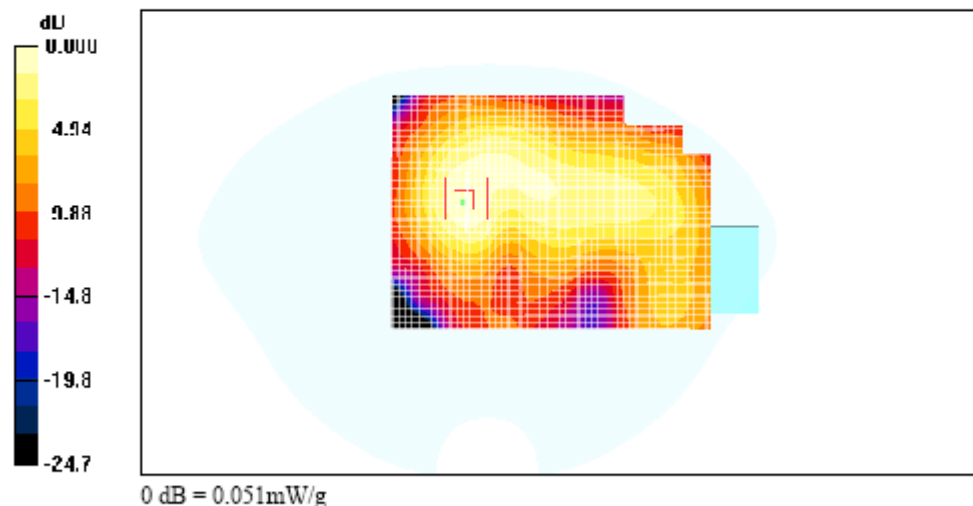
Reference Value = 2.02 V/m; Power Drift = -0.115 dB

Peak SAR (extrapolated) = 0.075 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.022 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.051 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WLAN; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2462$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 51.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 06/02/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch, Ch11, Rear, Slider Up, Fixed Ant, Standard Battery

WLAN/Area Scan (81x111x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.035 mW/g

WLAN/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

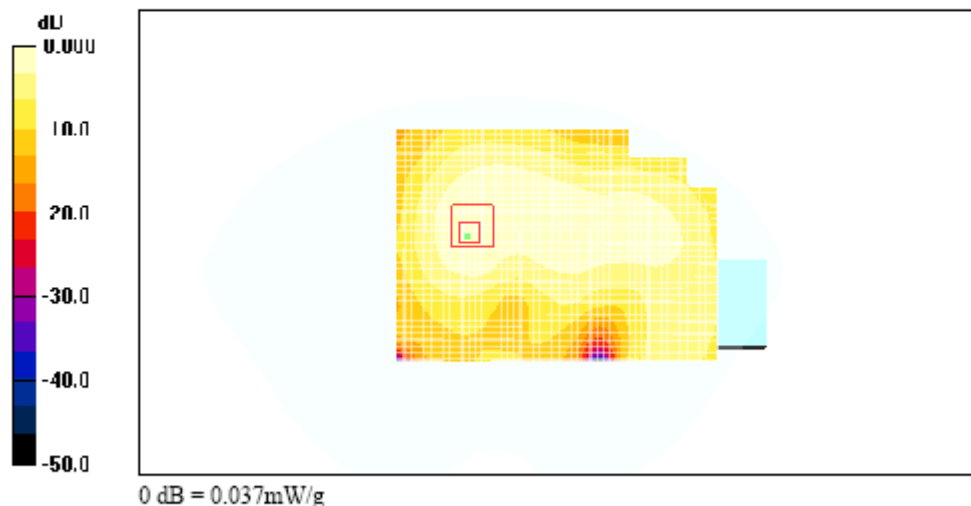
Reference Value = 1.51 V/m; Power Drift = -0.110 dB

Peak SAR (extrapolated) = 0.055 W/kg

SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.017 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.037 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: GSM850; Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.901 \text{ mho/m}$; $\epsilon_r = 42.8$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 05/31/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Head Touch, CH190, Fixed Ant, Standard Battery

GSM850/Area Scan (61x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.520 mW/g

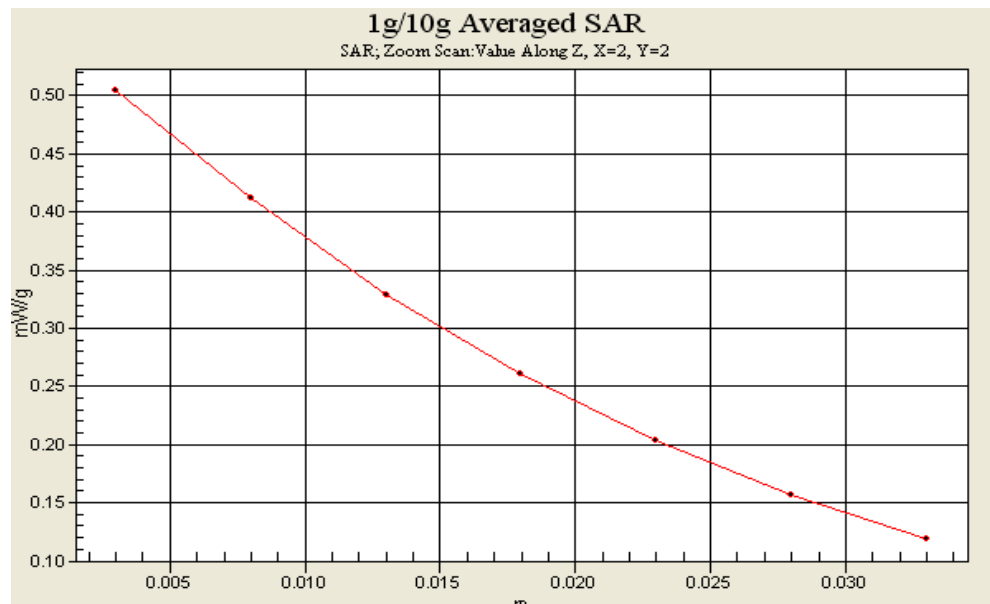
GSM850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.0 V/m; Power Drift = -0.209 dB

