

APPENDIX 2 : SAR Measurement data

1. Evaluation procedure

The evaluation was performed with the following procedure:

Step 1: Measurement of the E-field at a fixed location above the ear point or central position of flat phantom was used as a reference value for assessing the power drop.

Step 2: The SAR distribution at the exposed side of head or body position was measured at a distance of each device from the inner surface of the shell. The area covered the entire dimension of the antenna of EUT and the horizontal grid spacing was 15 mm x 15 mm. Based on these data, the area of the maximum absorption was determined by spline interpolation.

Step 3: Around this point found in the Step 2 (area scan), a volume of 30mm x 30mm x 30mm was assessed by measuring 7 x 7 x 7 points. And for any secondary peaks found in the Step2 which are within 2dB of maximum peak (level more than ambient noise (≥ 0.012 W/kg)) and not with this Step3 (Zoom scan) is repeated. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

(1). The data at the surface were extrapolated, since the center of the dipoles is 1mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. Therefore minimum distance of probe sensor from surface was set to the 2mm.

The extrapolation was based on a least square algorithm [4]. A polynomial of the fourth order was calculated through the points in z-axes.

This polynomial was then used to evaluate the points between the surface and the probe tip.

(2). The maximum interpolated value was searched with a straightforward algorithm. Around this maximum the SAR values averaged over the spatial volumes (1 g or 10 g) were computed by the 3D-Spline interpolation algorithm. The 3D-Spline is composed of three one-dimensional splines with the "Not a knot"-condition (in x, y and z-directions) [4], [5]. The volume was integrated with the trapezoidal-algorithm. One thousand points (10 x 10 x 10) were interpolated to calculate the average.

(3). All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

Step 4: Re-measurement of the E-field at the same location as in Step 1.

UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

2. Measurement data (SAR 2450MHz)

DWWL001/ Body/ Top/ 2437MHz/11b CCK (11Mbps)

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.951 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.4 V/m; Power Drift = 0.141 dB

Peak SAR (extrapolated) = 1.25 W/kg

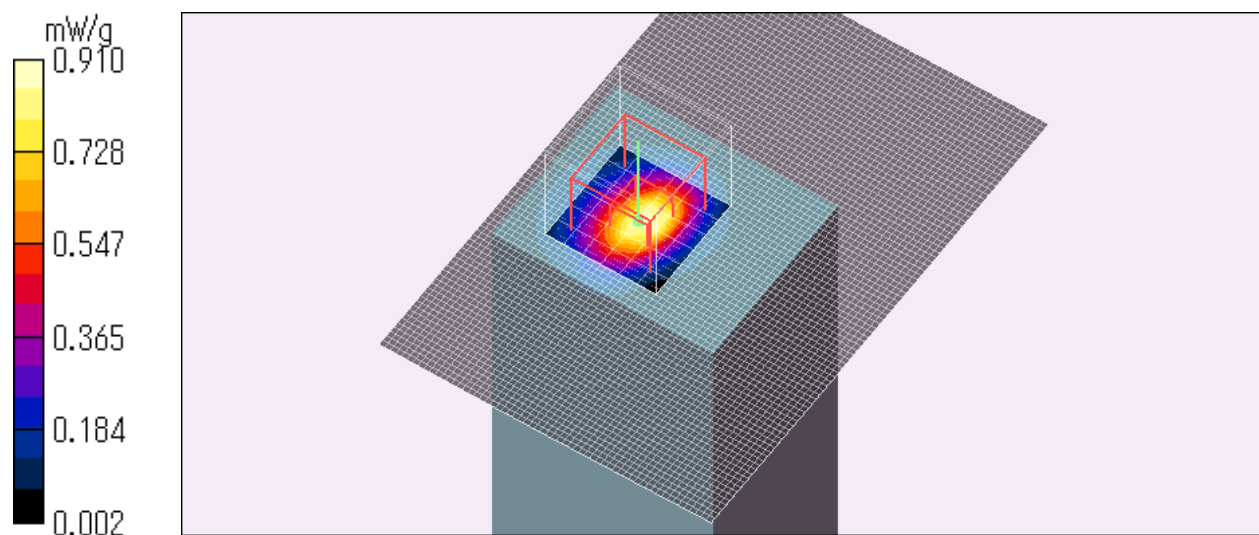
SAR(1 g) = 0.612 mW/g; SAR(10 g) = 0.259 mW/g

Maximum value of SAR (measured) = 0.910 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Front/ 2437MHz/11b CCK (11Mbps)

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.052 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.16 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.059 W/kg

