

Test report No. : 29CE0230-HO-03-A-R1
Page : 27 of 87
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APPENDIX 2 : SAR Measurement data

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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 2.7mm 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.

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2. Measurement data (SAR 2450MHz)

NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.683 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 = -0.199 dB

Peak SAR (extrapolated) = 1.42 W/kg

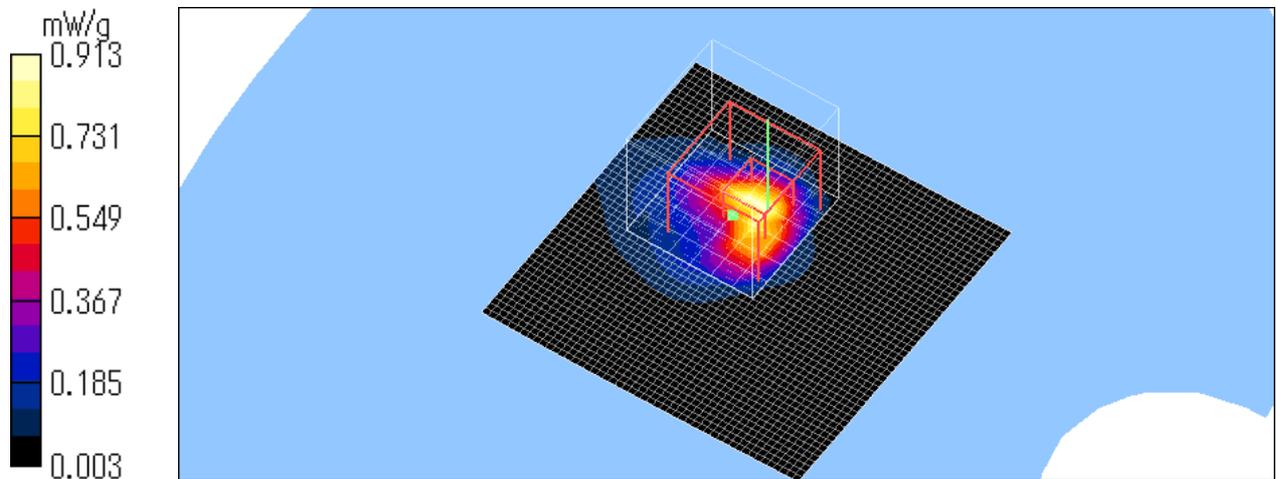
SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.220 mW/g

Maximum value of SAR (measured) = 0.913 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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NWZ-X1050/ Rear/ 11b CCK(11Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.04 mW/g

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

Reference Value = 11.1 V/m; Power Drift = -0.062 dB

Peak SAR (extrapolated) = 1.34 W/kg

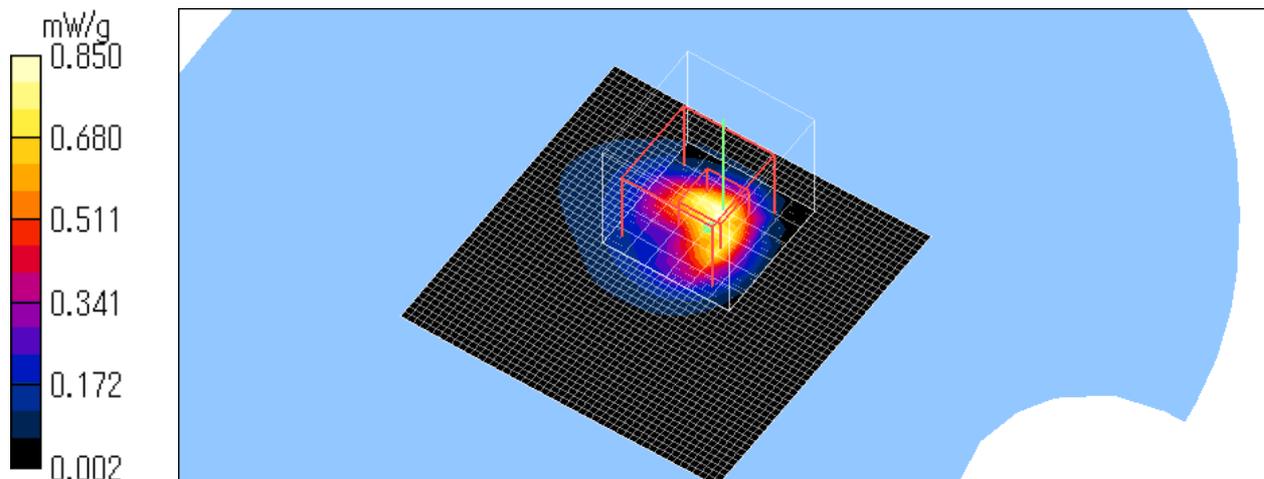
SAR(1 g) = 0.520 mW/g; SAR(10 g) = 0.205 mW/g

Maximum value of SAR (measured) = 0.850 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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NWZ-X1050/ Top/ 11b DBPSK(1Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.125 mW/g

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

Reference Value = 2.78 V/m; Power Drift = -0.180 dB

Peak SAR (extrapolated) = 0.324 W/kg

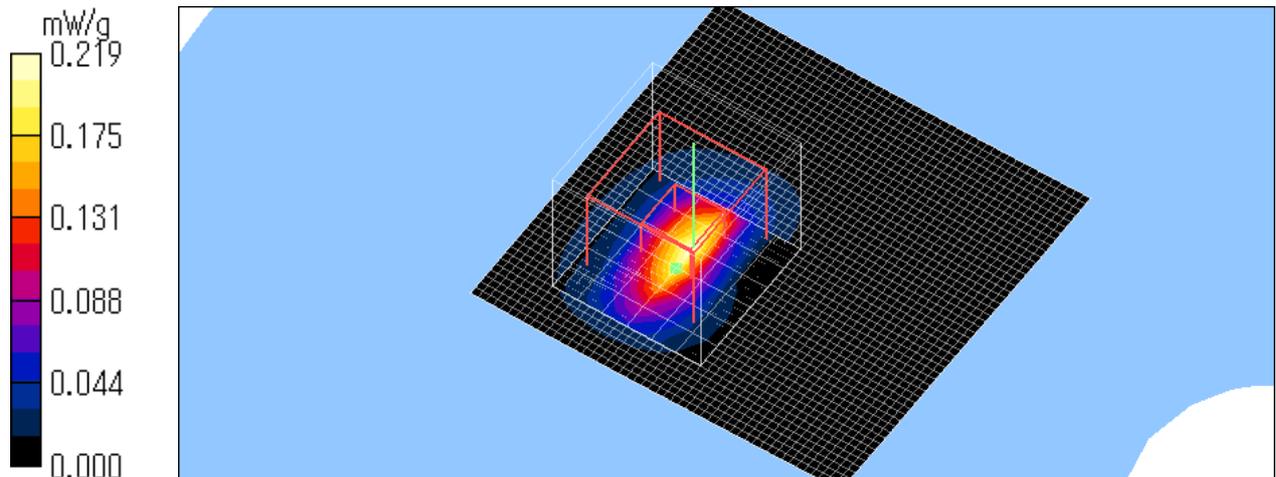
SAR(1 g) = 0.119 mW/g; SAR(10 g) = 0.043 mW/g