Peak SAR (extrapolated) = 0.585 W/kg

SAR(1 g) = 0.462 mW/g; SAR(10 g) = 0.342 mW/g

Maximum value of SAR (measured) = 0.503 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: PCS 1900; Frequency: 1880 MHz; Duty Cycle: 1:8.3
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.4 \text{ mho/m}$; $\epsilon_r = 39.8$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Left Section

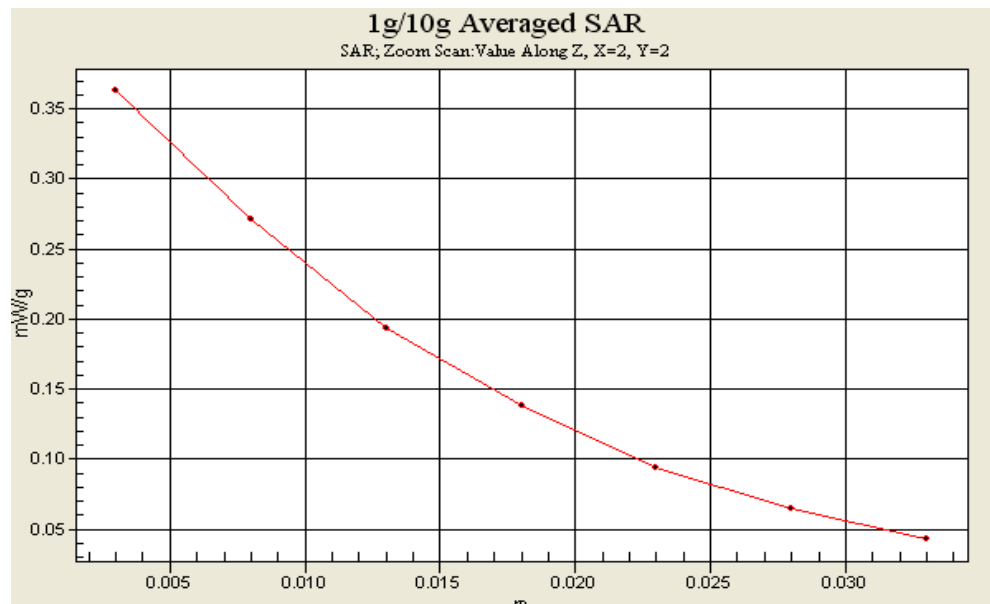
Test Date: 05/29/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Head Tilt, CH661, Fixed Ant, Standard Battery

PCS1900/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.381 mW/g

PCS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 14.0 V/m; Power Drift = -0.251 dB
Peak SAR (extrapolated) = 0.432 W/kg
SAR(1 g) = 0.312 mW/g; SAR(10 g) = 0.196 mW/g
Maximum value of SAR (measured) = 0.363 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.898$ mho/m; $\epsilon_r = 41.3$; $\rho = 1000$ kg/m³

Phantom section: Right Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.68, 5.68, 5.68); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Right Head Touch, CH4182, Fixed Ant, Standard Battery

WCDMA/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.488 mW/g

WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

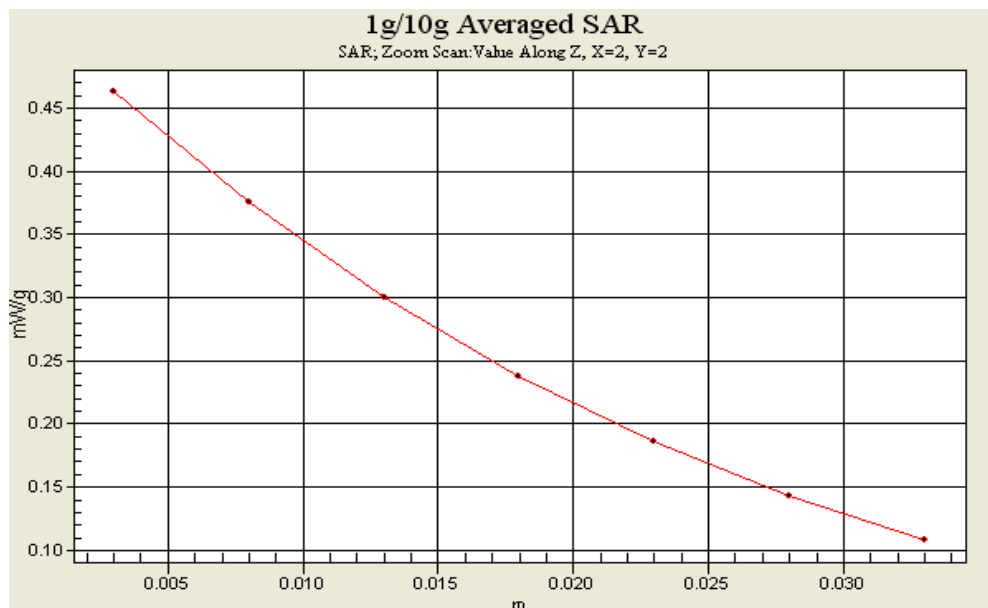
Reference Value = 12.5 V/m; Power Drift = 0.112 dB

Peak SAR (extrapolated) = 0.544 W/kg

SAR(1 g) = 0.428 mW/g; SAR(10 g) = 0.320 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.463 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Head Touch, CH9400, Fixed Ant, Standard Battery

