

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 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 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 [15mm x 15mm]. 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($\geq 0.012\text{W/kg}$)), 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 1 mm away from the tip of the probe and the distance between the surface and the lowest measuring point is 1.3 mm. 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.

2. Measurement data (WLAN 11b/g)

CA06178-A521/body /Front/2437MHz/11b CCK(11Mbps)

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 2.60 mW/g

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

Reference Value = 26.3 V/m; Power Drift = -0.264 dB

Peak SAR (extrapolated) = 2.03 W/kg

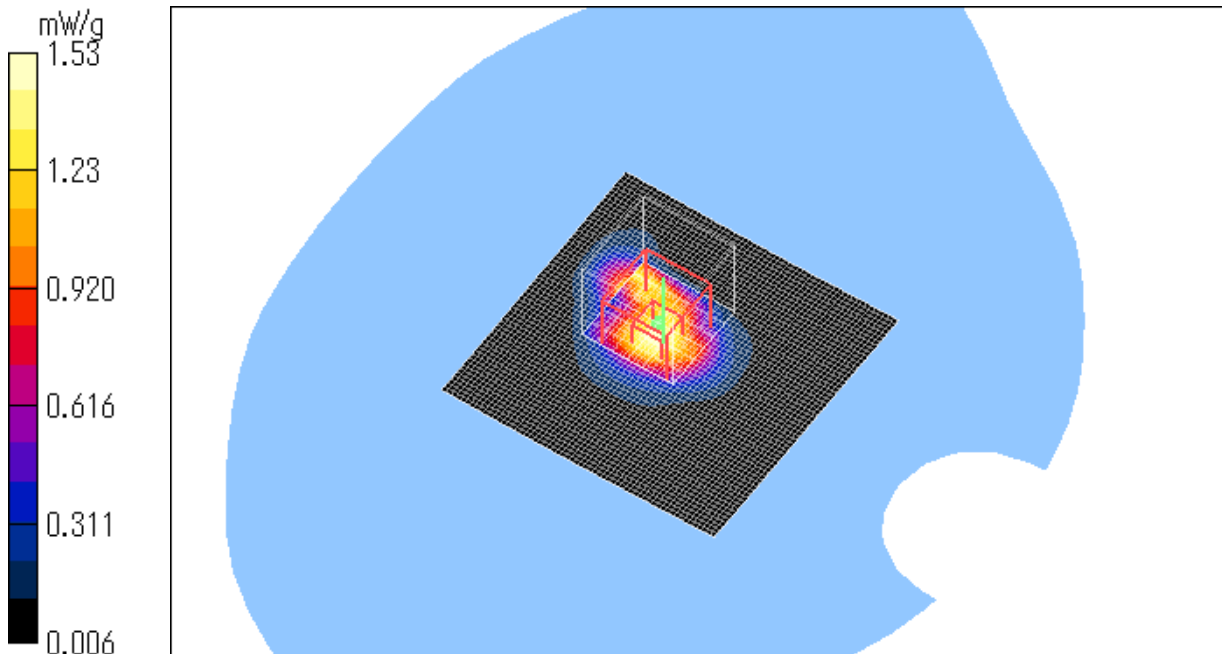
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.531 mW/g

Maximum value of SAR (measured) = 1.53 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



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Z-axis scan at max SAR location

CA06178-A521/body /Front/2437MHz/11b CCK(11Mbps)

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

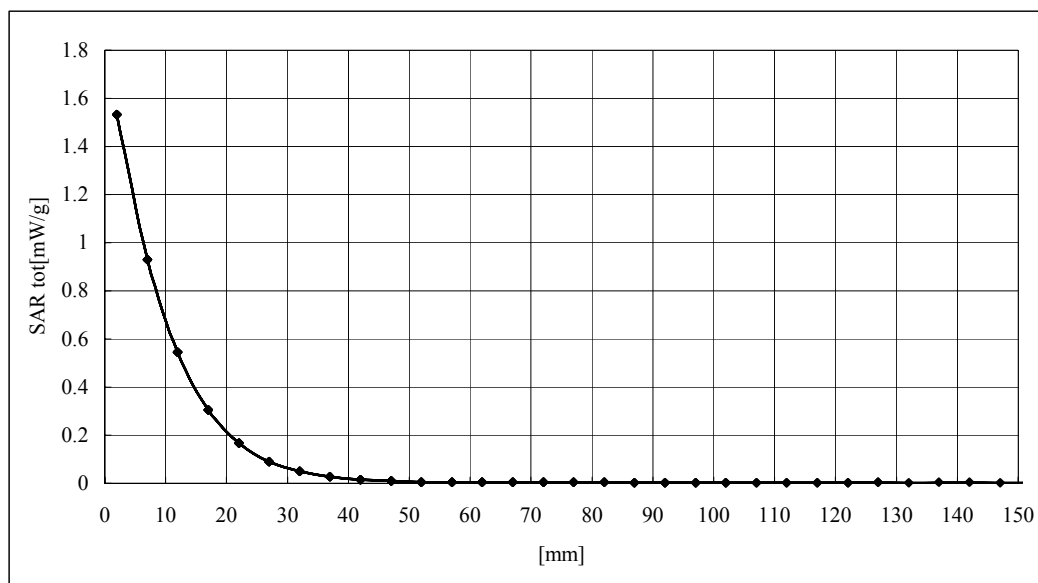
DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160



CA06178-A521/body /Left/2437MHz/11b CCK(11Mbps)

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.039 mW/g

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

Reference Value = 4.75 V/m; Power Drift = -0.302 dB

Peak SAR (extrapolated) = 0.056 W/kg

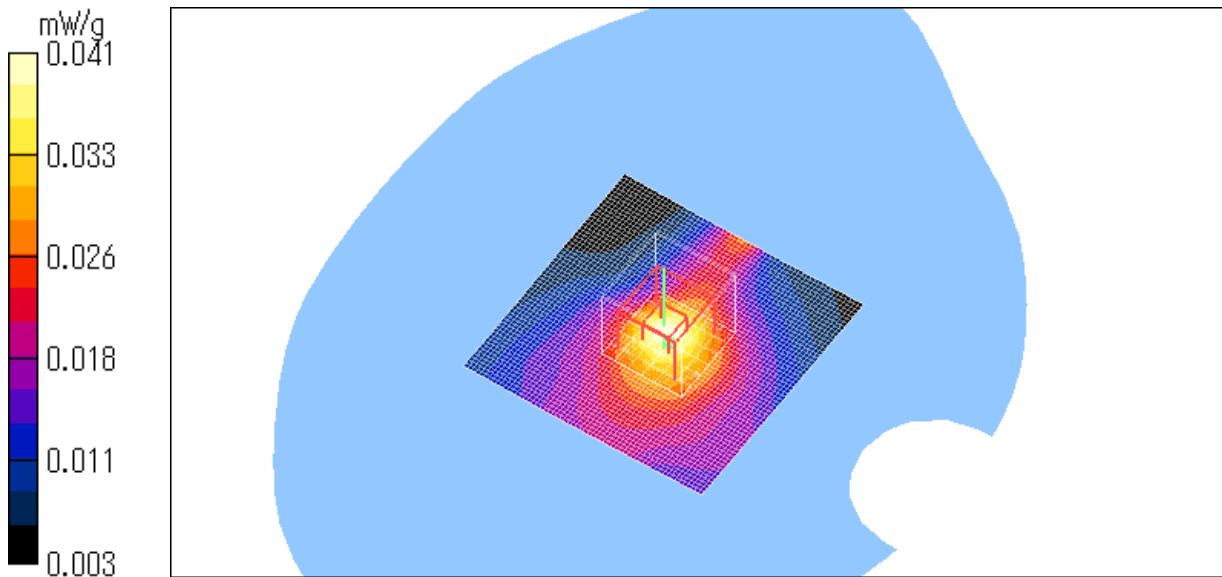
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.017 mW/g

