

APPENDIX 2 : SAR Measurement data

6180210-11b-Body-11Mbps-Mid ch (2437MHz) -Front

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.100 mW/g

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

Reference Value = 4.49 V/m; Power Drift = 0.213 dB

Peak SAR (extrapolated) = 0.199 W/kg

SAR(1 g) = 0.083 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.089 mW/g

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

Reference Value = 4.49 V/m; Power Drift = 0.213 dB

Peak SAR (extrapolated) = 0.136 W/kg

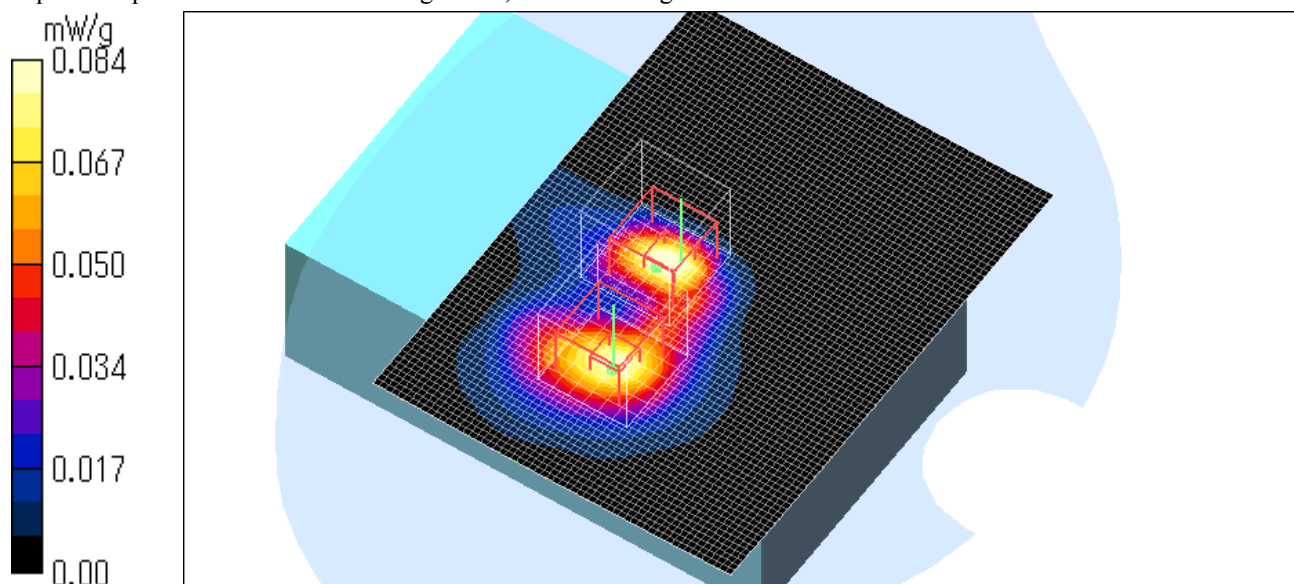
SAR(1 g) = 0.076 mW/g; SAR(10 g) = 0.042 mW/g

Maximum value of SAR (measured) = 0.084 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.6 degree.C. , After 24.4 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-Mid ch (2437MHz) -Back