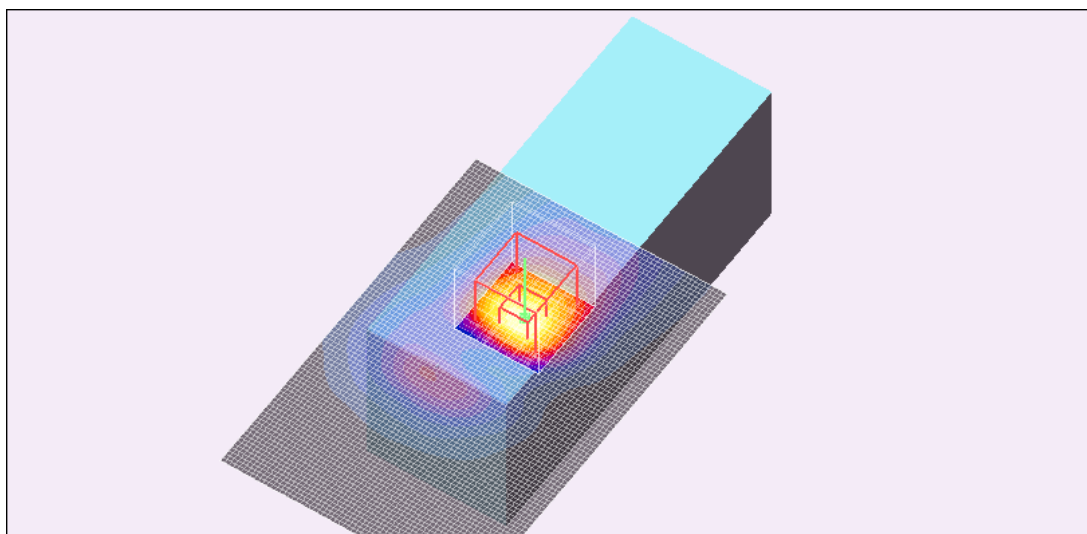
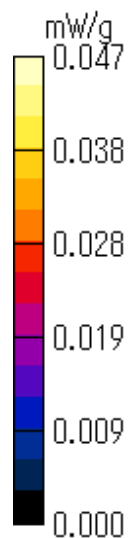
SAR(1 g) = 0.035 mW/g; SAR(10 g) = 0.019 mW/g

Maximum value of SAR (measured) = 0.047 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Rear/ 2437MHz/11b CCK (11Mbps)

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.072 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.00 V/m; Power Drift = -0.135 dB

Peak SAR (extrapolated) = 0.088 W/kg

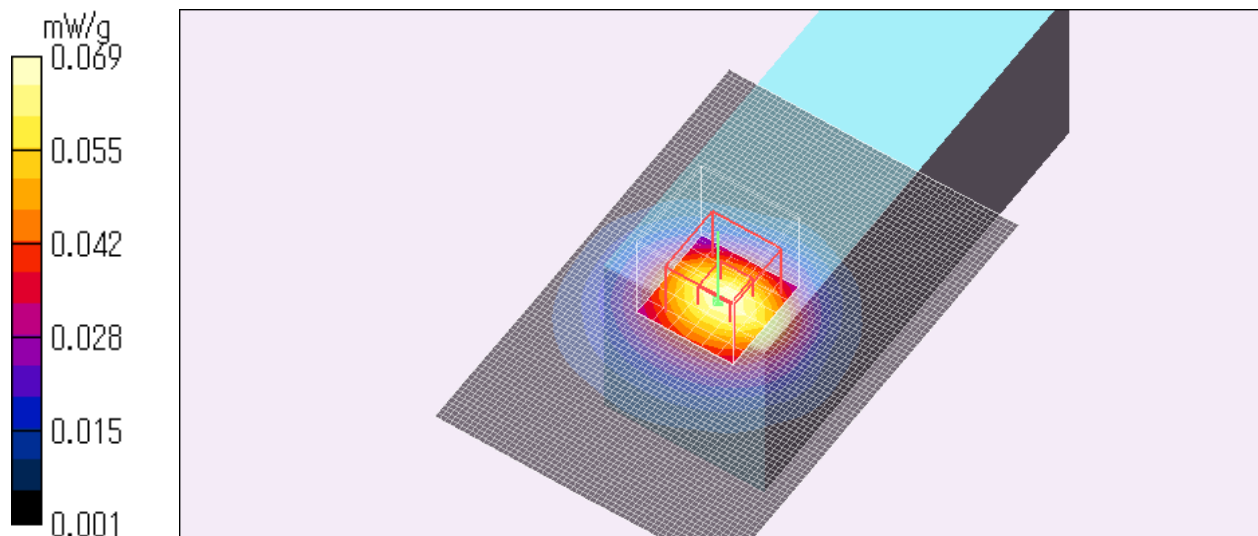
SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.028 mW/g

Maximum value of SAR (measured) = 0.069 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.C

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Left side/ 2437MHz/11b CCK (11Mbps)

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.036 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.48 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 0.043 W/kg

SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.013 mW/g

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

Zoom Scan (7x7x7)/Cube 1: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.48 V/m; Power Drift = -0.114 dB

Peak SAR (extrapolated) = 0.046 W/kg

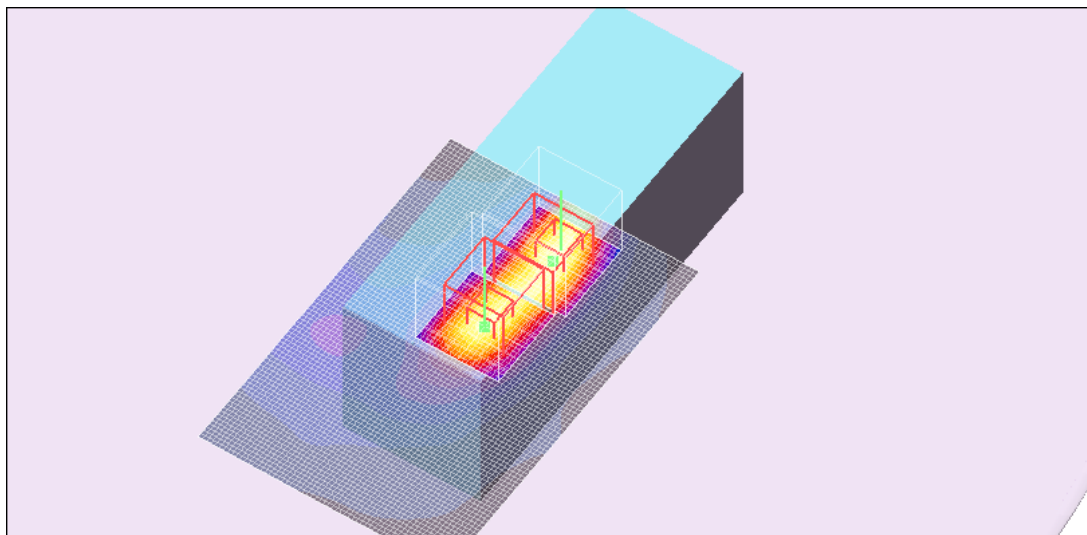
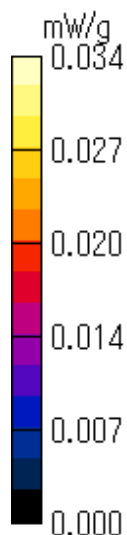
SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.034 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Right side/ 2437MHz/11b CCK (11Mbps)