WCDMA/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.644 mW/g

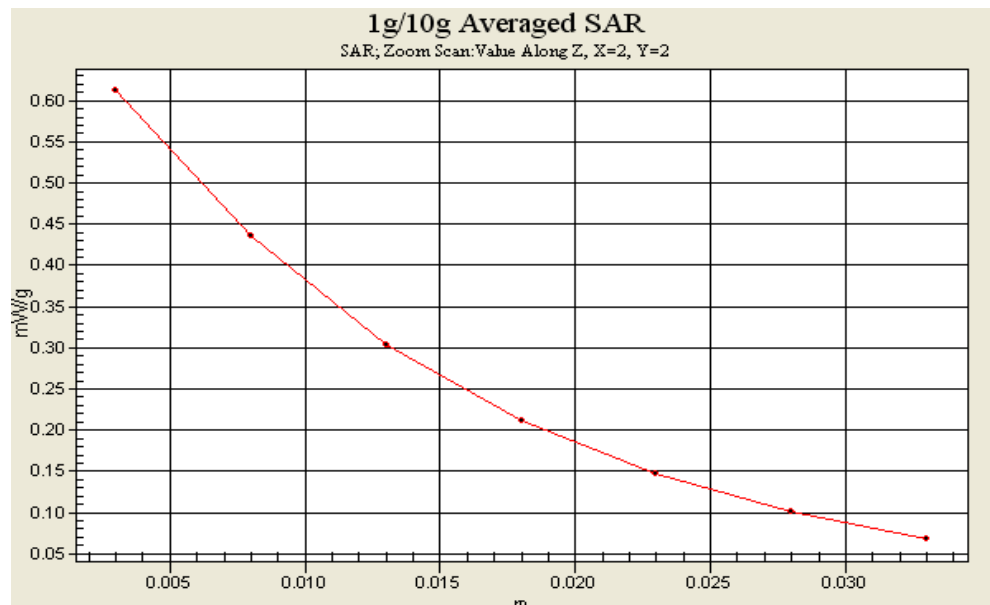
WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.7 V/m; Power Drift = 0.341 dB

Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.526 mW/g; SAR(10 g) = 0.334 mW/g

Maximum value of SAR (measured) = 0.612 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.37 \text{ mho/m}$; $\epsilon_r = 40.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Left Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.66, 4.66, 4.66); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 835MHz; Type: SAM; Serial: TP-1066

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Left Head Touch, CH9400, Fixed Ant, Standard Battery

WCDMA/Area Scan (61x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.644 mW/g

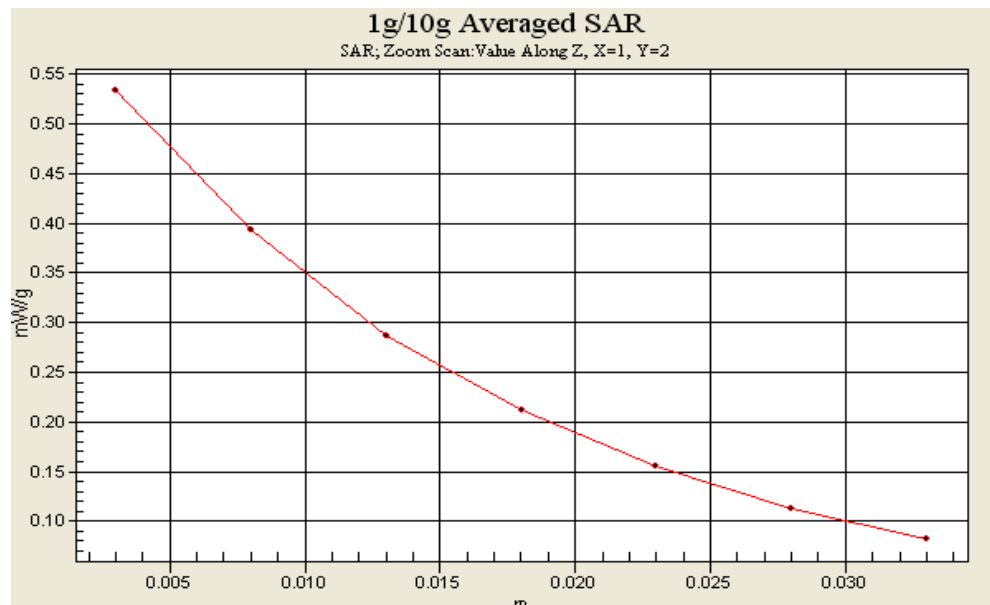
WCDMA/Zoom Scan (5x5x7)/Cube 1: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 12.7 V/m; Power Drift = 0.341 dB

Peak SAR (extrapolated) = 0.637 W/kg

SAR(1 g) = 0.467 mW/g; SAR(10 g) = 0.309 mW/g

Maximum value of SAR (measured) = 0.531 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 850; Frequency: 836.6 MHz; Duty Cycle: 1:4.15
Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.963 \text{ mho/m}$; $\epsilon_r = 55.9$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