Maximum value of SAR (measured) = 0.041 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/body/Right/2437MHz/11b CCK(11Mbps)

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

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

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

Reference Value = 2.15 V/m; Power Drift = 0.115 dB

Peak SAR (extrapolated) = 0.045 W/kg

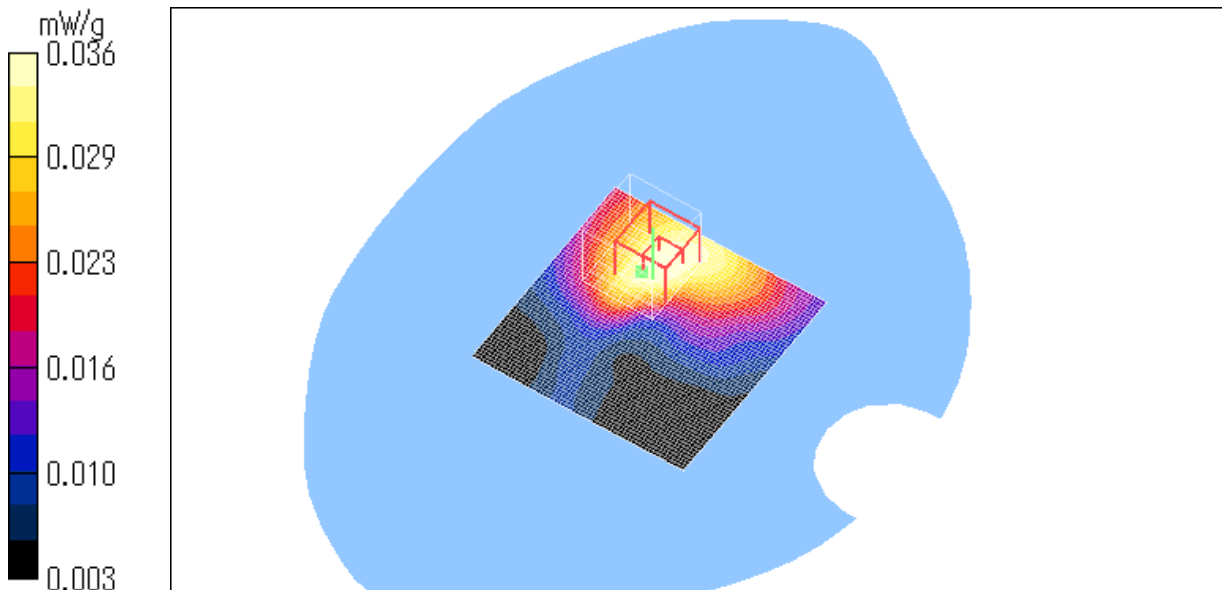
SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.017 mW/g

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

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/Body/Top/2437MHz/11b CCK(11Mbps)

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 1.09 mW/g

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

Reference Value = 20.5 V/m; Power Drift = -0.052 dB

Peak SAR (extrapolated) = 1.27 W/kg

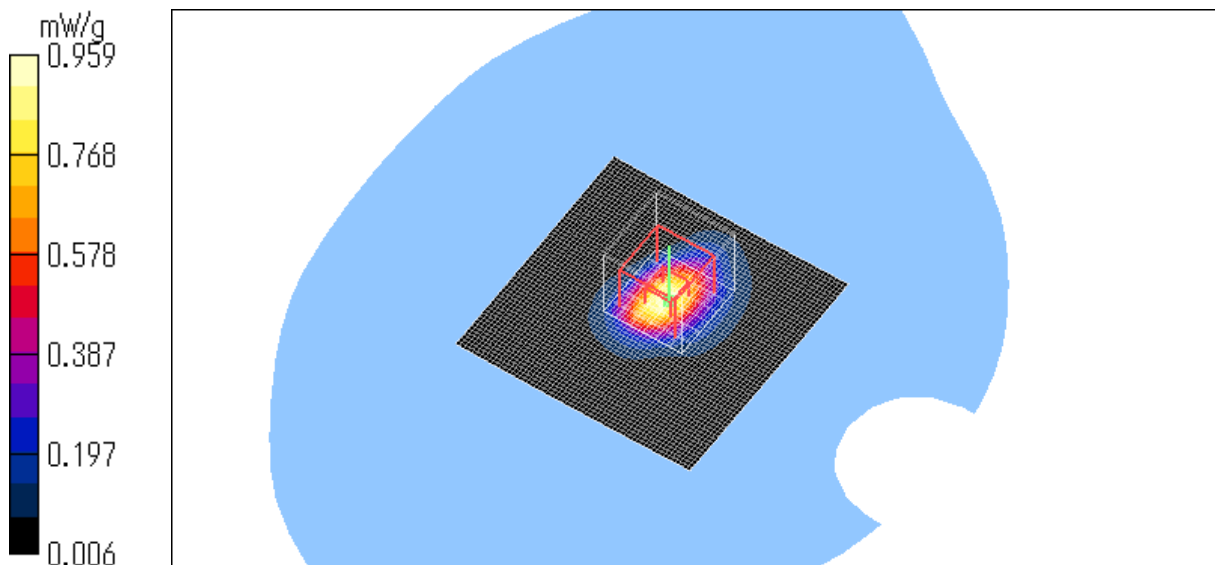
SAR(1 g) = 0.663 mW/g; SAR(10 g) = 0.306 mW/g

Maximum value of SAR (measured) = 0.959 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/body /Back/2437MHz/11b CCK 11Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.029 mW/g