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.99 \text{ mho/m}$; $\epsilon_r = 51.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.040 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.39 V/m ; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.053 W/kg

SAR(1 g) = 0.028 mW/g ; SAR(10 g) = 0.015 mW/g

Maximum value of SAR (measured) = 0.040 mW/g

Zoom Scan (7x7x7)/Cube 1: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 4.39 V/m ; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.044 W/kg

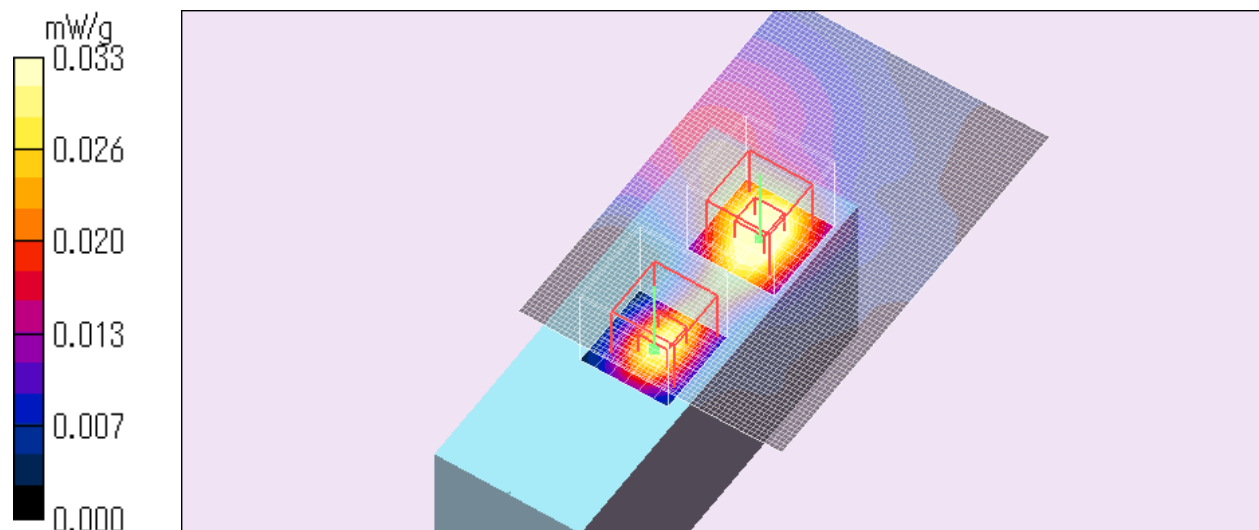
SAR(1 g) = 0.022 mW/g ; SAR(10 g) = 0.011 mW/g

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

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2412MHz/11b CCK (11Mbps)

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 1.13 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.5 V/m; Power Drift = 0.136 dB

Peak SAR (extrapolated) = 1.50 W/kg

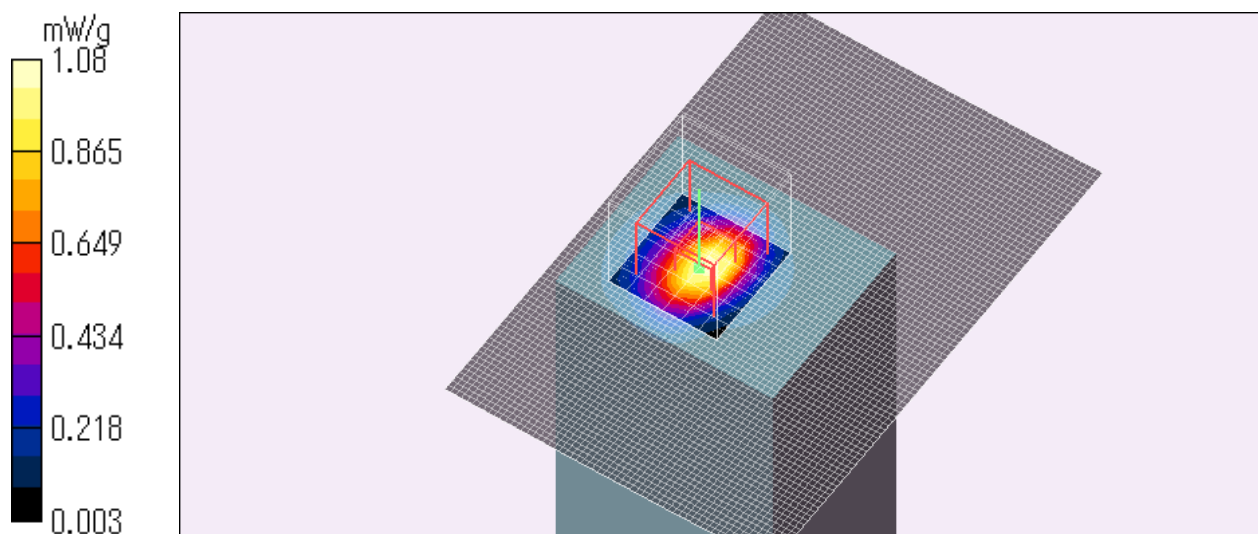
SAR(1 g) = 0.735 mW/g; SAR(10 g) = 0.314 mW/g