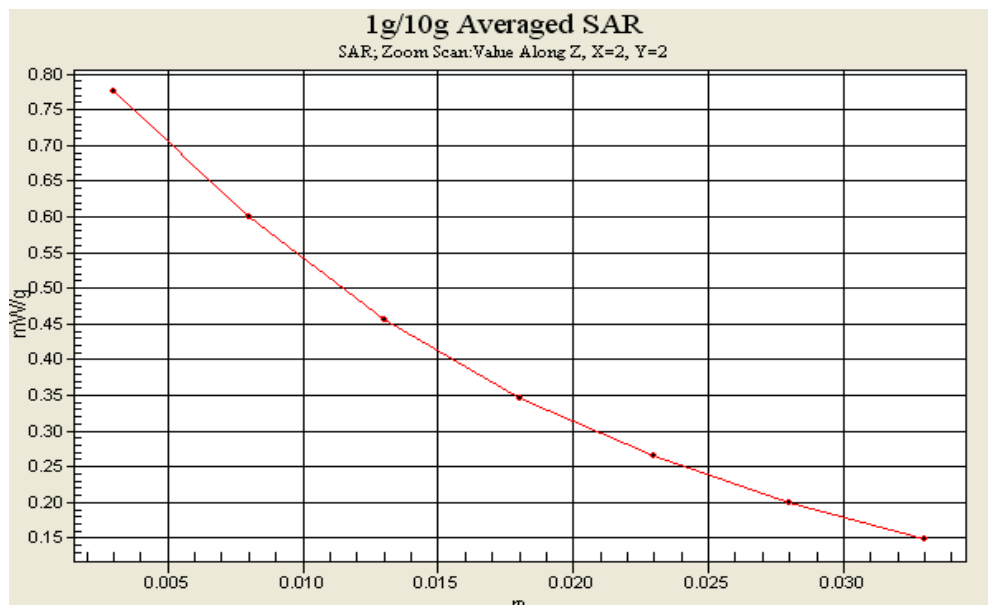
Test Date: 05/31/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30
Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH190, Rear, Slider Down, 2TX, Fixed Ant, Standard Battery

GPRS850/Area Scan (71x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.787 mW/g

GPRS850/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 12.9 V/m; Power Drift = -0.023 dB
Peak SAR (extrapolated) = 0.917 W/kg
SAR(1 g) = 0.701 mW/g; SAR(10 g) = 0.515 mW/g
Maximum value of SAR (measured) = 0.775 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: GPRS 1900; Frequency: 1880 MHz; Duty Cycle: 1:4.15

Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.55 \text{ mho/m}$; $\epsilon_r = 52.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 05/29/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH661, Rear, Slider Up, 2TX, Fixed Ant, Standard Battery

GPRS1900/Area Scan (81x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 0.681 mW/g

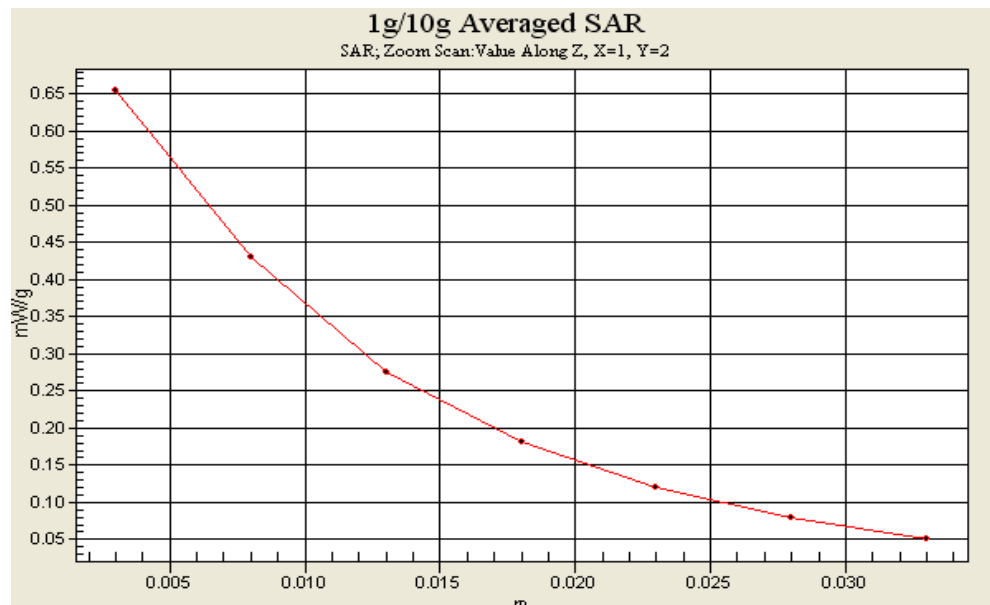
GPRS1900/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.2 V/m; Power Drift = -0.058 dB

Peak SAR (extrapolated) = 0.835 W/kg

SAR(1 g) = 0.568 mW/g; SAR(10 g) = 0.368 mW/g

Maximum value of SAR (measured) = 0.654 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 836.4 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.4$ MHz; $\sigma = 0.973$ mho/m; $\epsilon_r = 55.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(5.55, 5.55, 5.55); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH4182, Rear, Slider Down, Fixed Ant, Standard Battery

WCDMA/Area Scan (71x101x1): Measurement grid: dx=15mm, dy=15mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.584 mW/g

WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

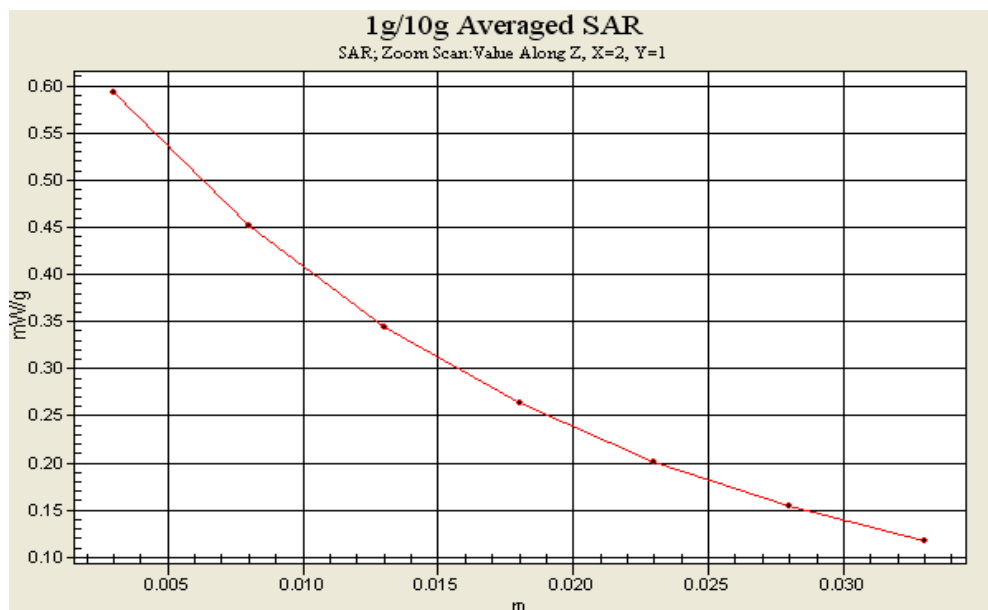
Reference Value = 11.0 V/m; Power Drift = 0.356 dB