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

Maximum value of SAR (interpolated) = 0.00 mW/g

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

Reference Value = 1.35 V/m; Power Drift = -0.295 dB

Peak SAR (extrapolated) = 0.00 W/kg

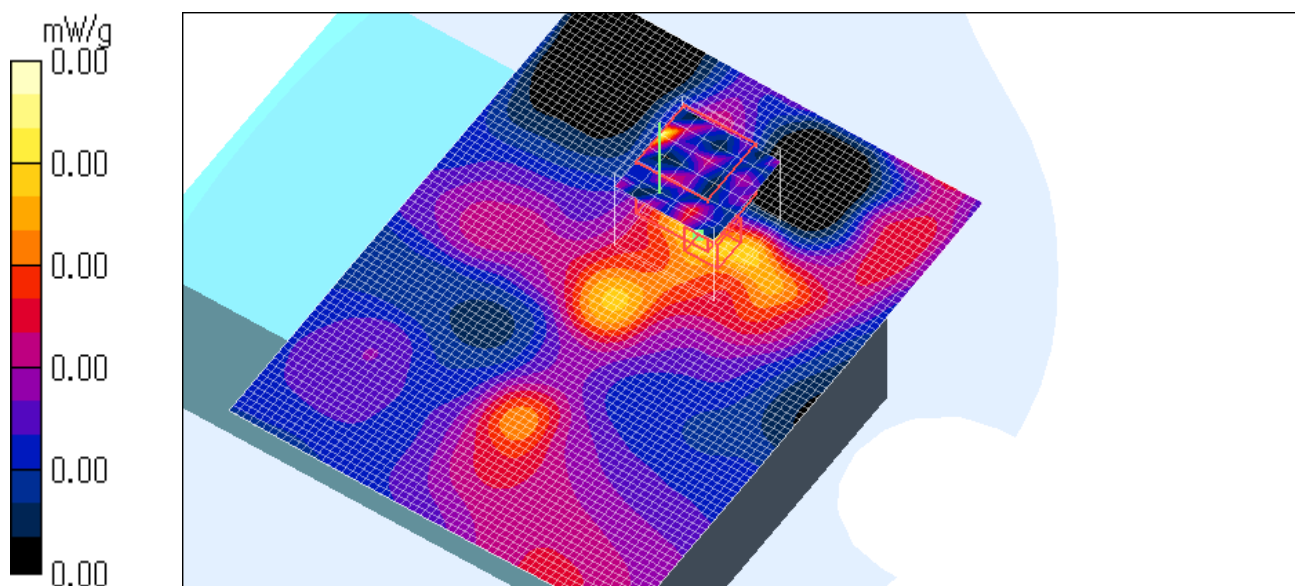
SAR(1 g) = 0.000795 mW/g; SAR(10 g) = 0.000347 mW/g

Maximum value of SAR (measured) = 0.00 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

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



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-Mid ch (2437MHz) –Right side

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.014 mW/g

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

Reference Value = 2.03 V/m; Power Drift = 0.048 dB

Peak SAR (extrapolated) = 0.026 W/kg

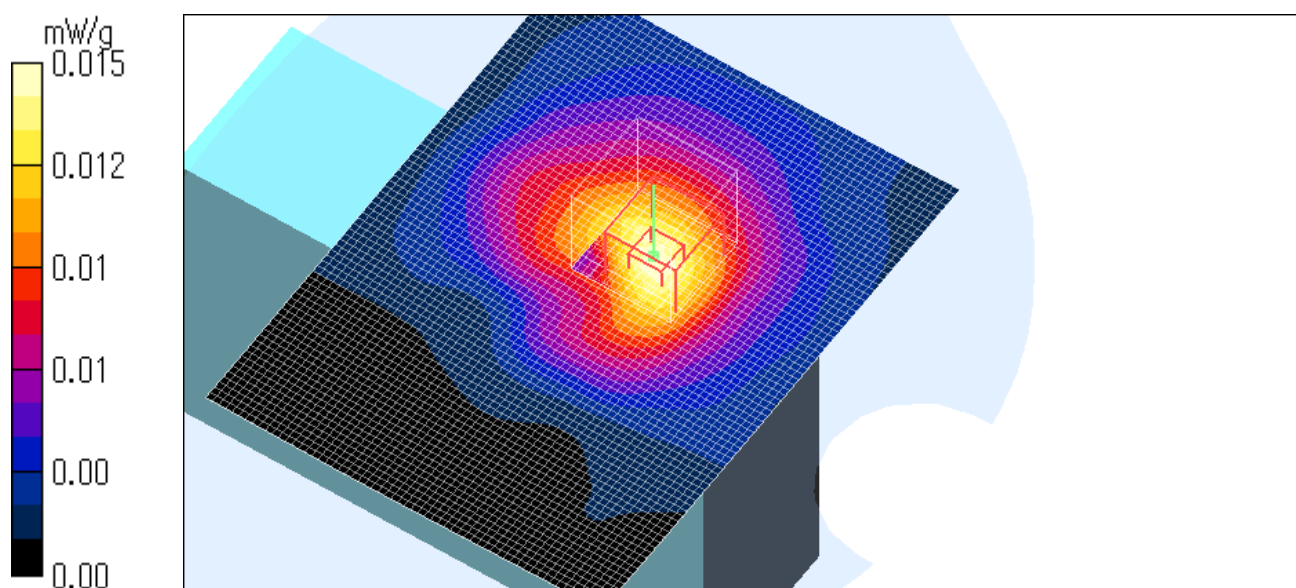
SAR(1 g) = 0.014 mW/g; SAR(10 g) = 0.00747 mW/g

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

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.3 degree.C. , After 24.5 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-Mid ch (2437MHz) -Left side