Maximum value of SAR (measured) = 1.08 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

Z-axis scan at max SAR location

DWWL001/ Body/ Top/ 2412MHz/11b CCK (11Mbps)

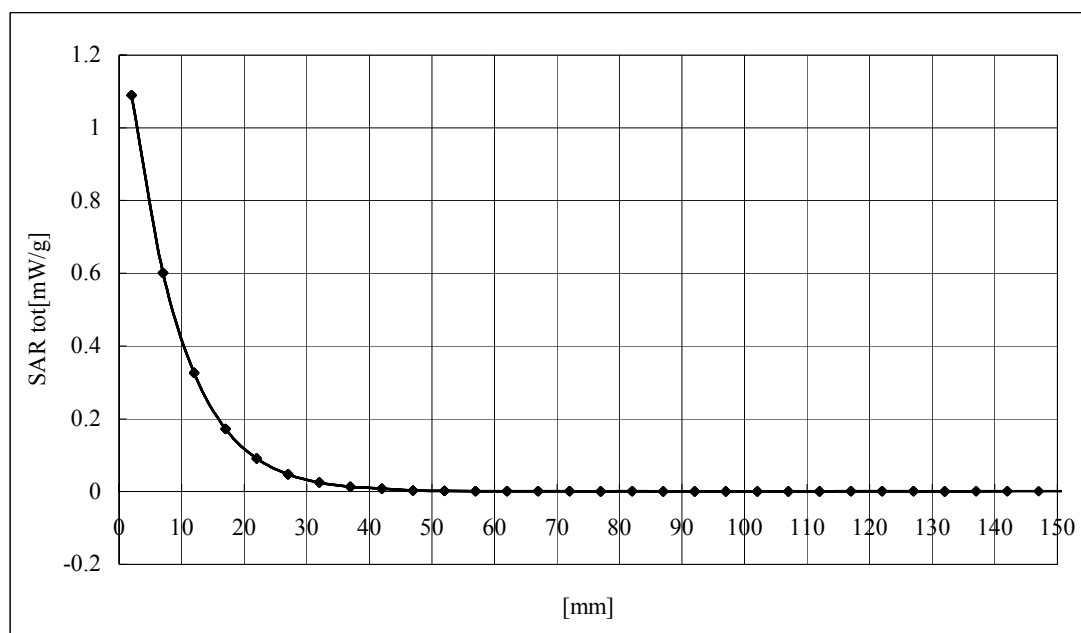
Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2462MHz/11b CCK (11Mbps)

Crest factor: 2.0

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 1.08 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 11.6 V/m; Power Drift = 0.165 dB

Peak SAR (extrapolated) = 1.38 W/kg

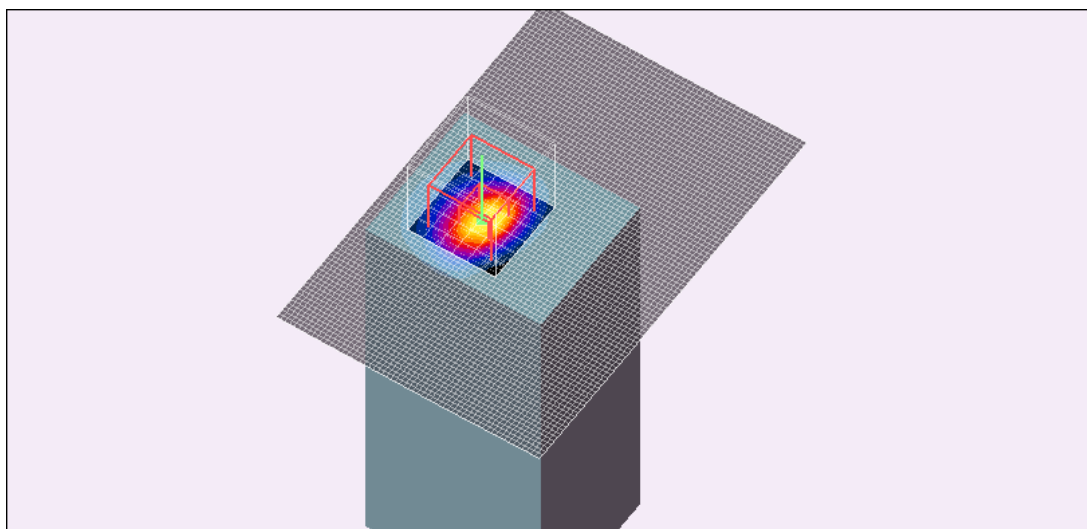
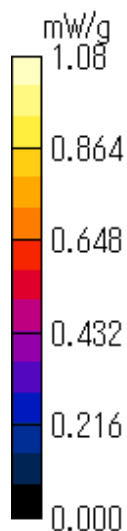
SAR(1 g) = 0.673 mW/g; SAR(10 g) = 0.283 mW/g

Maximum value of SAR (measured) = 0.995 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.7 degree.C , After 23.7 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2437MHz/11g BPSK (9Mbps)

Crest factor: 5.4

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.853 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.8 V/m; Power Drift = 0.142 dB