Peak SAR (extrapolated) = 0.691 W/kg

SAR(1 g) = 0.533 mW/g; SAR(10 g) = 0.392 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

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



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WCDMA; Frequency: 1880 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 1880 \text{ MHz}$; $\sigma = 1.5 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$
Phantom section: Flat Section

Test Date: 06/01/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

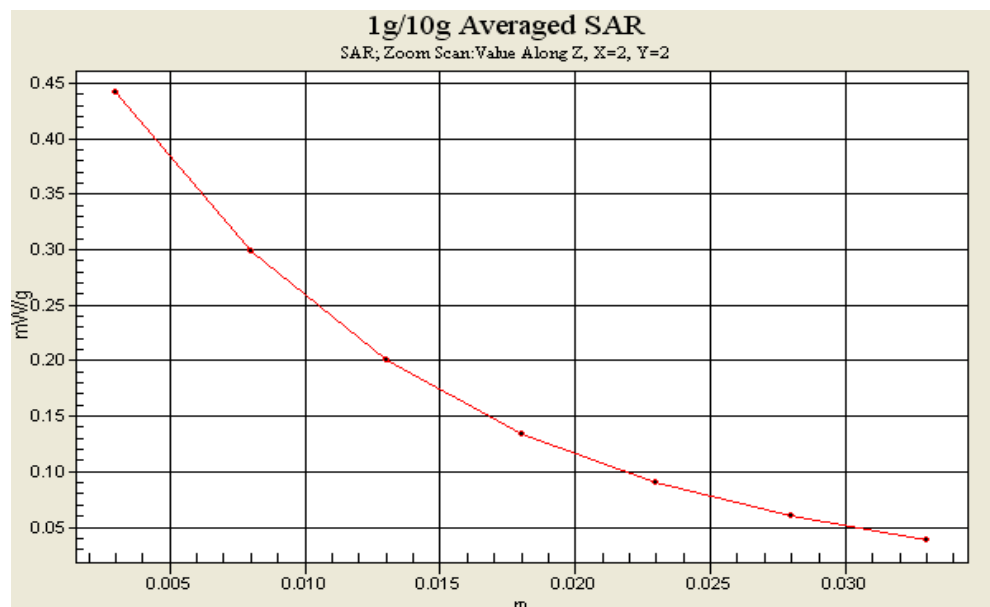
Probe: ES3DV3 - SN3066; ConvF(4.2, 4.2, 4.2); Calibrated: 2010-02-24
Sensor-Surface: 3mm (Mechanical Surface Detection)
Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244
Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch ,CH9400, Rear, Slider Up, Fixed Ant, Standard Battery

WCDMA/Area Scan (81x101x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 0.445 mW/g

WCDMA/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 10.4 V/m; Power Drift = -0.215 dB
Peak SAR (extrapolated) = 0.549 W/kg
SAR(1 g) = 0.382 mW/g; SAR(10 g) = 0.251 mW/g
Maximum value of SAR (measured) = 0.441 mW/g



LG Electronics Inc.

DUT: JS750; Type: Cellular/PCS GSM/EDGE/WCDMA Phone with Bluetooth&WLAN; Serial: #1

Communication System: WLAN; Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 2437 \text{ MHz}$; $\sigma = 2 \text{ mho/m}$; $\epsilon_r = 51.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Test Date: 06/02/2010; Ambient Temp: 22.0°C; Tissue Temp: 21.8°C

Probe: ES3DV3 - SN3066; ConvF(3.9, 3.9, 3.9); Calibrated: 2010-02-24

Sensor-Surface: 3mm (Mechanical Surface Detection)

Electronics: DAE3 Sn362; Calibrated: 2010-04-30

Phantom: SAM with CRP 1800MHz; Type: SAM; Serial: TP-1244

Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Flat Touch, Ch6, Rear, Slider Up, Fixed Ant, Standard Battery

WLAN/Area Scan (81x111x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (interpolated) = 0.050 mW/g