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

Reference Value = 2.75 V/m; Power Drift = 0.100 dB

Peak SAR (extrapolated) = 0.033 W/kg

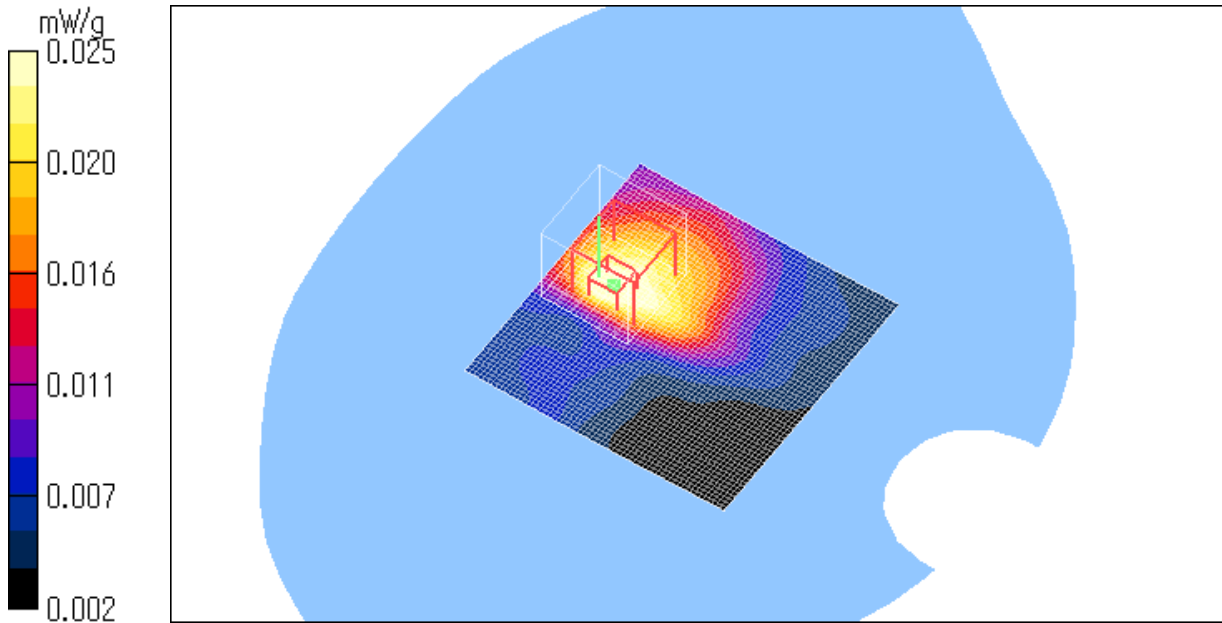
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.025 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/body /Front/2412MHz/11b CCK(11Mbps)

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 2.19 mW/g

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

Reference Value = 18.9 V/m; Power Drift = -0.301 dB

Peak SAR (extrapolated) = 1.96 W/kg

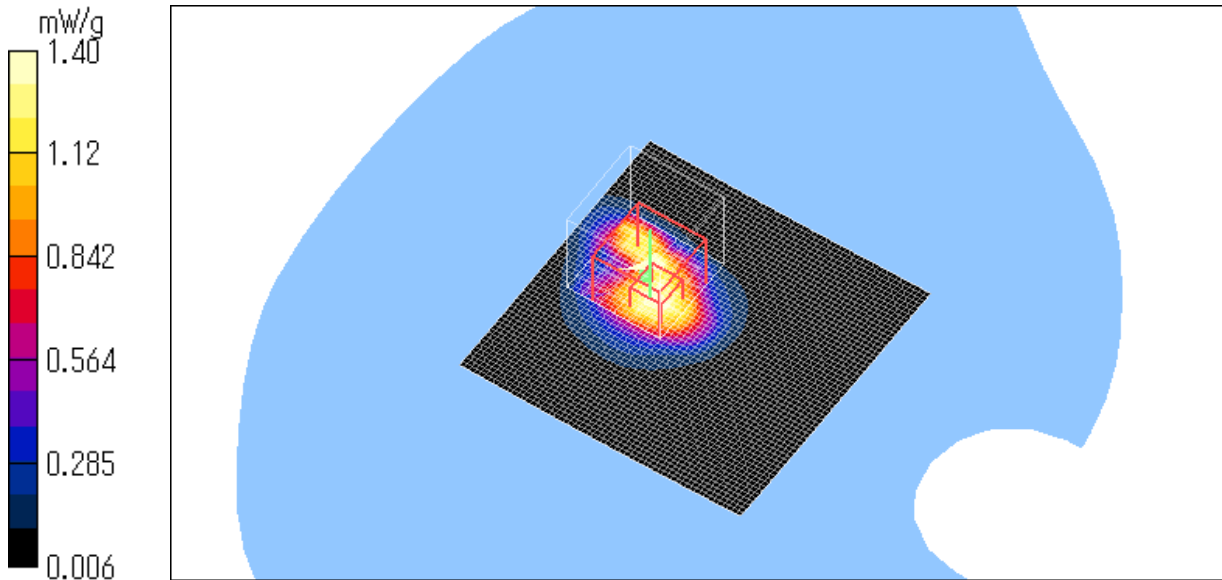
SAR(1 g) = 1.01 mW/g; SAR(10 g) = 0.495 mW/g

Maximum value of SAR (measured) = 1.40 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/body /Front/2462MHz/11b CCK 11Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 1.78 mW/g

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

Reference Value = 18.8 V/m; Power Drift = -0.288 dB

Peak SAR (extrapolated) = 1.91 W/kg

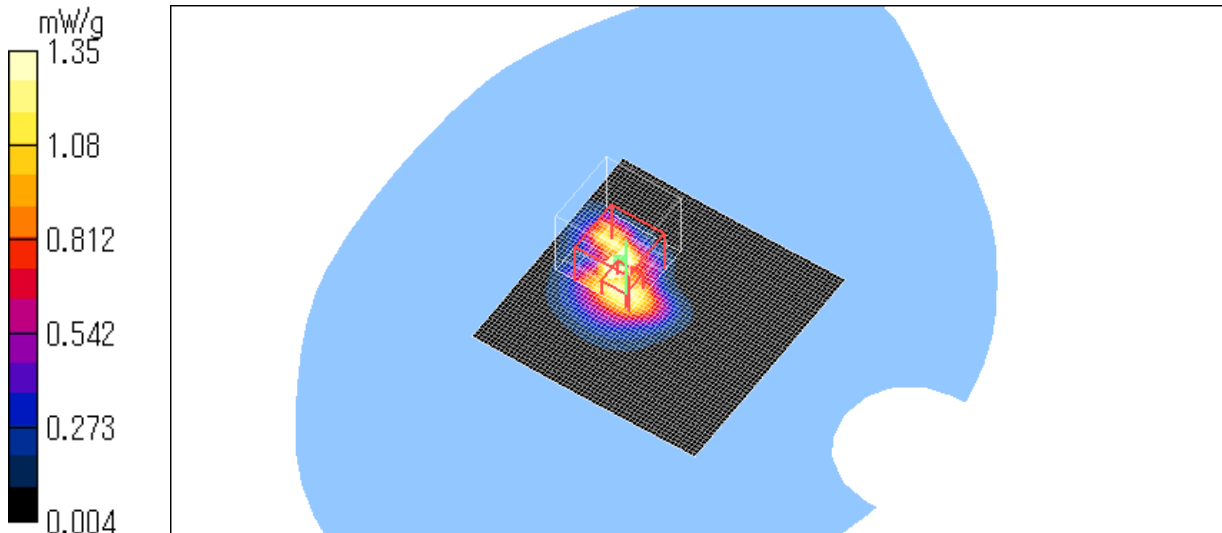
SAR(1 g) = 0.939 mW/g; SAR(10 g) = 0.418 mW/g