Maximum value of SAR (measured) = 0.219 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

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



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NWZ-X1050/ Left side/ 11b DBPSK(1Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 0.019 mW/g

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

Reference Value = 2.34 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.038 W/kg

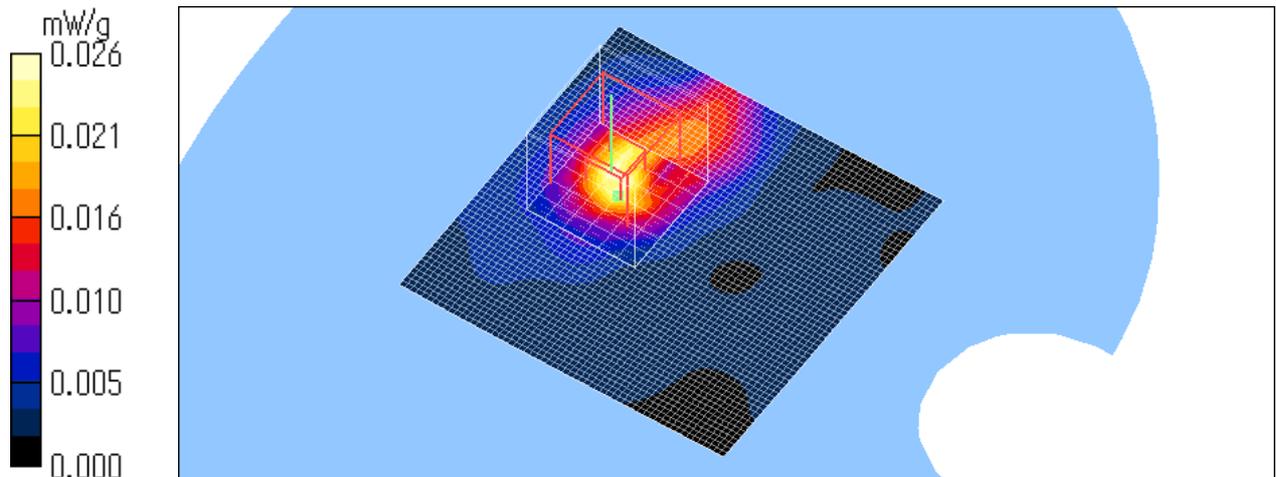
SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00763 mW/g

Maximum value of SAR (measured) = 0.026 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

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



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NWZ-X1050/ Right side/ 11b DBPSK(1Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 0.011 mW/g

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

Reference Value = 0.982 V/m; Power Drift = 0.141 dB

Peak SAR (extrapolated) = 0.012 W/kg

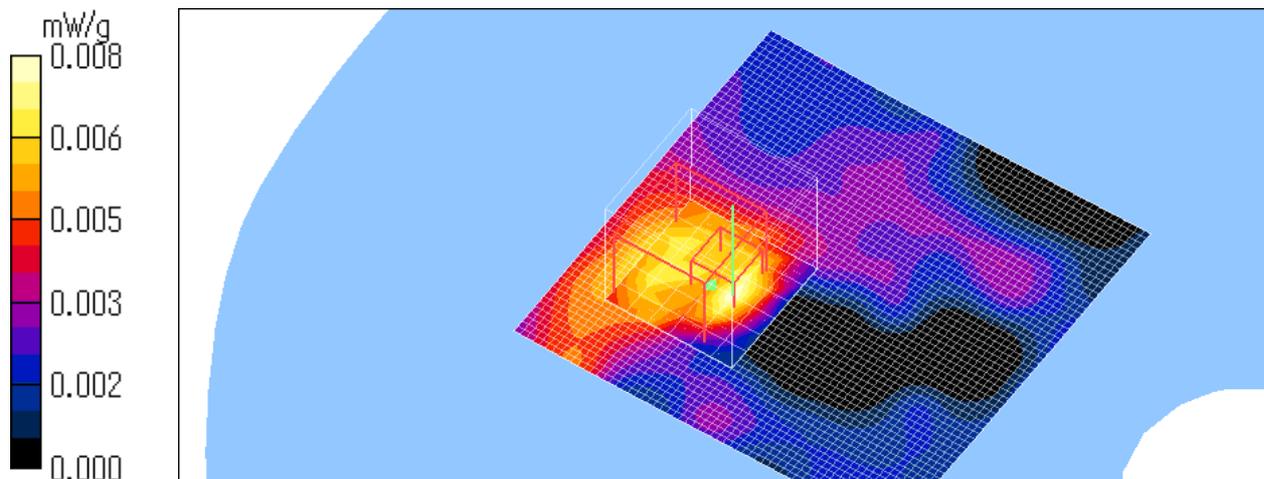
SAR(1 g) = 0.00458 mW/g; SAR(10 g) = 0.00237 mW/g

Maximum value of SAR (measured) = 0.008 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

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



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NWZ-X1050/ Front/ 11b DBPSK(1Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 0.038 mW/g