Peak SAR (extrapolated) = 1.12 W/kg

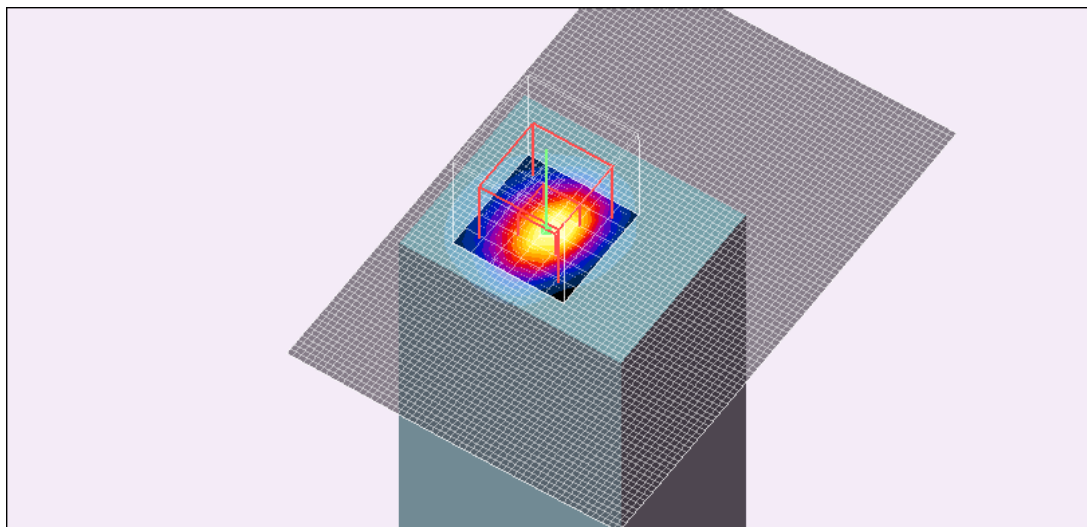
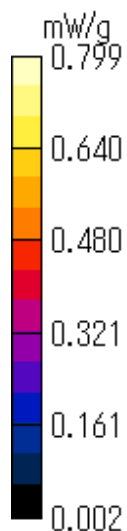
SAR(1 g) = 0.538 mW/g; SAR(10 g) = 0.227 mW/g

Maximum value of SAR (measured) = 0.799 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.7 degree.C , After 23.7 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2437MHz/11g QPSK (12Mbps)

Crest factor: 5.3

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.879 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.0 V/m; Power Drift = 0.200 dB

Peak SAR (extrapolated) = 1.16 W/kg

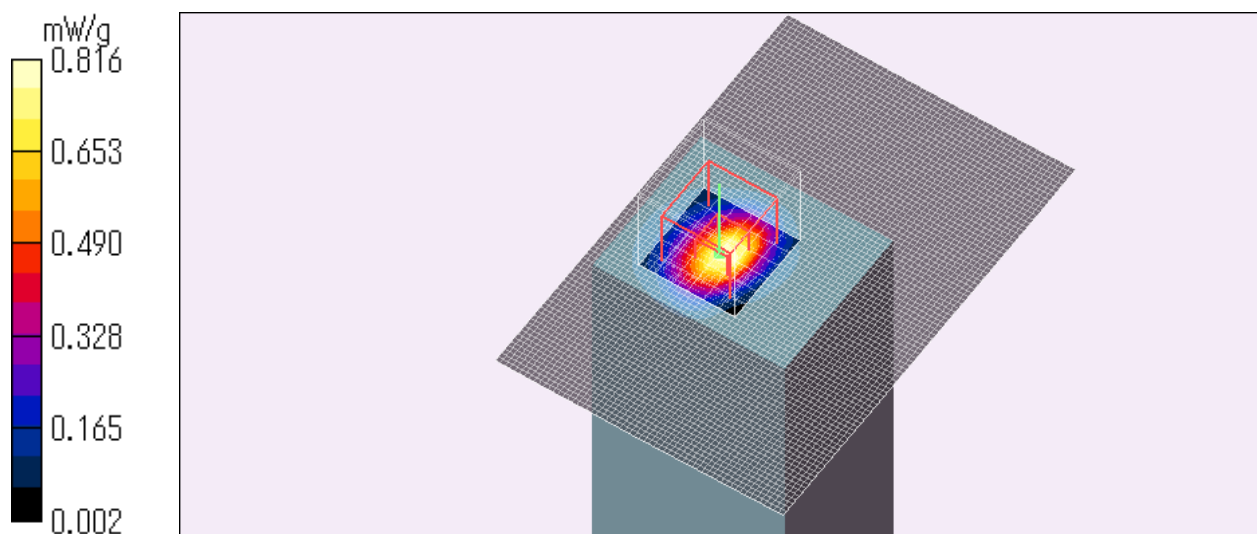
SAR(1 g) = 0.553 mW/g; SAR(10 g) = 0.233 mW/g

Maximum value of SAR (measured) = 0.816 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.7 degree.C , After 23.7 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2437MHz/11g 16QAM (24Mbps)

Crest factor: 5.3

Medium: M2450 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.99 \text{ mho/m}$; $\epsilon_r = 51.5$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.942 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 11.5 V/m; Power Drift = 0.026 dB