Maximum value of SAR (measured) = 1.35 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/body /Front/2437MHz/11g BPSK 9Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 1.03 mW/g

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

Reference Value = 12.1 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.961 W/kg

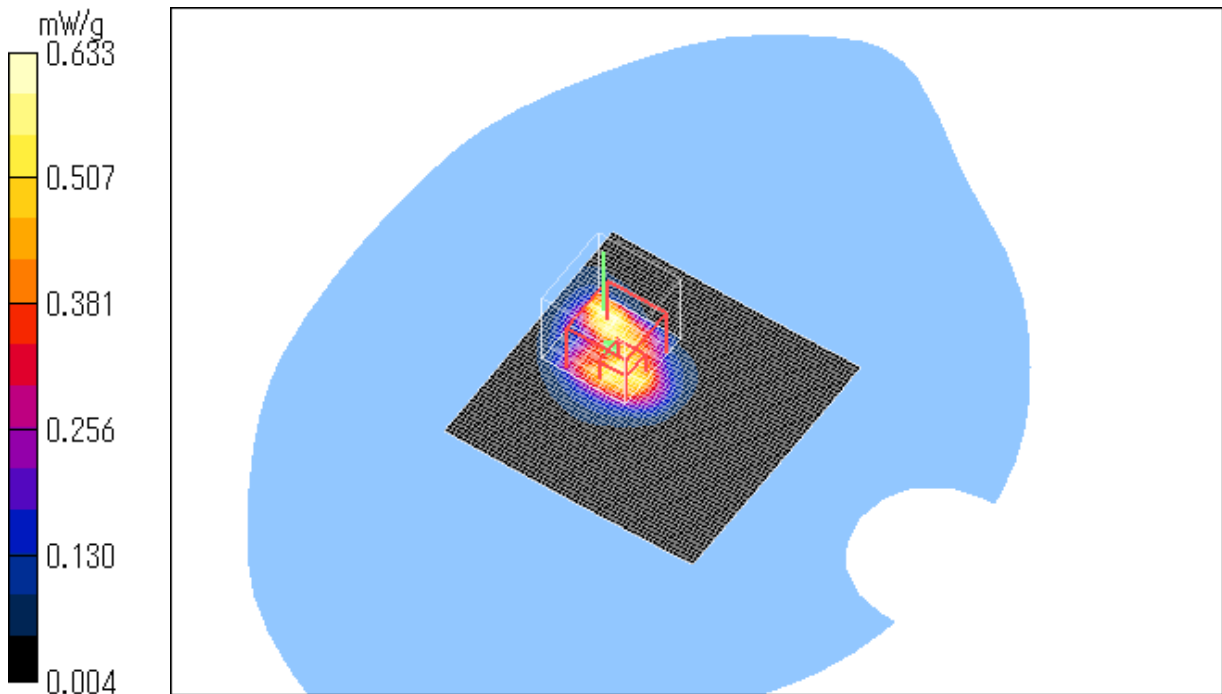
SAR(1 g) = 0.411 mW/g; SAR(10 g) = 0.206 mW/g

Maximum value of SAR (measured) = 0.633 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.3 degree.C , After 24.3 degree.C



CA06178-A521/body /Front/2437MHz/11g QPSK 12Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.874 mW/g

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

Reference Value = 16.8 V/m; Power Drift = -0.308 dB

Peak SAR (extrapolated) = 0.898 W/kg

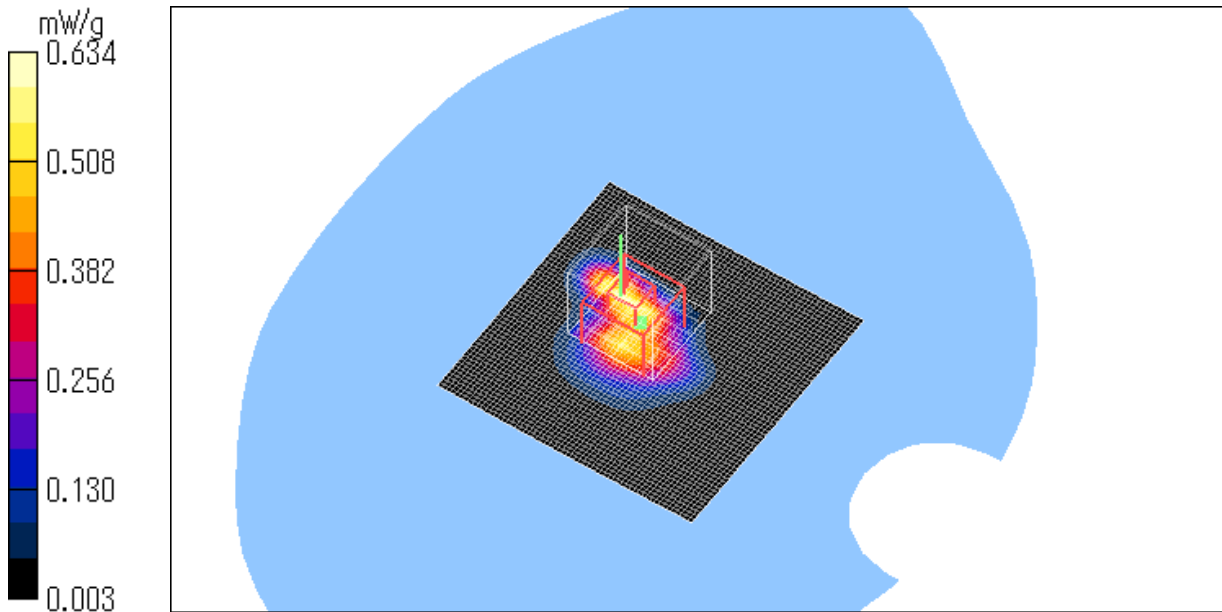
SAR(1 g) = 0.371 mW/g; SAR(10 g) = 0.196 mW/g

Maximum value of SAR (measured) = 0.634 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.4 degree.C , After 24.4 degree.C



CA06178-A521/body /Front/2437MHz/11g 16QAM 24Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.712 mW/g