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

Reference Value = 3.94 V/m; Power Drift = 0.155 dB

Peak SAR (extrapolated) = 0.094 W/kg

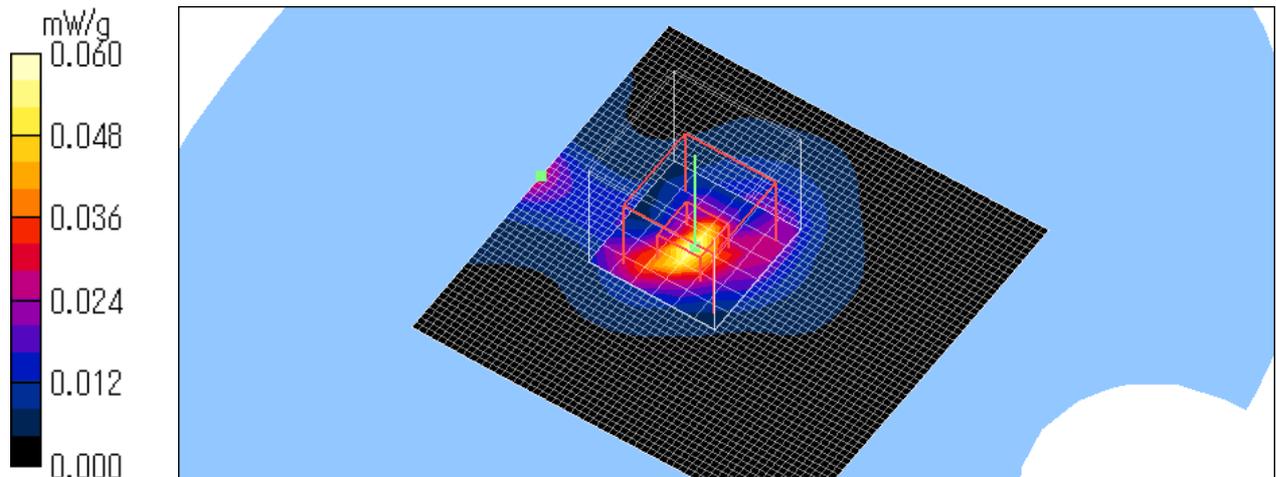
SAR(1 g) = 0.029 mW/g; SAR(10 g) = 0.012 mW/g

Maximum value of SAR (measured) = 0.060 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

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



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NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2412MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 1.70 mW/g

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

Reference Value = 24.5 V/m; Power Drift = -0.169 dB

Peak SAR (extrapolated) = 2.28 W/kg

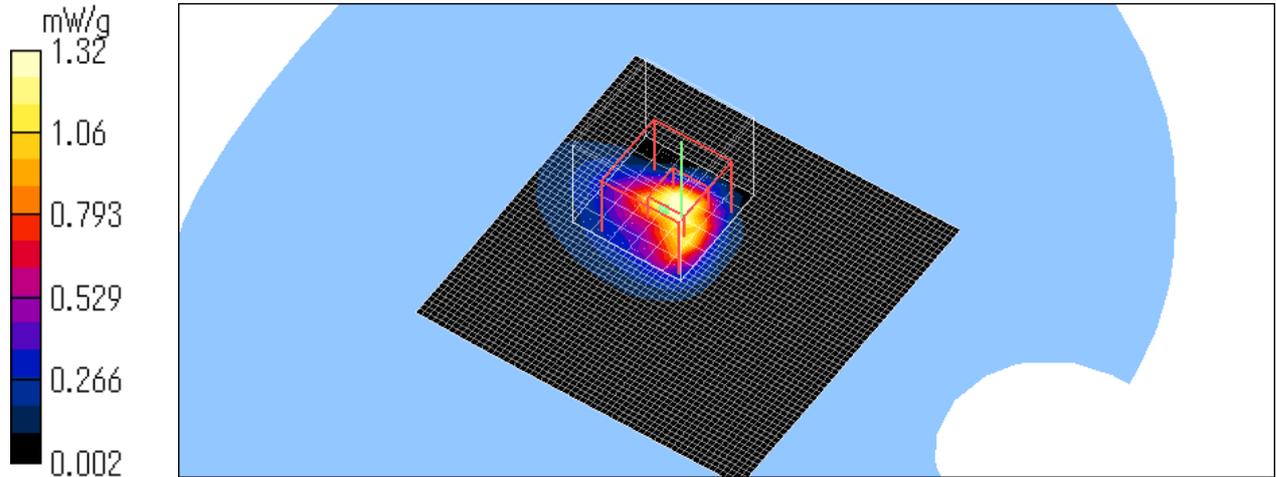
SAR(1 g) = 0.839 mW/g; SAR(10 g) = 0.338 mW/g

Maximum value of SAR (measured) = 1.32 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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Z-axis scan at max SAR location

NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2412MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

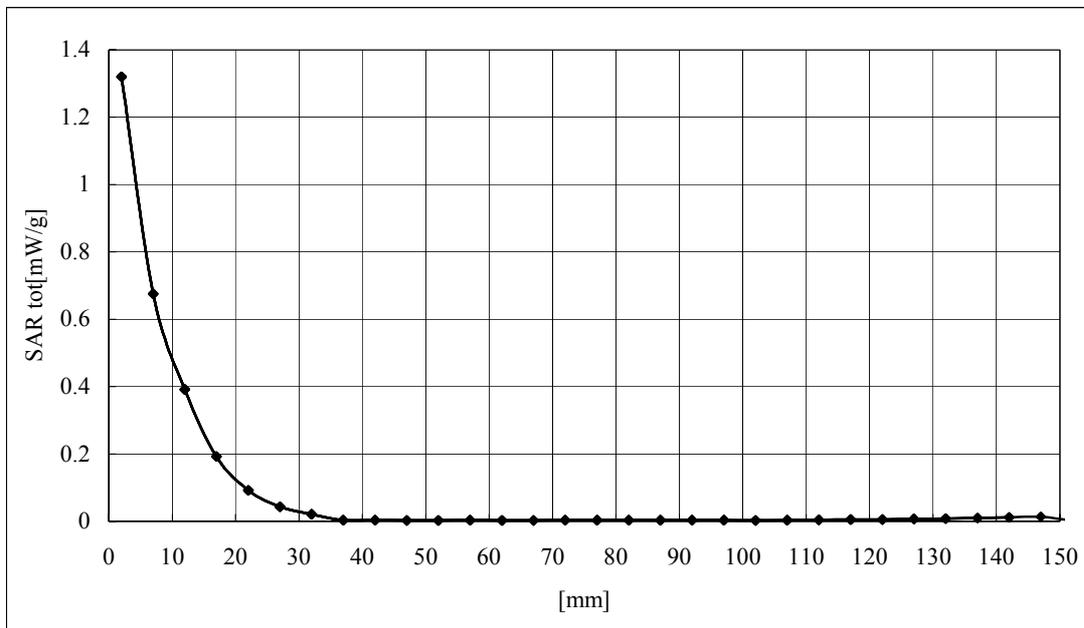
DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176



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NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2462MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.03$ mho/m; $\epsilon_r = 49.2$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 12.7 V/m; Power Drift = -0.106 dB