WLAN/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

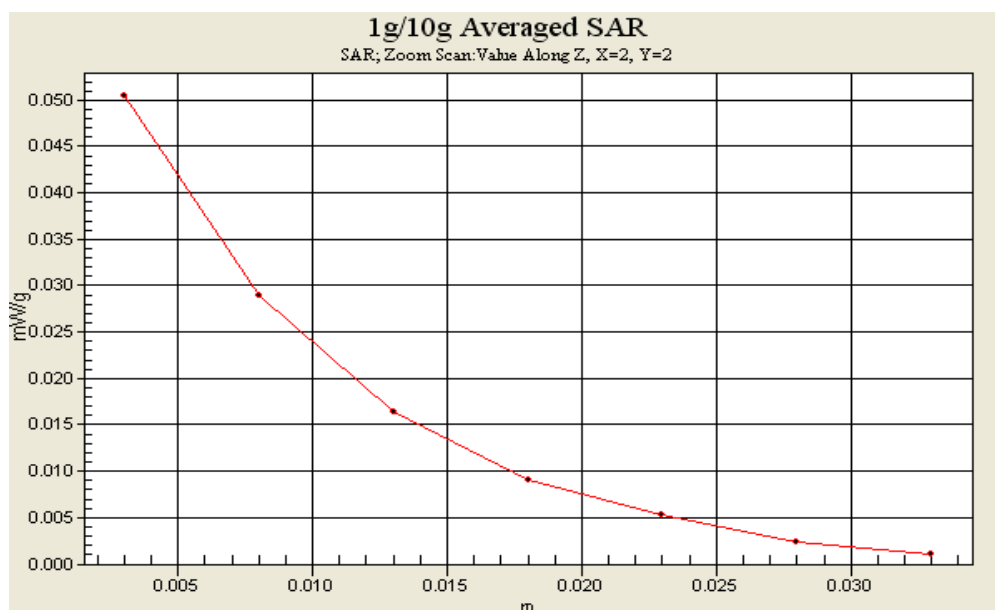
Reference Value = 1.93 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.073 W/kg

SAR(1 g) = 0.041 mW/g; SAR(10 g) = 0.023 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.051 mW/g



APPENDIX C: Calibration Certificates

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **LG (Dymstec)**

Certificate No: **ES3-3066_Feb10**

CALIBRATION CERTIFICATE

Object **ES3DV3 - SN:3066**

Calibration procedure(s) **QA CAL-01.v6, QA CAL-23.v3 and QA CAL-25.v2
Calibration procedure for dosimetric E-field probes**

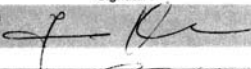
Calibration date: **February 24, 2010**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41495277	1-Apr-09 (No. 217-01030)	Apr-10
Power sensor E4412A	MY41498087	1-Apr-09 (No. 217-01030)	Apr-10
Reference 3 dB Attenuator	SN: S5054 (3c)	31-Mar-09 (No. 217-01026)	Mar-10
Reference 20 dB Attenuator	SN: S5086 (20b)	31-Mar-09 (No. 217-01028)	Mar-10
Reference 30 dB Attenuator	SN: S5129 (30b)	31-Mar-09 (No. 217-01027)	Mar-10
Reference Probe ES3DV2	SN: 3013	30-Dec-09 (No. ES3-3013_Dec09)	Dec-10
DAE4	SN: 660	29-Sep-09 (No. DAE4-660_Sep09)	Sep-10
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (in house check Oct-09)	In house check: Oct-11
Network Analyzer HP 8753E	US37390585	18-Oct-01 (in house check Oct-09)	In house check: Oct10

	Name	Function	Signature
Calibrated by:	Jeton Kastrati	Laboratory Technician	
Approved by:	Katja Pokovic	Technical Manager	

Issued: February 24, 2010

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: ES3-3066_Feb10

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**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Glossary:

TSL	tissue simulating liquid
NORM _{x,y,z}	sensitivity in free space
ConvF	sensitivity in TSL / NORM _{x,y,z}
DCP	diode compression point
CF	crest factor (1/duty_cycle) of the RF signal
A, B, C	modulation dependent linearization parameters
Polarization ϕ	ϕ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

- IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- NORM_{x,y,z}:** Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORM_{x,y,z} are only intermediate values, i.e., the uncertainties of NORM_{x,y,z} does not effect the E²-field uncertainty inside TSL (see below ConvF).
- NORM(*f*)_{x,y,z} = NORM_{x,y,z} * frequency_response** (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP_{x,y,z}:** DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal (no uncertainty required). DCP does not depend on frequency nor media.
- A_{x,y,z}; B_{x,y,z}; C_{x,y,z}; VR_{x,y,z}:** A, B, C are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters:** Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM_{x,y,z} * ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- Spherical isotropy (3D deviation from isotropy):** in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset:** The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Certificate No: ES3-3066_Feb10

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ES3DV3 SN:3066

February 24, 2010

Probe ES3DV3

SN:3066

Manufactured:	December 14, 2004
Last calibrated:	February 16, 2009
Recalibrated:	February 24, 2010

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

Certificate No: ES3-3066_Feb10

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ES3DV3 SN:3066

February 24, 2010

DASY - Parameters of Probe: ES3DV3 SN:3066

Basic Calibration Parameters

	Sensor X	Sensor Y	Sensor Z	Unc (k=2)
Norm ($\mu\text{V}/(\text{V}/\text{m})^2$) ^A	1.22	1.36	1.22	$\pm 10.1\%$
DCP (mV) ^B	90.7	93.1	91.5	

Modulation Calibration Parameters

UID	Communication System Name	PAR		A dB	B dBuV	C	VR mV	Unc ^E (k=2)
10000	CW	0.00	X	0.00	0.00	1.00	300.0	$\pm 1.5\%$
			Y	0.00	0.00	1.00	300.0	
			Z	0.00	0.00	1.00	300.0	

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor $k=2$, which for a normal distribution corresponds to a coverage probability of approximately 95%.

^A The uncertainties of NormX,Y,Z do not affect the E^2 -field uncertainty inside TSL (see Pages 5 and 6).

^B Numerical linearization parameter: uncertainty not required.

^E Uncertainty is determined using the maximum deviation from linear response applying recatangular distribution and is expressed for the square of the field value.