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

Reference Value = 17.9 V/m; Power Drift = -0.309 dB

Peak SAR (extrapolated) = 0.895 W/kg

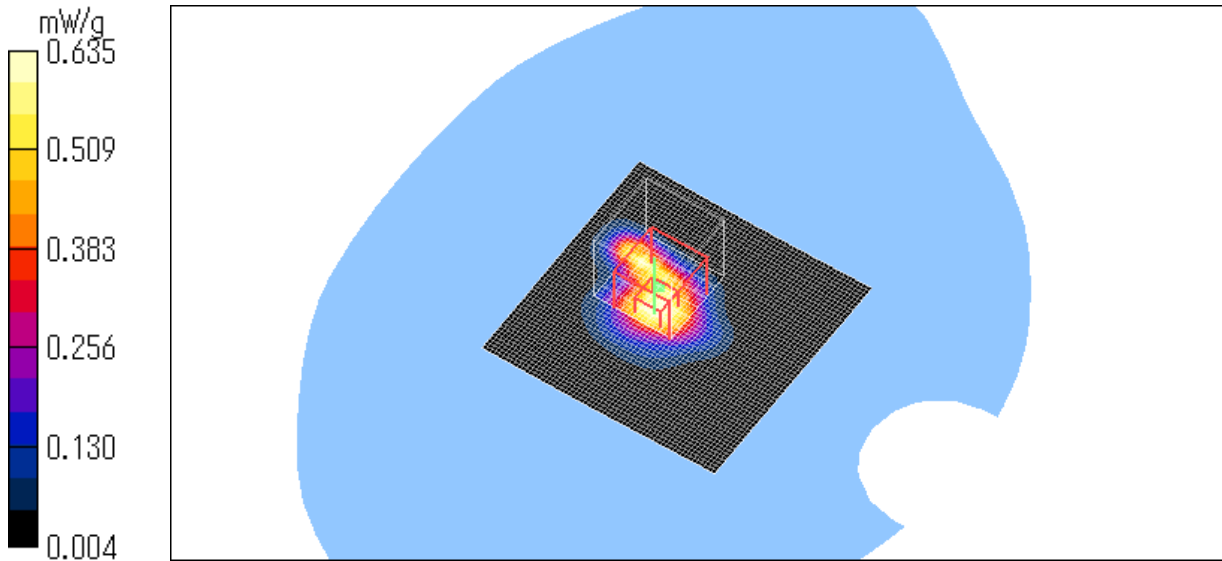
SAR(1 g) = 0.465 mW/g; SAR(10 g) = 0.232 mW/g

Maximum value of SAR (measured) = 0.635 mW/g

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.4 degree.C , After 24.4 degree.C



CA06178-A521/body /Front/2437MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.5$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.985 mW/g

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

Reference Value = 18.8 V/m; Power Drift = -0.310 dB

Peak SAR (extrapolated) = 0.974 W/kg

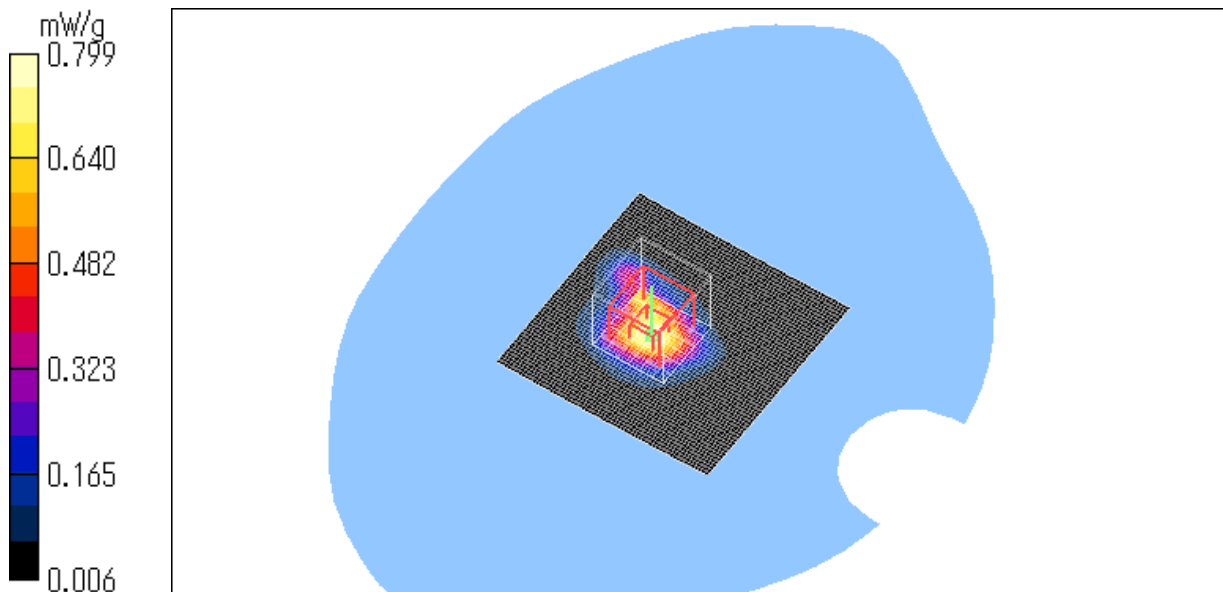
SAR(1 g) = 0.572 mW/g; SAR(10 g) = 0.287 mW/g

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

Test Date = 06/27/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.4 degree.C , After 24.4 degree.C



CA06178-A521/body /Left/2437MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.029 mW/g