Peak SAR (extrapolated) = 0.836 W/kg

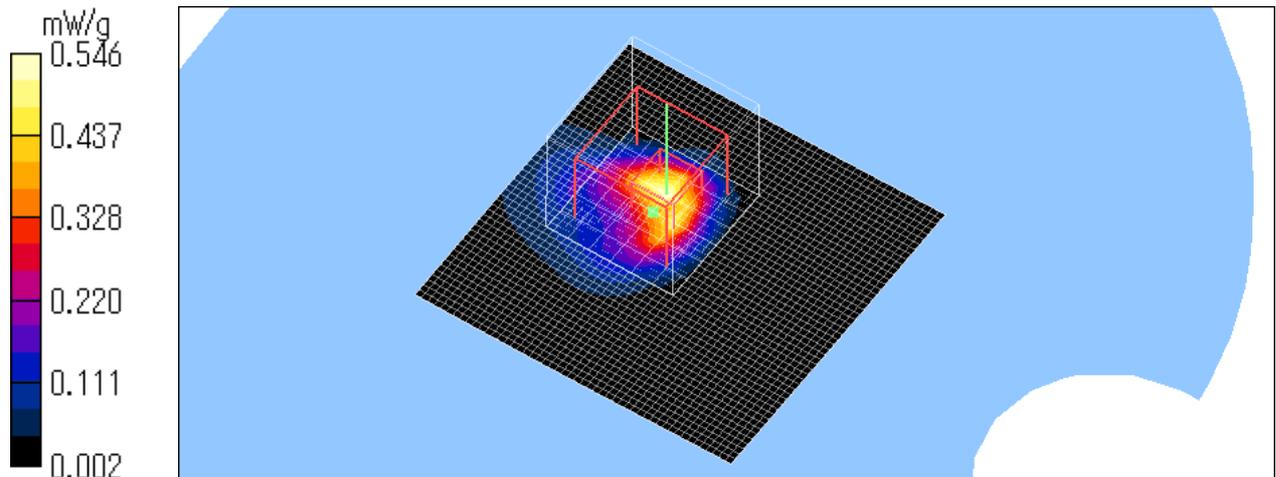
SAR(1 g) = 0.323 mW/g; SAR(10 g) = 0.128 mW/g

Maximum value of SAR (measured) = 0.546 mW/g

Test Date = 11/17/08

Ambient Temperature = 24.5 degree.c

Liquid Temperature = Before 23.9 degree.C , After 23.9 degree.C



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NWZ-X1050/ Rear/ 11g BPSK(6Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.947 mW/g

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

Reference Value = 15.9 V/m; Power Drift = -0.163 dB

Peak SAR (extrapolated) = 1.34 W/kg

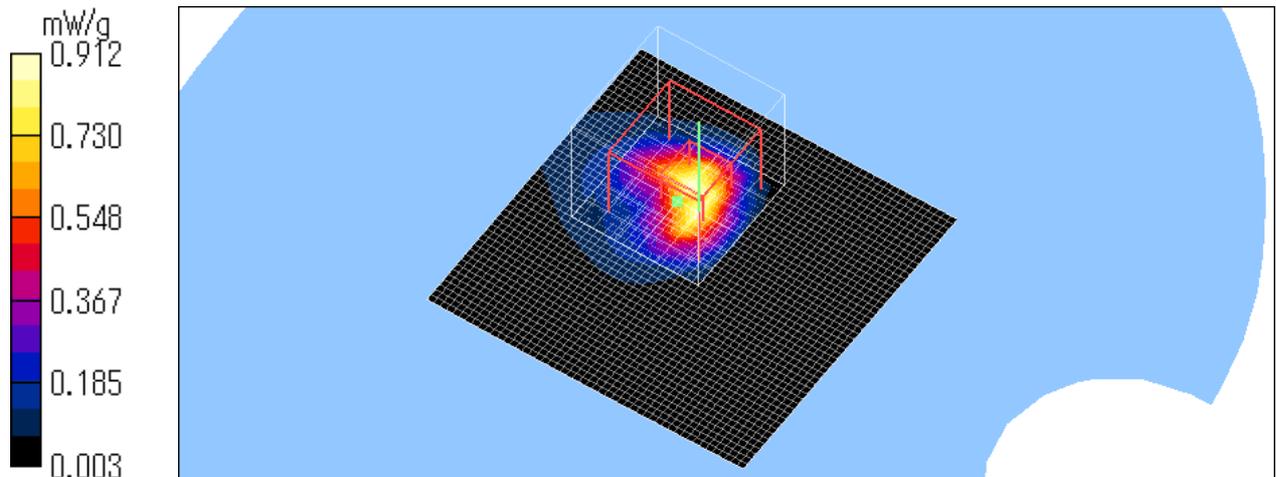
SAR(1 g) = 0.559 mW/g; SAR(10 g) = 0.218 mW/g

Maximum value of SAR (measured) = 0.912 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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NWZ-X1050/ Rear/ 11g QPSK(18Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.862 mW/g

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

Reference Value = 10.3 V/m; Power Drift = -0.088 dB

Peak SAR (extrapolated) = 1.20 W/kg

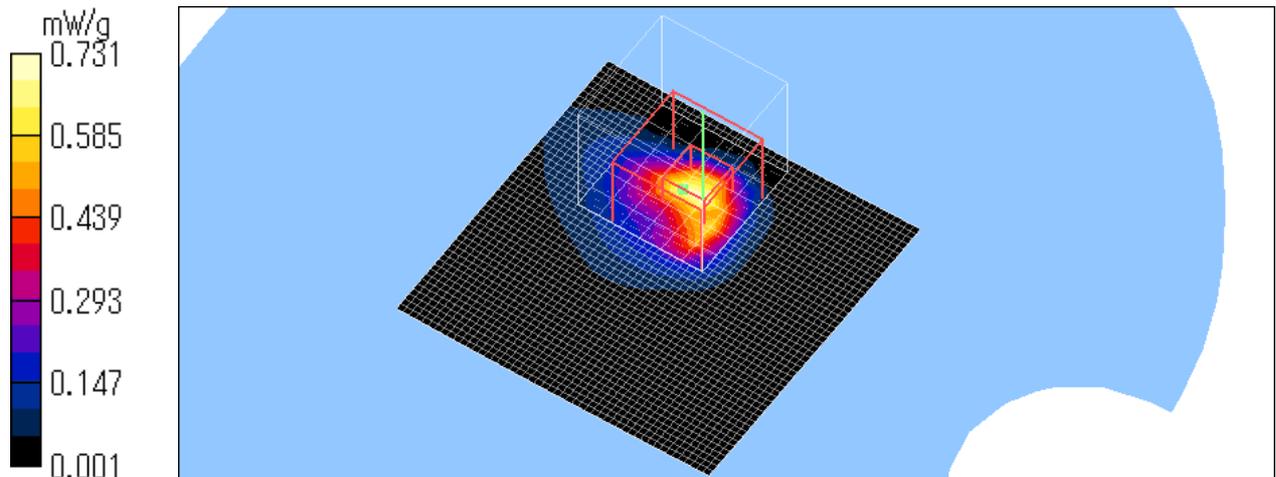
SAR(1 g) = 0.426 mW/g; SAR(10 g) = 0.171 mW/g