Peak SAR (extrapolated) = 1.24 W/kg

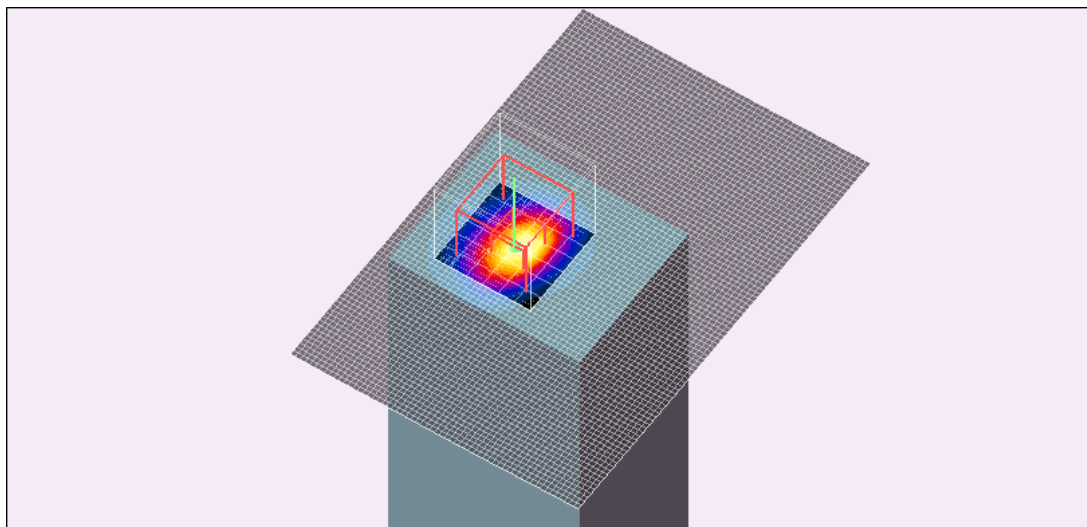
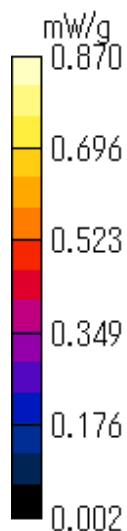
SAR(1 g) = 0.582 mW/g; SAR(10 g) = 0.242 mW/g

Maximum value of SAR (measured) = 0.870 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.6 degree.C , After 23.6 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2437MHz/11g 64QAM (54Mbps)

Crest factor: 5.4

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.849 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.6 V/m; Power Drift = 0.180 dB

Peak SAR (extrapolated) = 1.11 W/kg

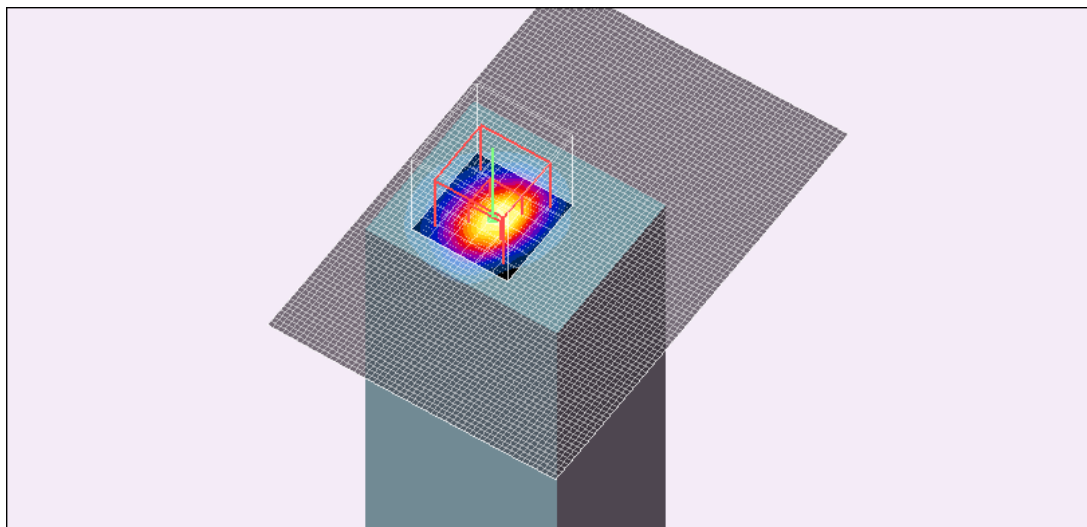
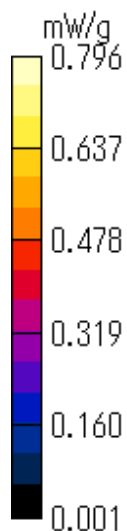
SAR(1 g) = 0.536 mW/g; SAR(10 g) = 0.226 mW/g

Maximum value of SAR (measured) = 0.796 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.6 degree.C , After 23.6 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2412MHz/11g 16QAM (24Mbps)

Crest factor: 5.7

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.928 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 15.3 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 1.30 W/kg

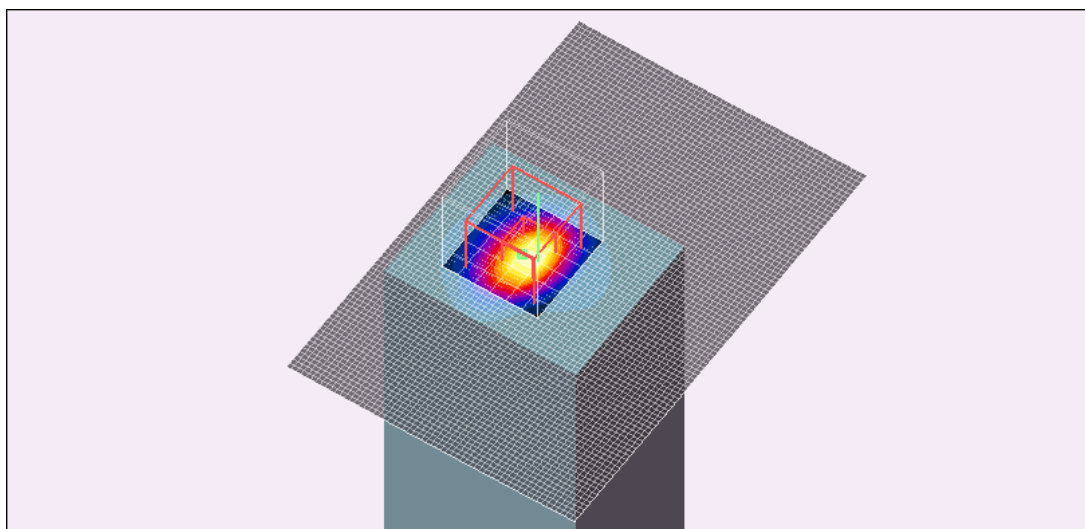
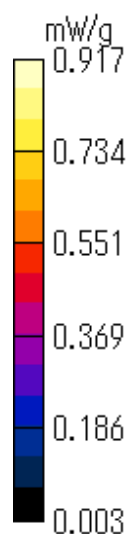
SAR(1 g) = 0.629 mW/g; SAR(10 g) = 0.268 mW/g