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

Reference Value = 3.28 V/m; Power Drift = 0.049 dB

Peak SAR (extrapolated) = 0.043 W/kg

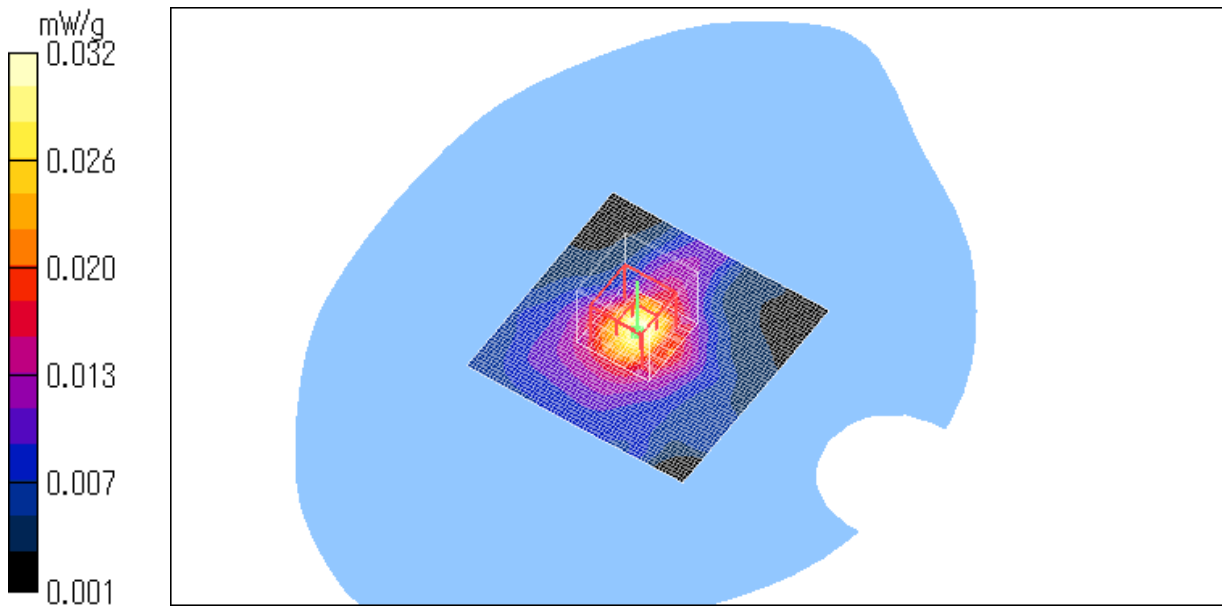
SAR(1 g) = 0.022 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.032 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Right/2437MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.018 mW/g

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

Reference Value = 2.76 V/m; Power Drift = 0.039 dB

Peak SAR (extrapolated) = 0.022 W/kg

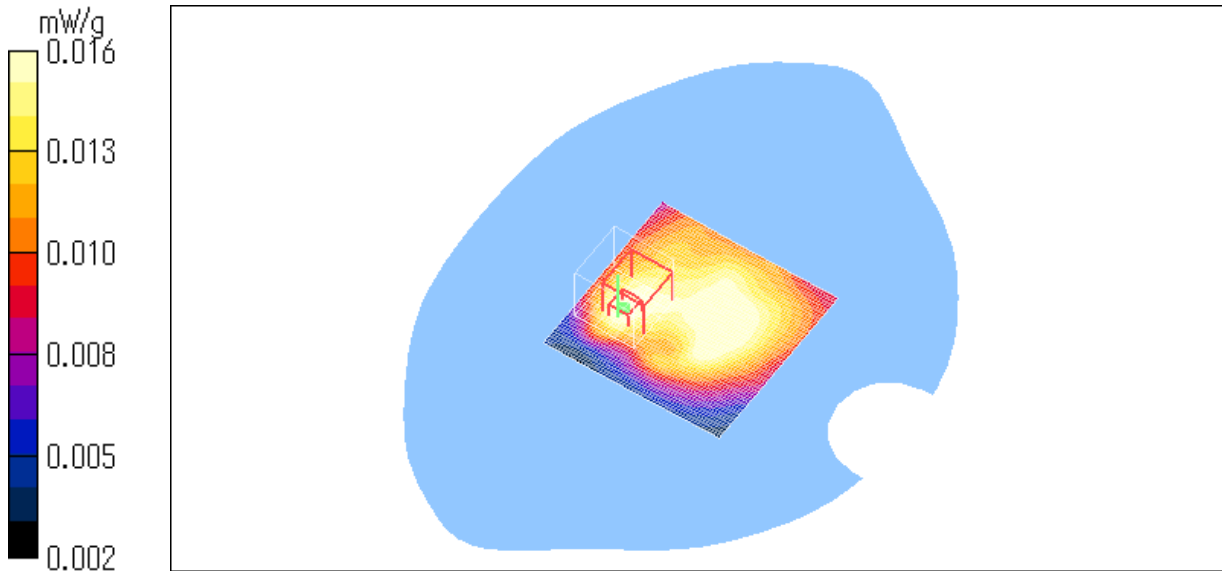
SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.0078 mW/g

Maximum value of SAR (measured) = 0.016 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Top/2437MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.487 mW/g

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

Reference Value = 13.0 V/m; Power Drift = -0.146 dB

Peak SAR (extrapolated) = 0.620 W/kg

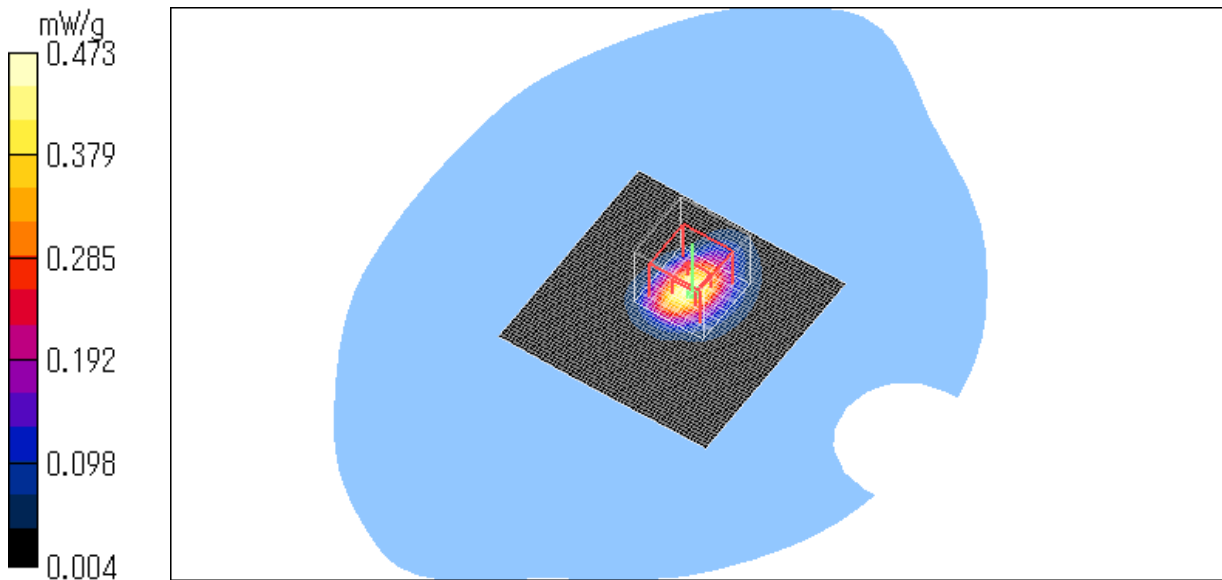
SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.148 mW/g

Maximum value of SAR (measured) = 0.473 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Back/2437MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.018 mW/g