Maximum value of SAR (measured) = 0.731 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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NWZ-X1050/ Rear/ 11g 16QAM(24Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.10 mW/g

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

Reference Value = 16.2 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 1.16 W/kg

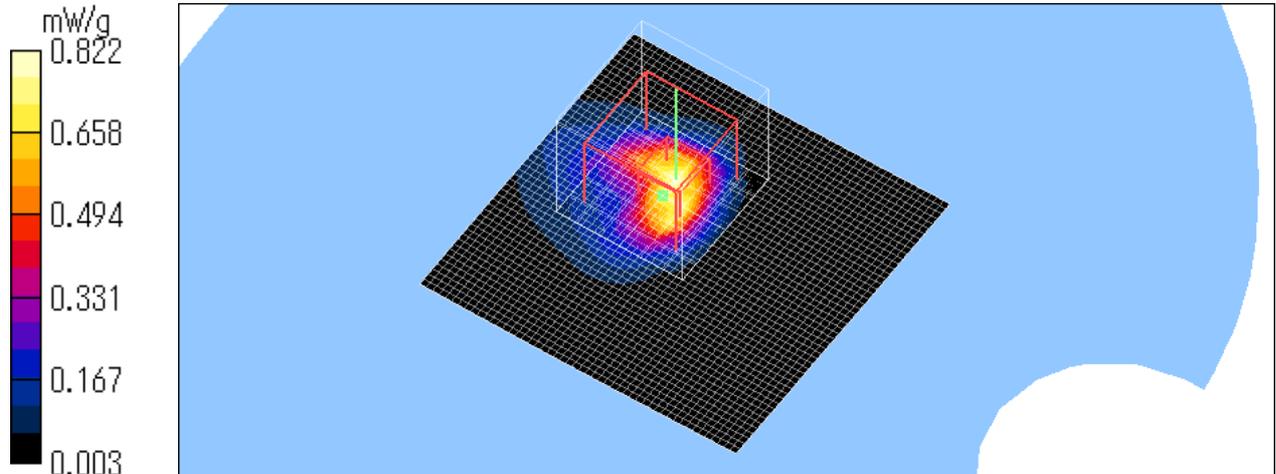
SAR(1 g) = 0.505 mW/g; SAR(10 g) = 0.203 mW/g

Maximum value of SAR (measured) = 0.822 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Rear/ 11g 64QAM(48Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.387 mW/g

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

Reference Value = 15.0 V/m; Power Drift = -0.177 dB

Peak SAR (extrapolated) = 0.947 W/kg

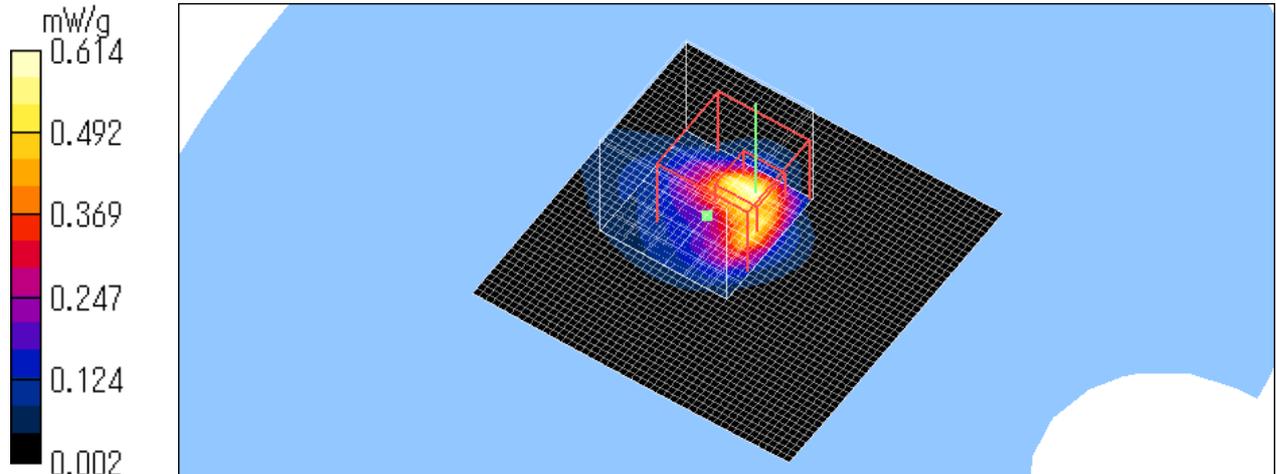
SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.145 mW/g

Maximum value of SAR (measured) = 0.614 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Top/ 11g BPSK(6Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.137 mW/g

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

Reference Value = 3.76 V/m; Power Drift = -0.179 dB

Peak SAR (extrapolated) = 0.254 W/kg

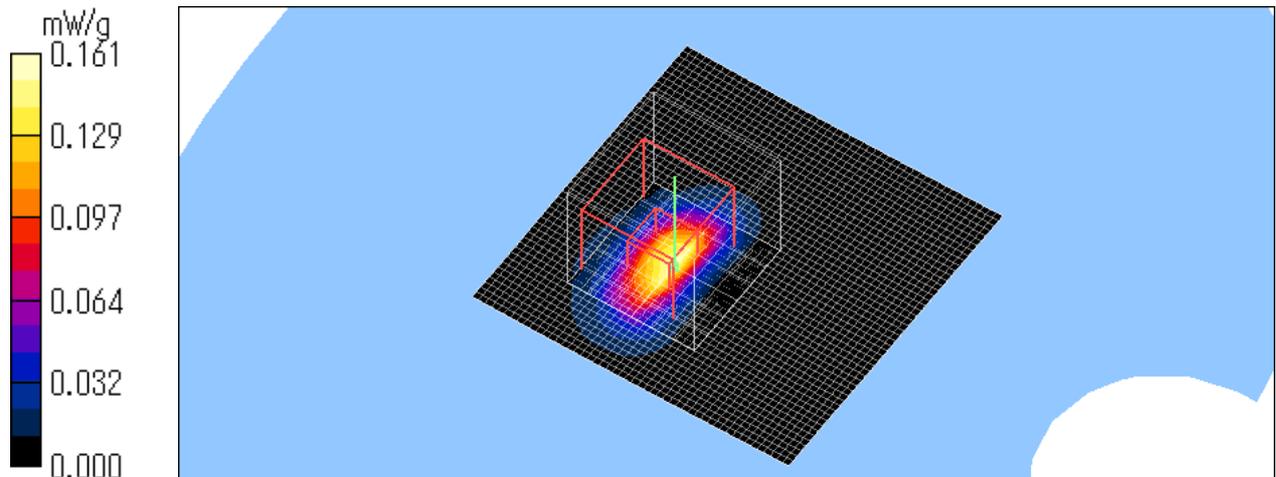
SAR(1 g) = 0.093 mW/g; SAR(10 g) = 0.033 mW/g