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

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

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

Reference Value = 2.49 V/m; Power Drift = -0.289 dB

Peak SAR (extrapolated) = 0.028 W/kg

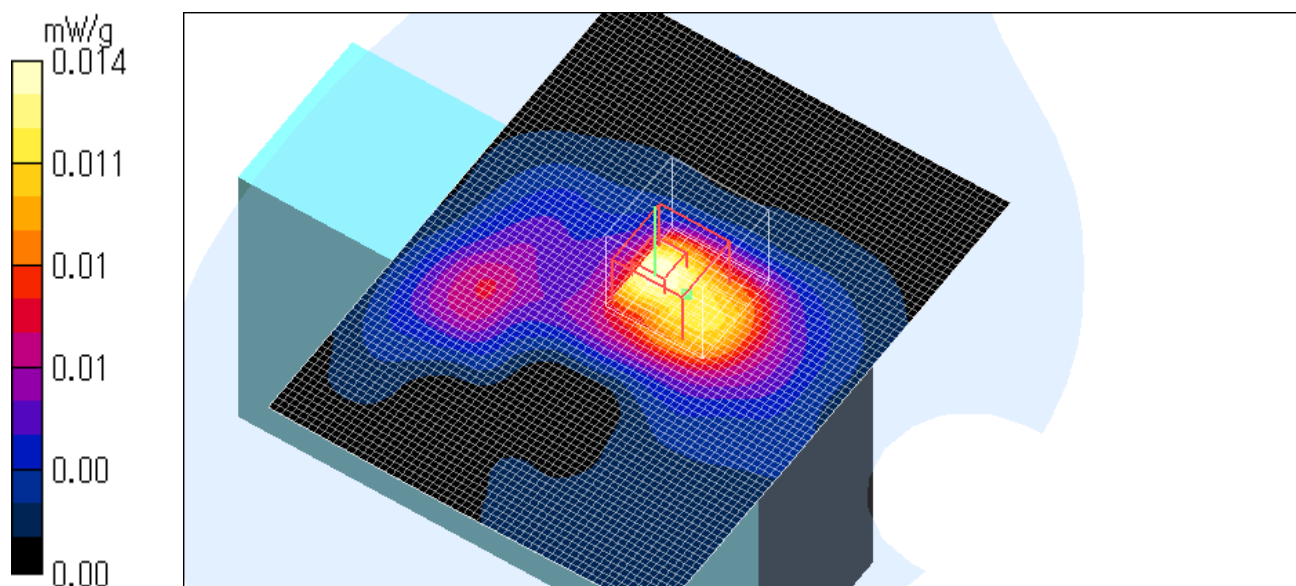
SAR(1 g) = 0.012 mW/g; SAR(10 g) = 0.00605 mW/g

Maximum value of SAR (measured) = 0.014 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.4 degree.C. , After 24.3 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-Mid ch (2437MHz) -Top

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

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

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

Reference Value = 1.07 V/m; Power Drift = 0.047 dB

Peak SAR (extrapolated) = 0.067 W/kg

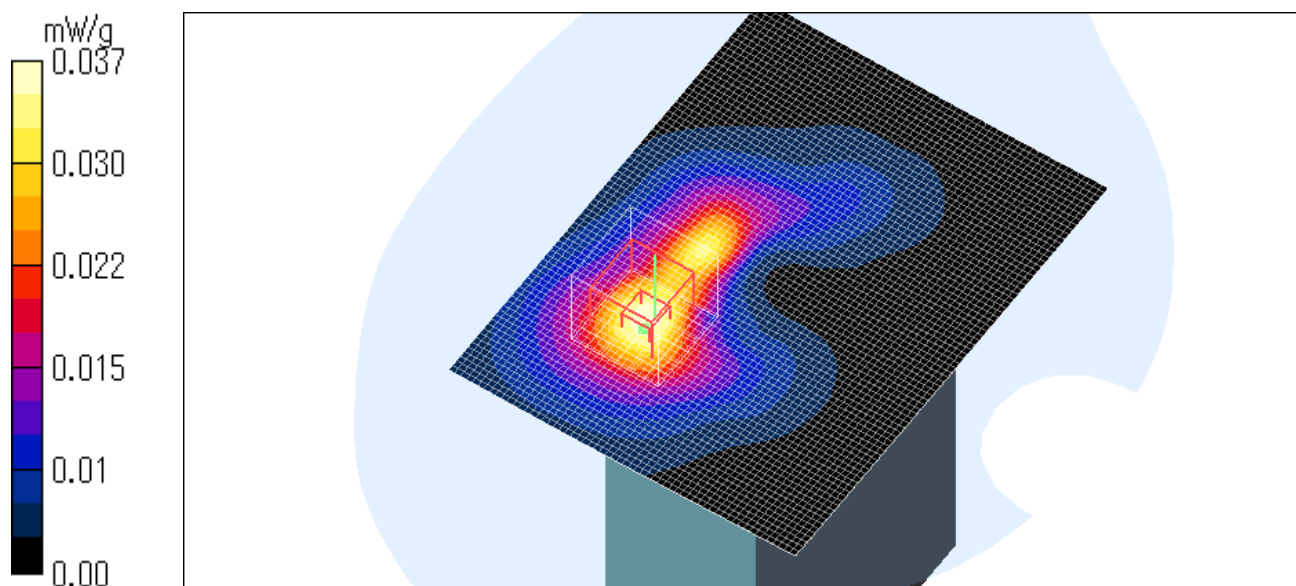
SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.019 mW/g