ES3DV3 SN:3066

February 24, 2010

DASY - Parameters of Probe: ES3DV3 SN:3066

Calibration Parameter Determined in Head Tissue Simulating Media

f [MHz]	Validity [MHz] ^c	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	41.5 ± 5%	0.90 ± 5%	5.68	5.68	5.68	0.96	1.04 ± 11.0%
1750	± 50 / ± 100	40.1 ± 5%	1.37 ± 5%	4.80	4.80	4.80	0.51	1.45 ± 11.0%
1900	± 50 / ± 100	40.0 ± 5%	1.40 ± 5%	4.66	4.66	4.66	0.44	1.54 ± 11.0%

^c The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

ES3DV3 SN:3066

February 24, 2010

DASY - Parameters of Probe: ES3DV3 SN:3066

Calibration Parameter Determined in Body Tissue Simulating Media

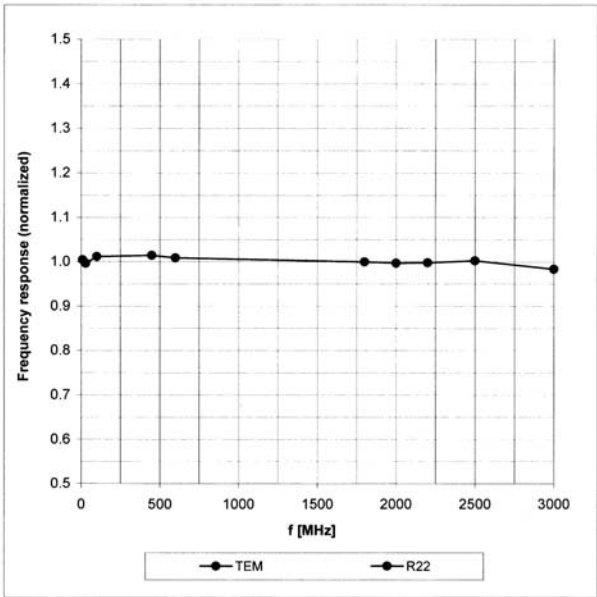
f [MHz]	Validity [MHz] ^c	Permittivity	Conductivity	ConvF X	ConvF Y	ConvF Z	Alpha	Depth Unc (k=2)
835	± 50 / ± 100	55.2 ± 5%	0.97 ± 5%	5.55	5.55	5.55	0.72	1.20 ± 11.0%
1750	± 50 / ± 100	53.4 ± 5%	1.49 ± 5%	4.48	4.48	4.48	0.36	2.07 ± 11.0%
1900	± 50 / ± 100	53.3 ± 5%	1.52 ± 5%	4.20	4.20	4.20	0.33	2.39 ± 11.0%
2450	± 50 / ± 100	52.7 ± 5%	1.95 ± 5%	3.90	3.90	3.90	0.66	1.27 ± 11.0%

^c The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

ES3DV3 SN:3066

February 24, 2010

Frequency Response of E-Field
(TEM-Cell:ifi110 EXX, Waveguide: R22)

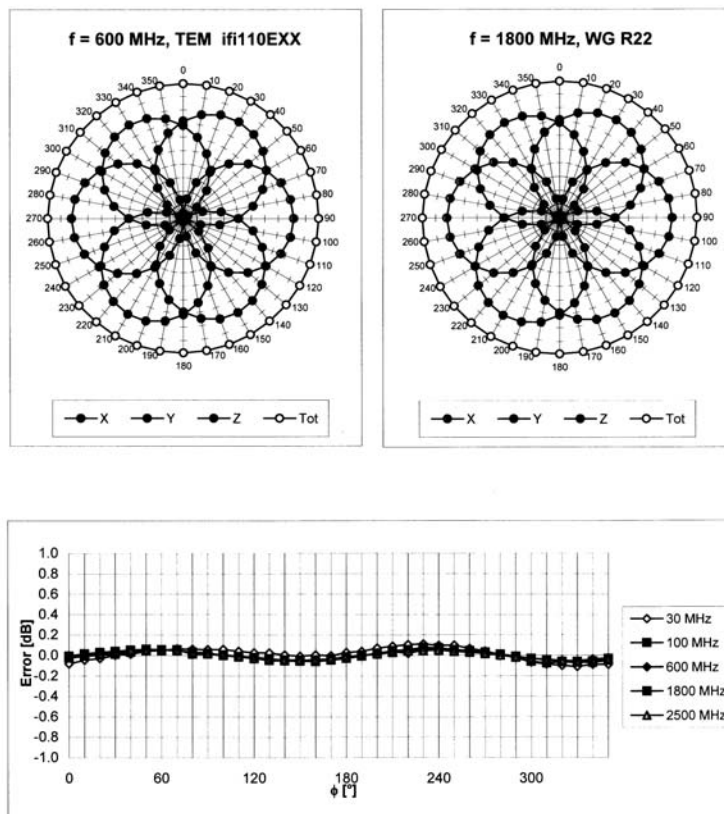


Uncertainty of Frequency Response of E-field: $\pm 6.3\%$ (k=2)