Maximum value of SAR (measured) = 0.917 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.6 degree.C , After 23.6 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2462MHz/11g 16QAM (24Mbps)

Crest factor: 5.8

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.737 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 13.8 V/m; Power Drift = 0.018 dB

Peak SAR (extrapolated) = 1.04 W/kg

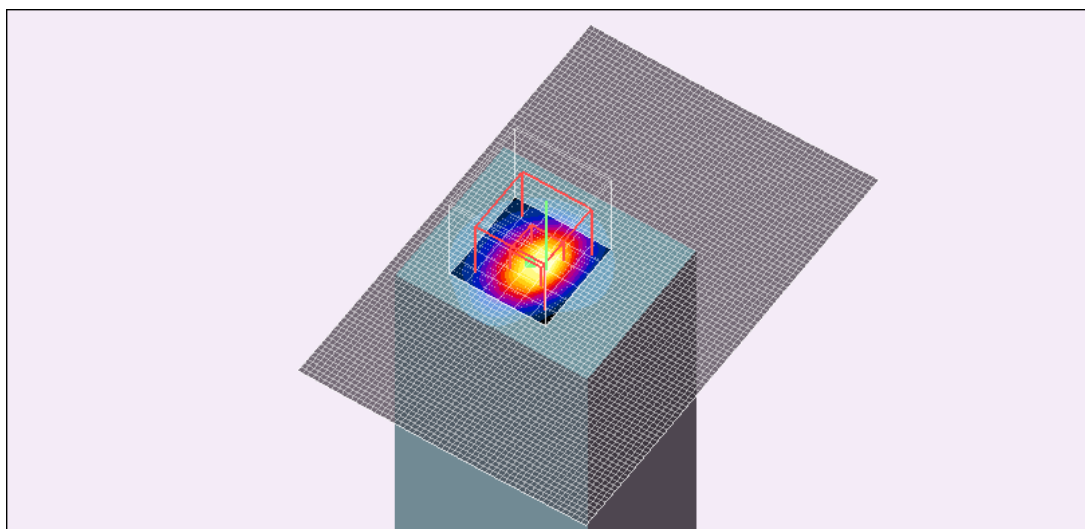
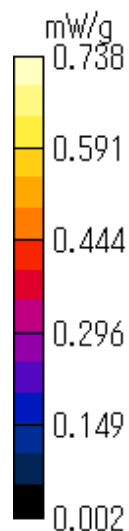
SAR(1 g) = 0.498 mW/g; SAR(10 g) = 0.210 mW/g

Maximum value of SAR (measured) = 0.738 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.6 degree.C , After 23.6 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2412MHz/11b CCK (11Mbps) / Separation 5mm

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.232 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.07 V/m; Power Drift = -0.187 dB

Peak SAR (extrapolated) = 0.307 W/kg

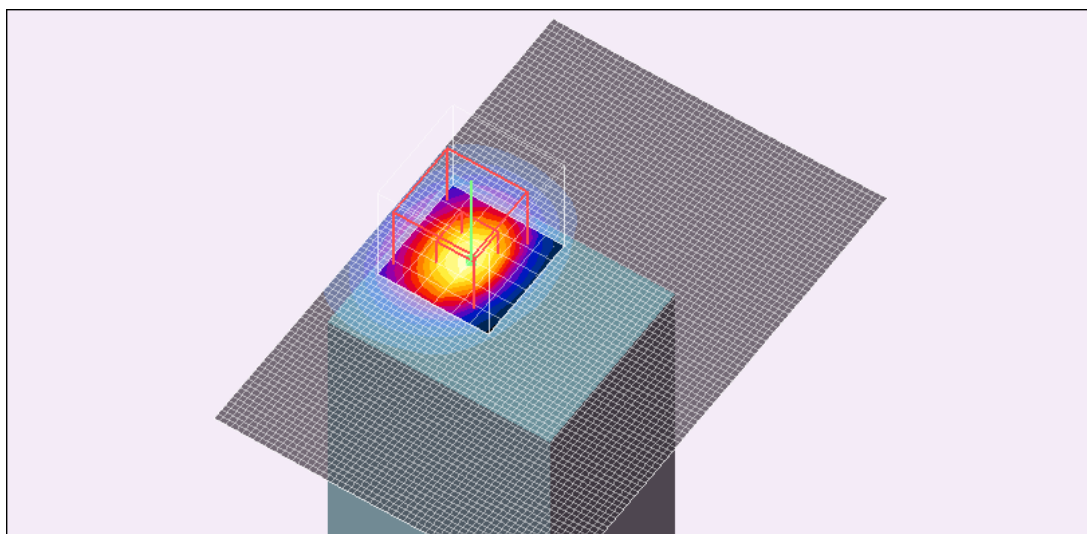
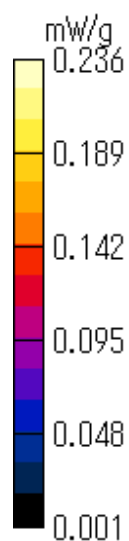
SAR(1 g) = 0.161 mW/g; SAR(10 g) = 0.077 mW/g