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

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.5 degree.C. , After 24.9 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-Mid ch (2437MHz) -Bottom

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

Maximum value of SAR (interpolated) = 0.00 mW/g

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

Reference Value = 0.850 V/m; Power Drift = -0.293 dB

Peak SAR (extrapolated) = 0.01 W/kg

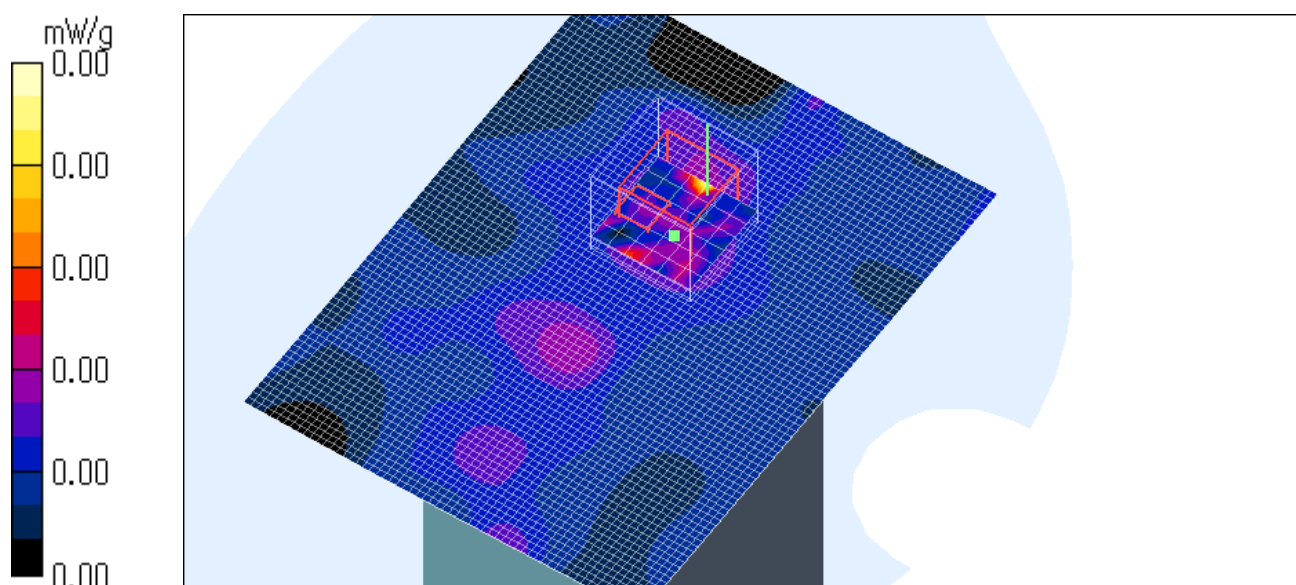
SAR(1 g) = 0.00159 mW/g; SAR(10 g) = 0.000905 mW/g

Maximum value of SAR (measured) = 0.00 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.9 degree.C. , After 24.8 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-Low ch (2412MHz) -Front

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.070 mW/g

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

Reference Value = 5.14 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.110 W/kg

SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.033 mW/g

Maximum value of SAR (measured) = 0.067 mW/g

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

Reference Value = 5.14 V/m; Power Drift = -0.152 dB

Peak SAR (extrapolated) = 0.123 W/kg

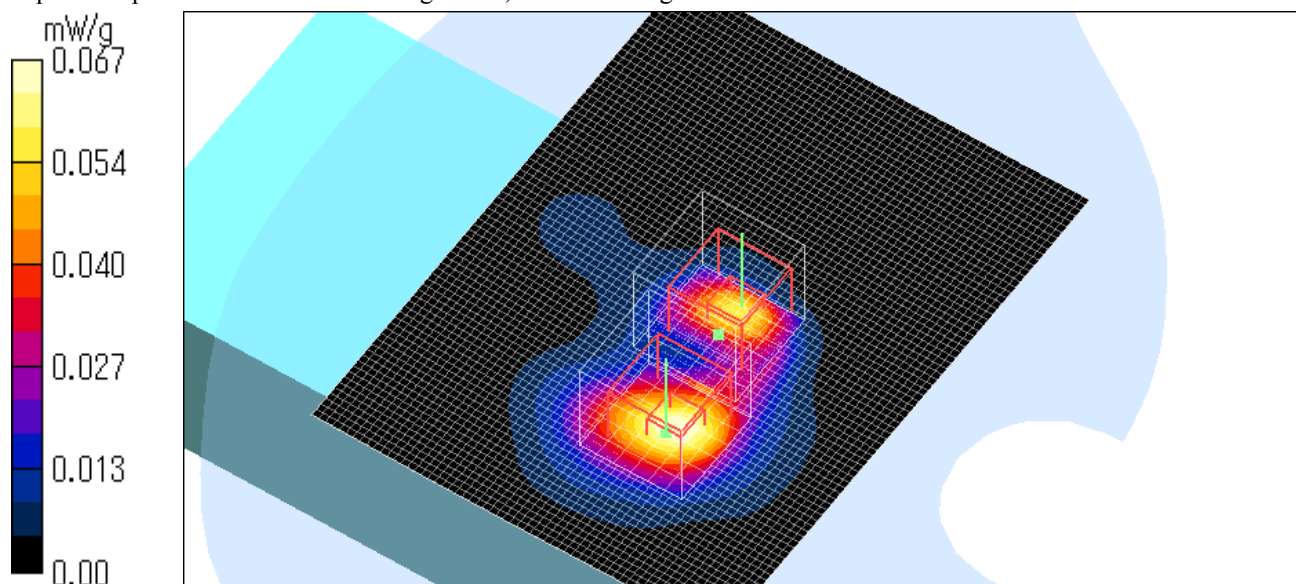
SAR(1 g) = 0.053 mW/g; SAR(10 g) = 0.023 mW/g

Maximum value of SAR (measured) = 0.057 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.7 degree.C. , After 24.6 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-High ch (2462MHz) -Front

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ 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 = 6.68 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 0.345 W/kg

SAR(1 g) = 0.144 mW/g; SAR(10 g) = 0.064 mW/g

Maximum value of SAR (measured) = 0.163 mW/g

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

Reference Value = 6.68 V/m; Power Drift = -0.173 dB

Peak SAR (extrapolated) = 0.206 W/kg

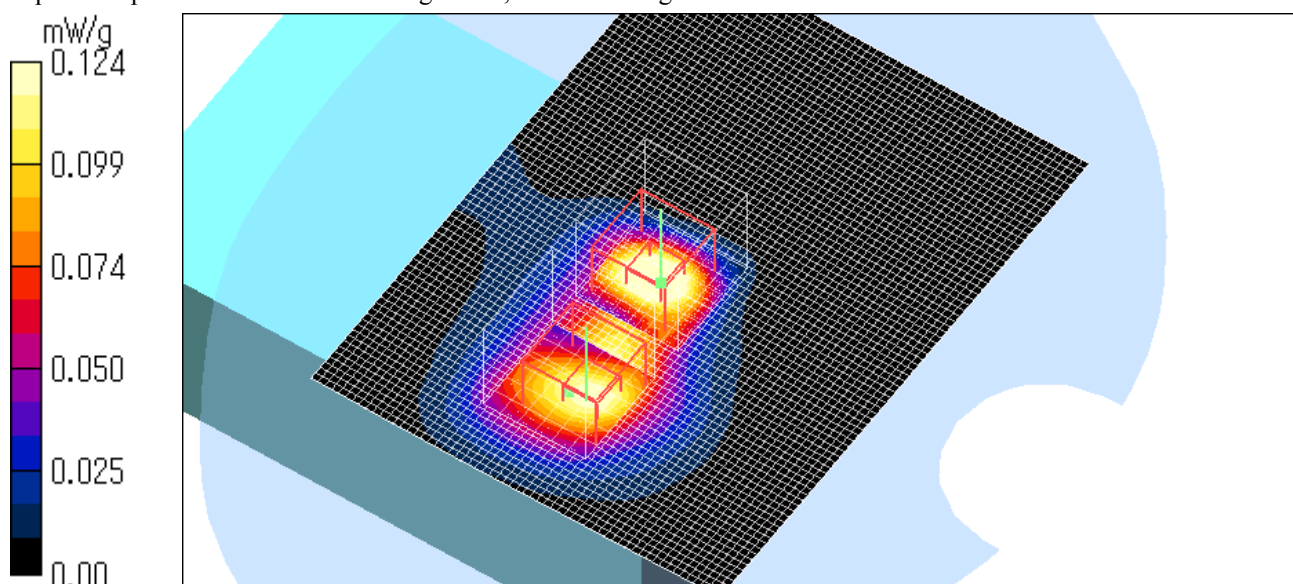
SAR(1 g) = 0.114 mW/g; SAR(10 g) = 0.062 mW/g