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

Reference Value = 2.73 V/m; Power Drift = 0.140 dB

Peak SAR (extrapolated) = 0.022 W/kg

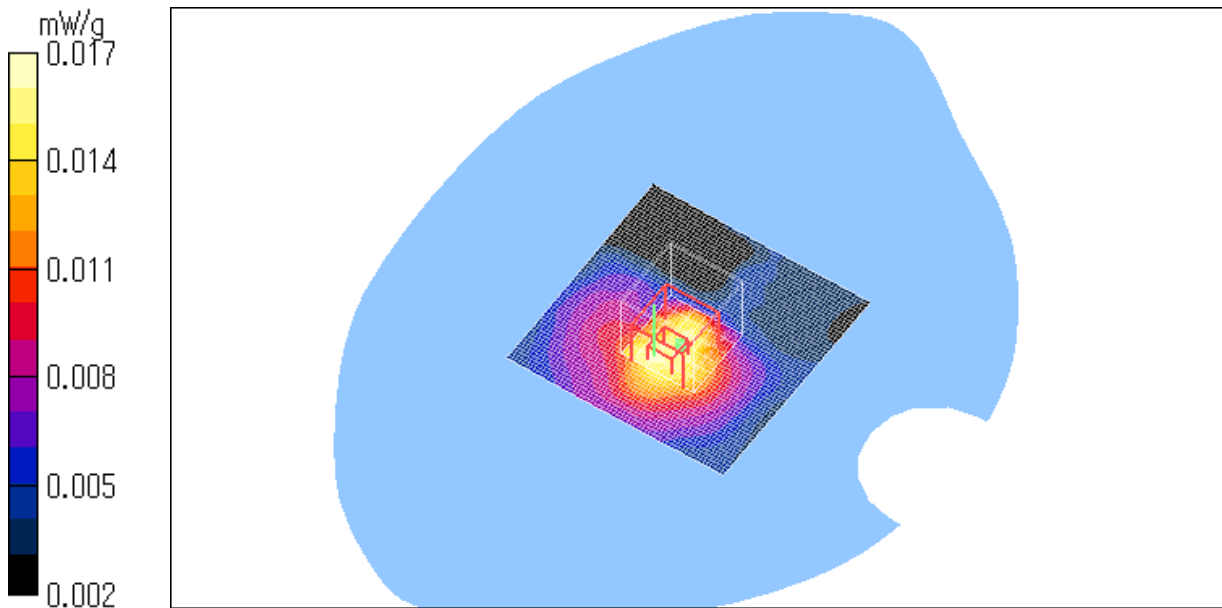
SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00821 mW/g

Maximum value of SAR (measured) = 0.017 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Front/2412MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.810 mW/g

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

Reference Value = 14.3 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 1.04 W/kg

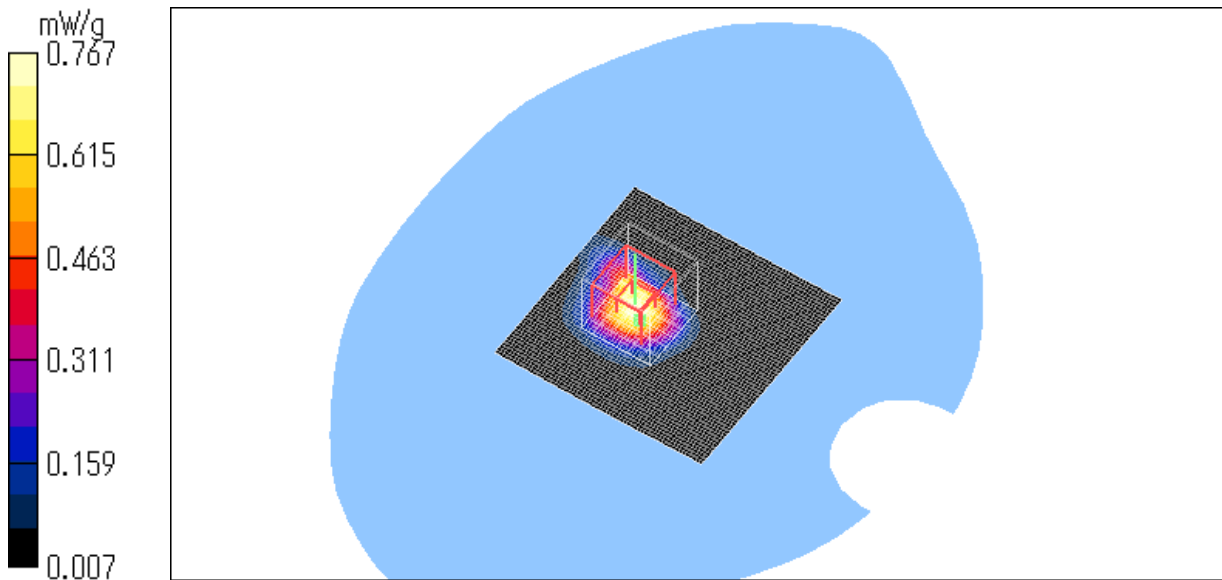
SAR(1 g) = 0.554 mW/g; SAR(10 g) = 0.280 mW/g

Maximum value of SAR (measured) = 0.767 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Front/2462MHz/11g 64QAM 54Mbps

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.899 mW/g

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

Reference Value = 17.4 V/m; Power Drift = -0.306 dB

Peak SAR (extrapolated) = 0.891 W/kg

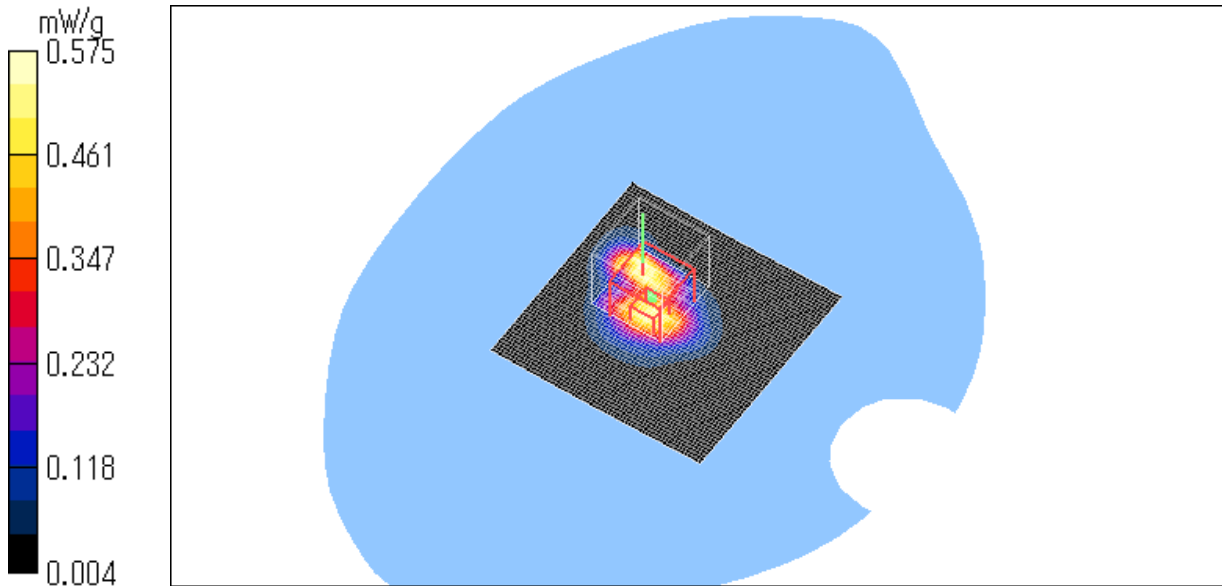
SAR(1 g) = 0.388 mW/g; SAR(10 g) = 0.189 mW/g