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

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Left side/ 11g BPSK(6Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 0.015 mW/g

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

Reference Value = 2.08 V/m; Power Drift = -0.101 dB

Peak SAR (extrapolated) = 0.027 W/kg

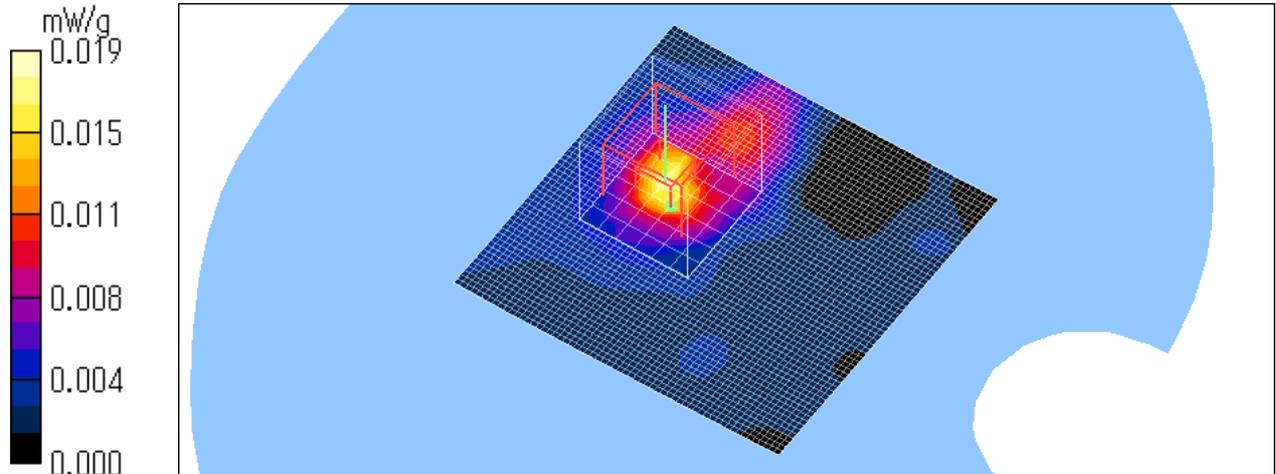
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00483 mW/g

Maximum value of SAR (measured) = 0.019 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Right side/ 11g BPSK(6Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 0.005 mW/g

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

Reference Value = 0.987 V/m; Power Drift = 0.118 dB

Peak SAR (extrapolated) = 0.010 W/kg

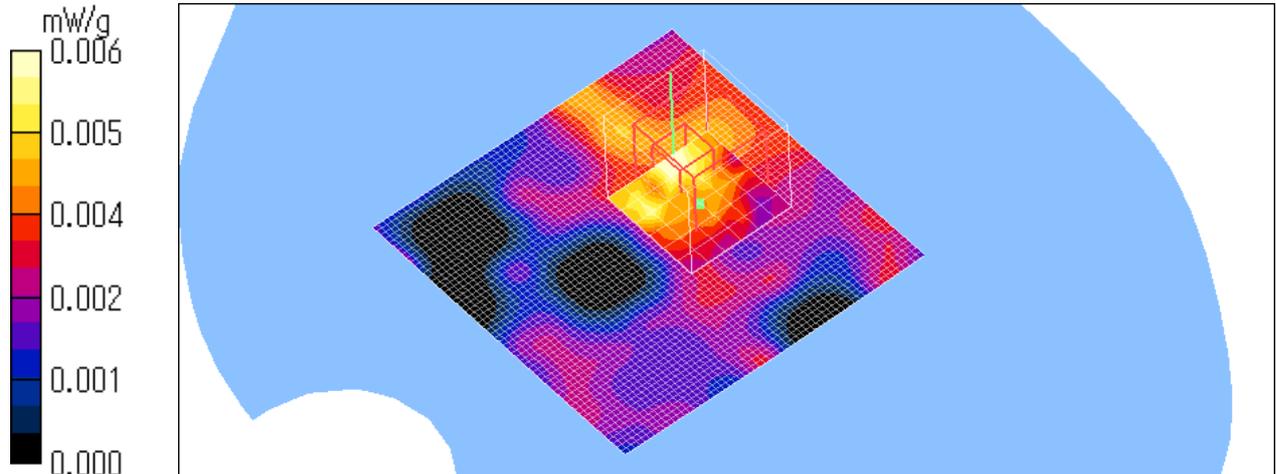
SAR(1 g) = 0.0037 mW/g; SAR(10 g) = 0.0016 mW/g

Maximum value of SAR (measured) = 0.006 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Front/ 11g BPSK(6Mbps)/ 2437MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 0.030 mW/g

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

Reference Value = 4.37 V/m; Power Drift = -0.054 dB

Peak SAR (extrapolated) = 0.072 W/kg

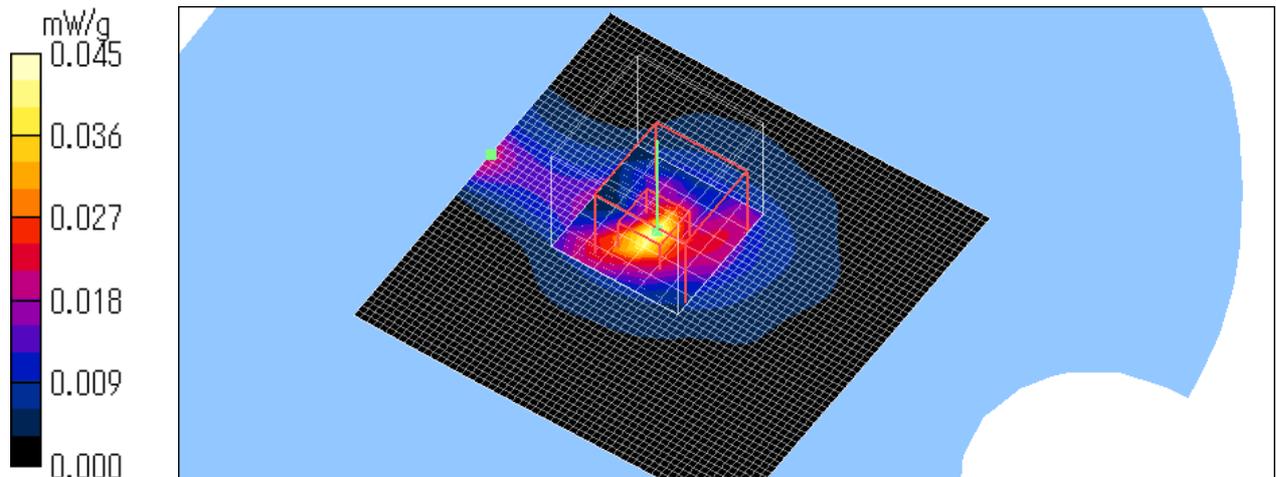
SAR(1 g) = 0.021 mW/g; SAR(10 g) = 0.00887 mW/g