Maximum value of SAR (measured) = 0.236 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2412MHz/11b CCK (11Mbps) / Separation 10mm

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.131 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 3.92 V/m; Power Drift = -0.109 dB

Peak SAR (extrapolated) = 0.151 W/kg

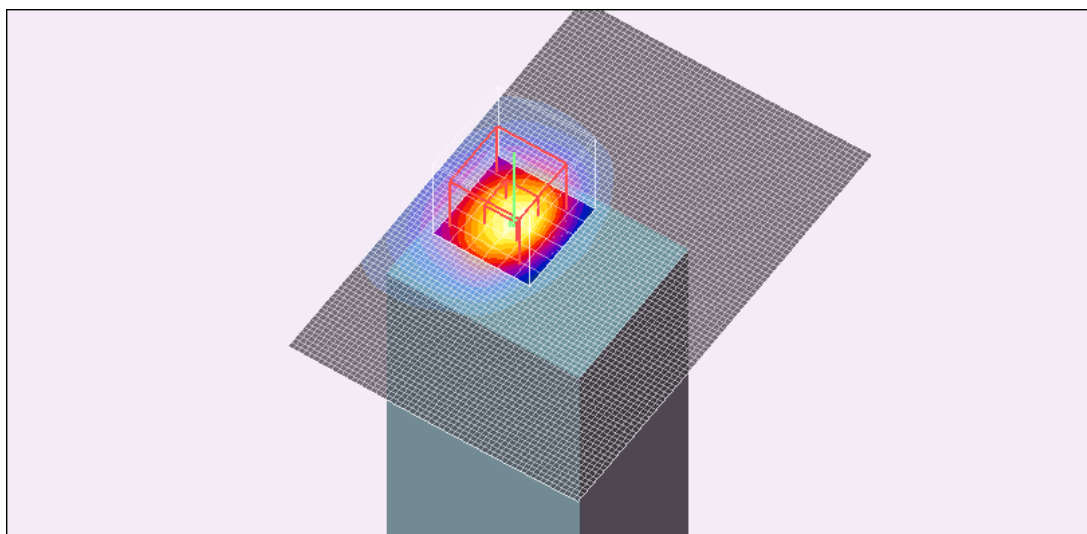
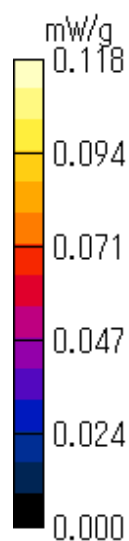
SAR(1 g) = 0.082 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.118 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124

DWWL001/ Body/ Top/ 2412MHz/11b CCK (11Mbps) / Separation 15mm

Crest factor: 1.9

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.68, 7.68, 7.68); Calibrated: 2009/02/12
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: Flat Phantom ELI4.0
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

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

Maximum value of SAR (interpolated) = 0.079 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 6.08 V/m; Power Drift = -0.161 dB

Peak SAR (extrapolated) = 0.098 W/kg

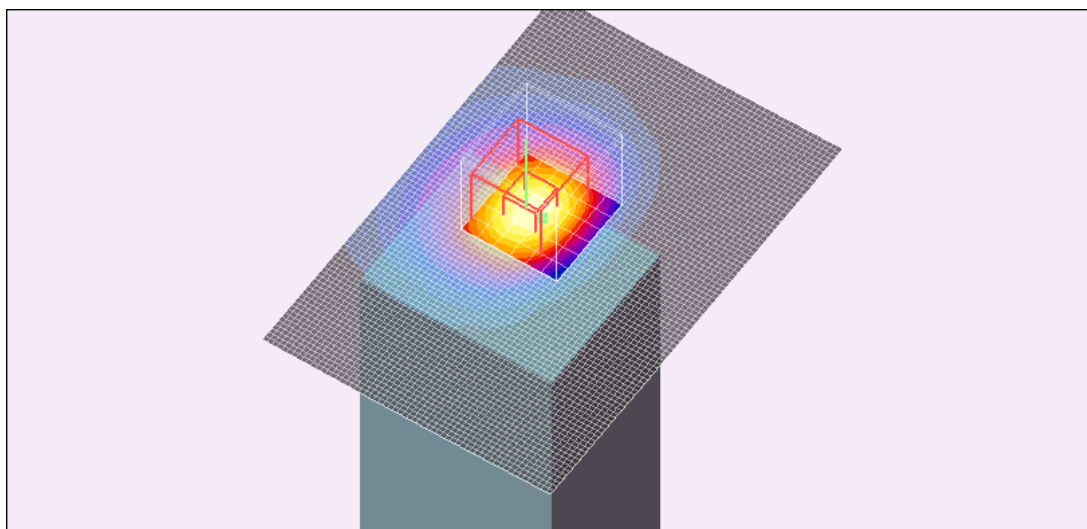
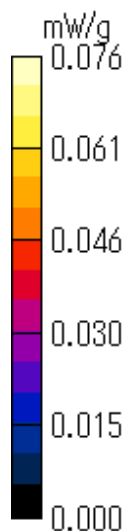
SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.030 mW/g

Maximum value of SAR (measured) = 0.076 mW/g

Test Date = 04/15/09

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.5 degree.C , After 23.5 degree.C



UL Japan, Inc.

Head Office EMC Lab.

4383-326 Asama-cho, Ise-shi, Mie-ken 516-0021 JAPAN

Telephone : +81 596 24 8116

Facsimile : +81 596 24 8124