Maximum value of SAR (measured) = 0.575 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Front/2437MHz/11b CCK 11Mbps /Separation 5mm

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.525 mW/g

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

Reference Value = 8.50 V/m; Power Drift = -0.159 dB

Peak SAR (extrapolated) = 0.532 W/kg

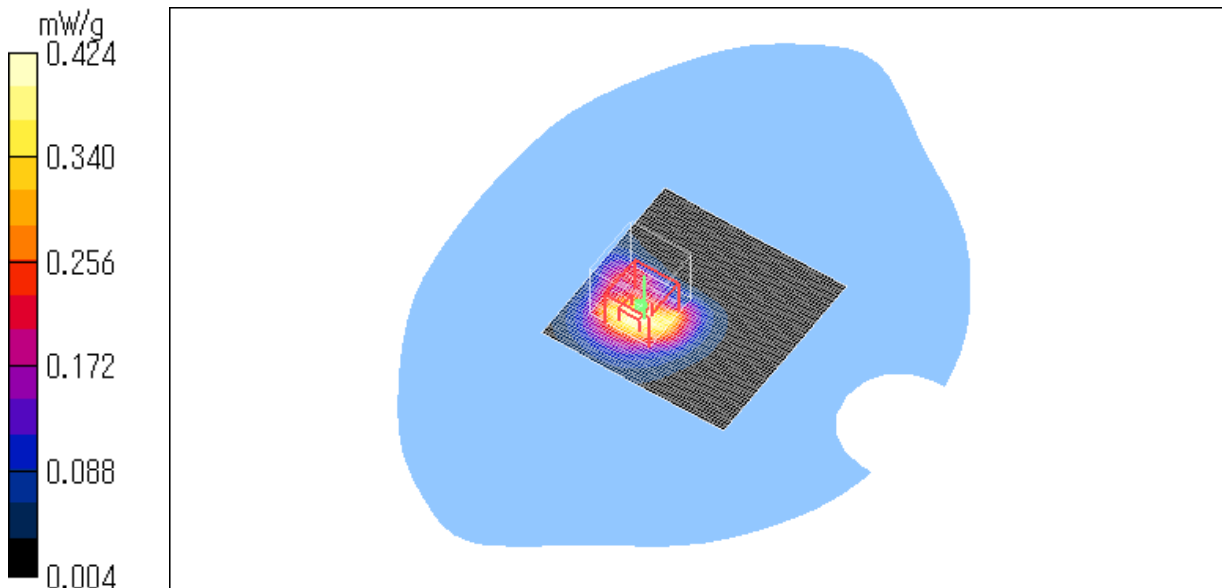
SAR(1 g) = 0.307 mW/g; SAR(10 g) = 0.158 mW/g

Maximum value of SAR (measured) = 0.424 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



CA06178-A521/body /Front/2437MHz/11b CCK 11Mbps /Separation 10mm

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.259 mW/g

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

Reference Value = 2.66 V/m; Power Drift = 0.088 dB

Peak SAR (extrapolated) = 0.324 W/kg

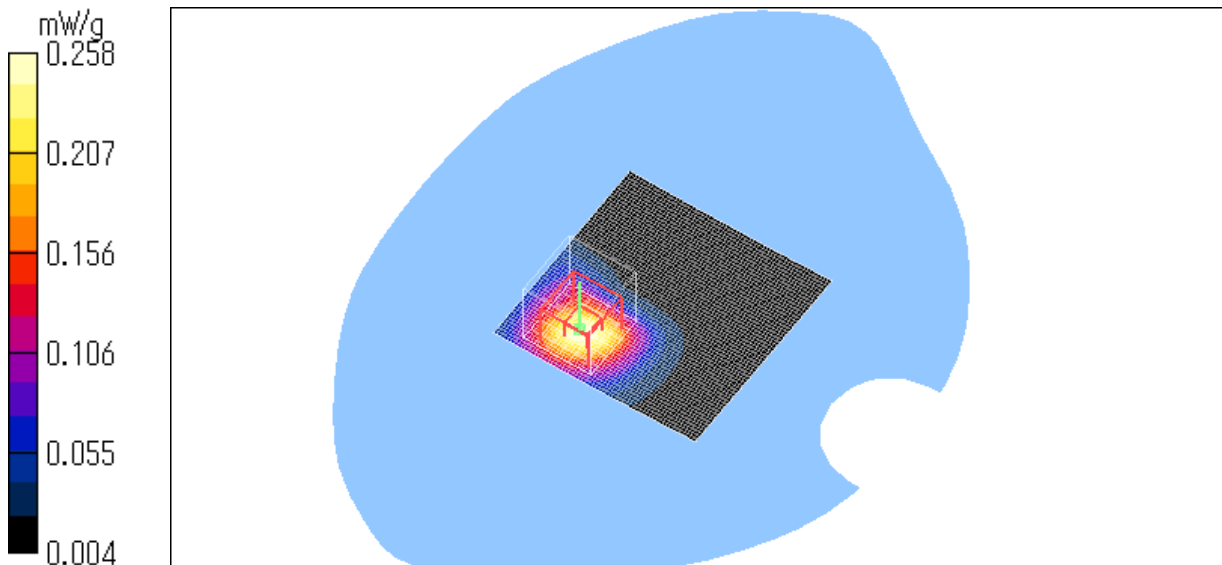
SAR(1 g) = 0.189 mW/g; SAR(10 g) = 0.102 mW/g

Maximum value of SAR (measured) = 0.258 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.1 degree.C , After 24.2 degree.C



CA06178-A521/body /Front/2437MHz/11b CCK 11Mbps /Separation 15mm

Crest factor : 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV4 - SN3540; ConvF(7.8, 7.8, 7.8); Calibrated: 2007/01/19

- Sensor-Surface: 2mm (Mechanical Surface Detection)

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.6 Build 23; Postprocessing SW: SEMCAD, V1.8 Build 160

Area Scan (61x61x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.153 mW/g

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

Reference Value = 6.77 V/m; Power Drift = -0.099 dB

Peak SAR (extrapolated) = 0.199 W/kg

SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.160 mW/g

Test Date = 06/28/07

Ambient Temperature = 24.0degree.C

Liquid Temperature = Before 24.2 degree.C , After 24.2 degree.C