Maximum value of SAR (measured) = 0.045 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Rear/ 11g BPSK(6Mbps)/ 2412MHz

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 1.00 mW/g

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

Reference Value = 15.7 V/m; Power Drift = -0.111 dB

Peak SAR (extrapolated) = 1.76 W/kg

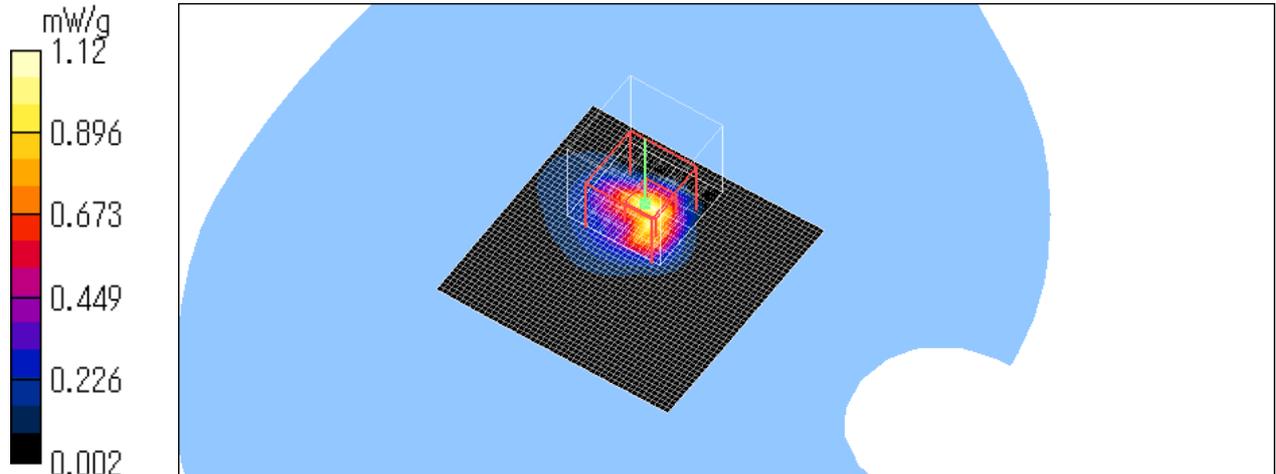
SAR(1 g) = 0.660 mW/g; SAR(10 g) = 0.265 mW/g

Maximum value of SAR (measured) = 1.12 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

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



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NWZ-X1050/ Rear/ 11g BPSK(6Mbps)/ 2462MHz

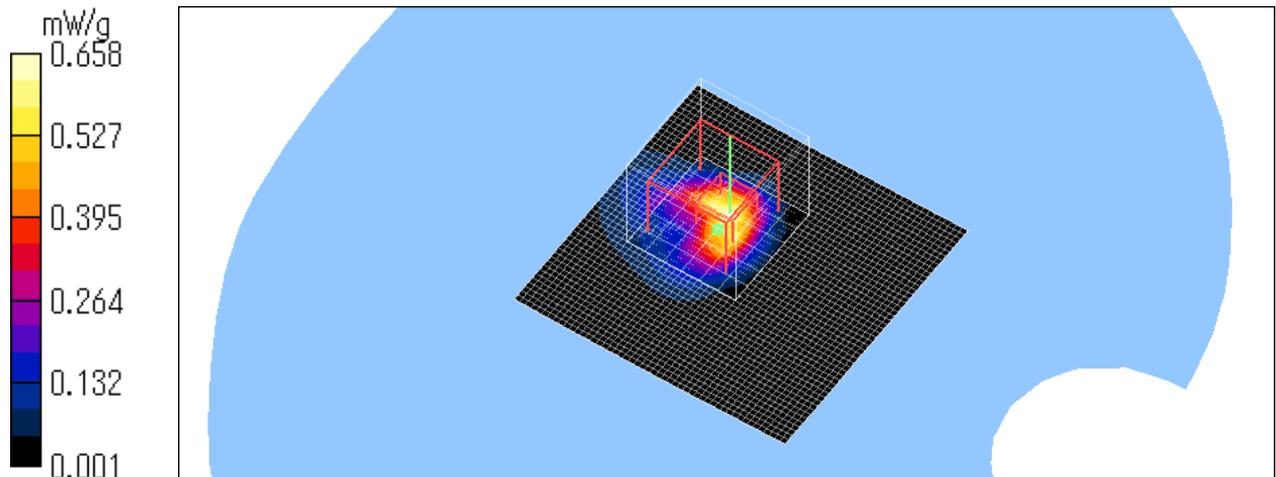
Crest factor: 1
Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³
Phantom section: Flat Section
DASY4 Configuration:
- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Phantom: SAM 1196
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 0.814 mW/g

Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 13.5 V/m; Power Drift = -0.173 dB
Peak SAR (extrapolated) = 0.983 W/kg

SAR(1 g) = 0.394 mW/g; SAR(10 g) = 0.153 mW/g
Maximum value of SAR (measured) = 0.658 mW/g

Test Date = 11/18/08
Ambient Temperature = 24.7 degree.c
Liquid Temperature = Before 24.1 degree.C , After 24.1 degree.C



NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2412MHz/ Separation 5mm

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 11.2 V/m; Power Drift = -0.098 dB