ES3DV3 SN:3066

February 24, 2010

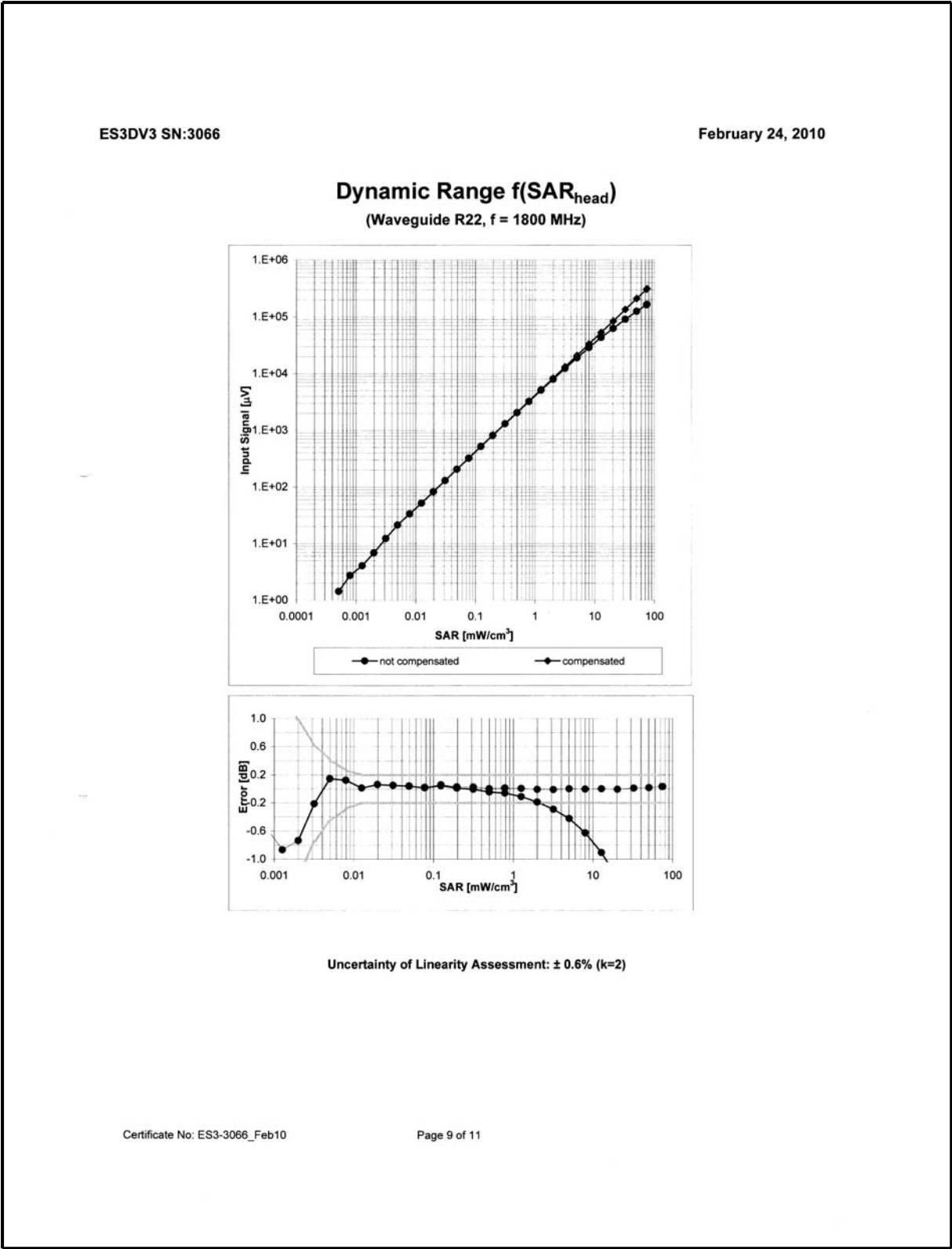
Receiving Pattern (ϕ), $\vartheta = 0^\circ$



Uncertainty of Axial Isotropy Assessment: $\pm 0.5\%$ ($k=2$)

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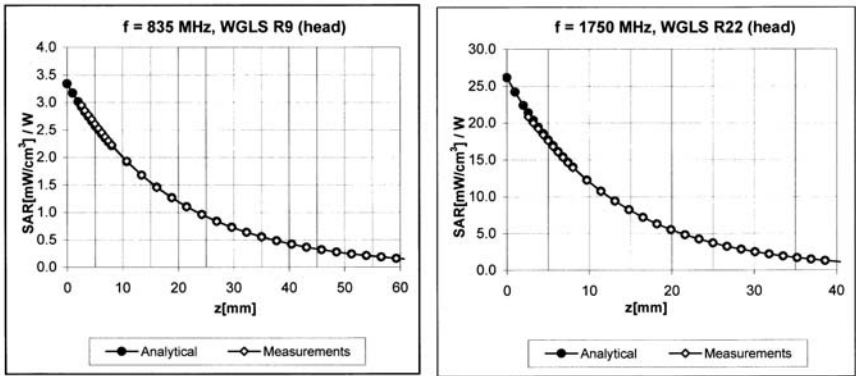
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ES3DV3 SN:3066

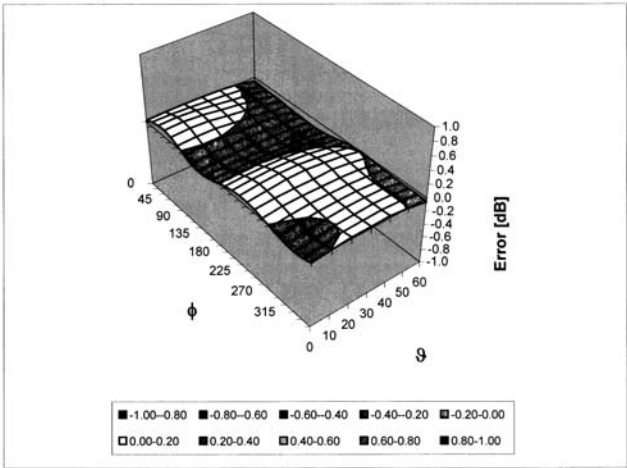
February 24, 2010

Conversion Factor Assessment



Deviation from Isotropy in HSL

Error (ϕ, θ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

ES3DV3 SN:3066

February 24, 2010

Other Probe Parameters

Sensor Arrangement	Triangular
Connector Angle (°)	Not applicable
Mechanical Surface Detection Mode	enabled
Optical Surface Detection Mode	disabled
Probe Overall Length	337 mm
Probe Body Diameter	10 mm
Tip Length	10 mm
Tip Diameter	4.0 mm
Probe Tip to Sensor X Calibration Point	2 mm
Probe Tip to Sensor Y Calibration Point	2 mm
Probe Tip to Sensor Z Calibration Point	2 mm
Recommended Measurement Distance from Surface	3 mm