Peak SAR (extrapolated) = 0.430 W/kg

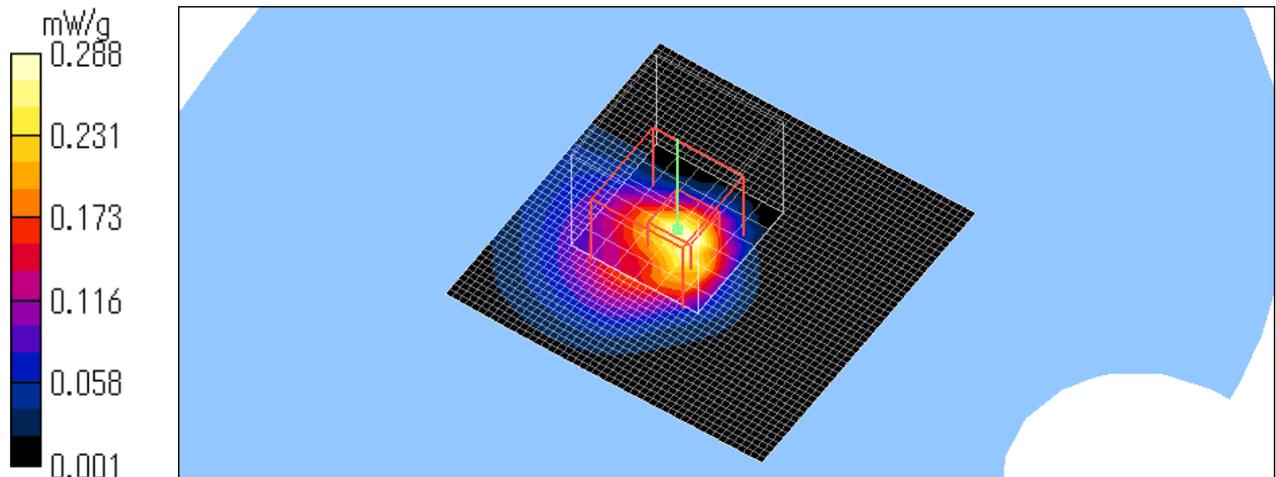
SAR(1 g) = 0.181 mW/g; SAR(10 g) = 0.081 mW/g

Maximum value of SAR (measured) = 0.288 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

Liquid Temperature = Before 23.9 degree.C , After 23.9 degree.C



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NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2412MHz/ Separation 10mm

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 0.087 mW/g

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

Reference Value = 5.89 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 0.104 W/kg

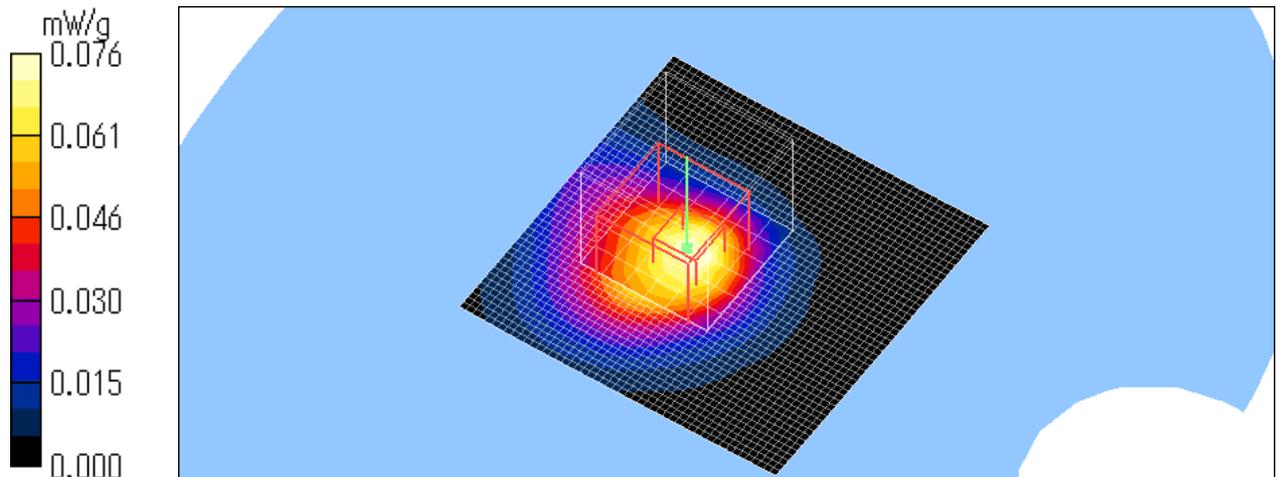
SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.027 mW/g

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

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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NWZ-X1050/ Rear/ 11b DBPSK(1Mbps)/ 2412MHz/ Separation 15mm

Crest factor: 1

Medium: M2450 Medium parameters used: $f = 2450$ MHz; $\sigma = 2.04$ mho/m; $\epsilon_r = 49.0$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

DASY4 Configuration:

- Probe: EX3DV3 - SN3507; ConvF(7.9, 7.9, 7.9); Calibrated: 2008/01/25

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

- Phantom: SAM 1196

- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (51x51x1): Measurement grid: dx=15mm, dy=15mm

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

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

Reference Value = 3.37 V/m; Power Drift = 0.136 dB

Peak SAR (extrapolated) = 0.056 W/kg

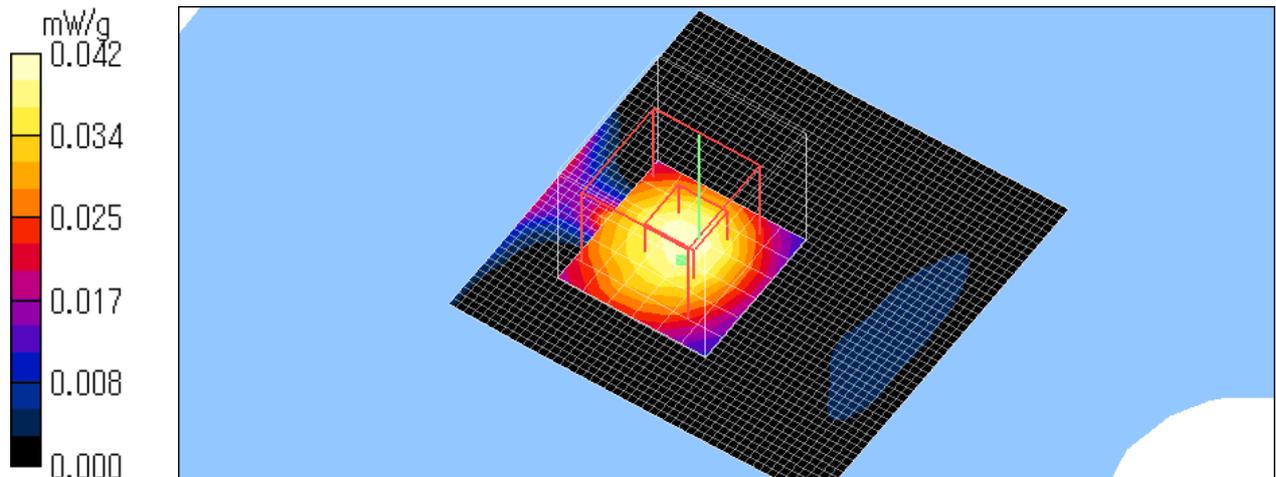
SAR(1 g) = 0.030 mW/g; SAR(10 g) = 0.016 mW/g

Maximum value of SAR (measured) = 0.042 mW/g

Test Date = 11/18/08

Ambient Temperature = 24.7 degree.c

Liquid Temperature = Before 24.0 degree.C , After 24.0 degree.C



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