Maximum value of SAR (measured) = 0.124 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.6 degree.C. , After 24.9 degree.C.



UL Apex Co., Ltd.

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 at maximum SAR location

6180210-11b-Body-11Mbps-High ch (2462MHz) -Front

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

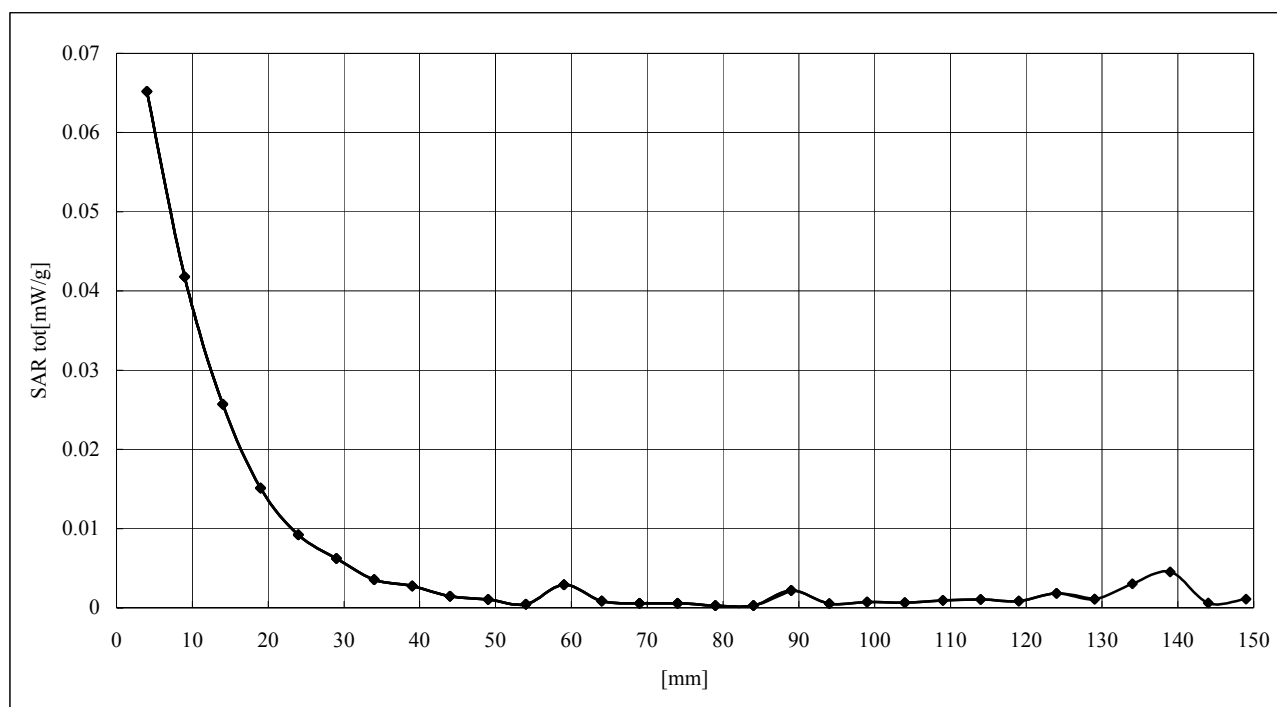
Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-High ch (2462MHz) -Front 5mm

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.074 mW/g

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

Reference Value = 5.86 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.147 W/kg

SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.032 mW/g

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

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

Reference Value = 5.86 V/m; Power Drift = 0.051 dB

Peak SAR (extrapolated) = 0.111 W/kg

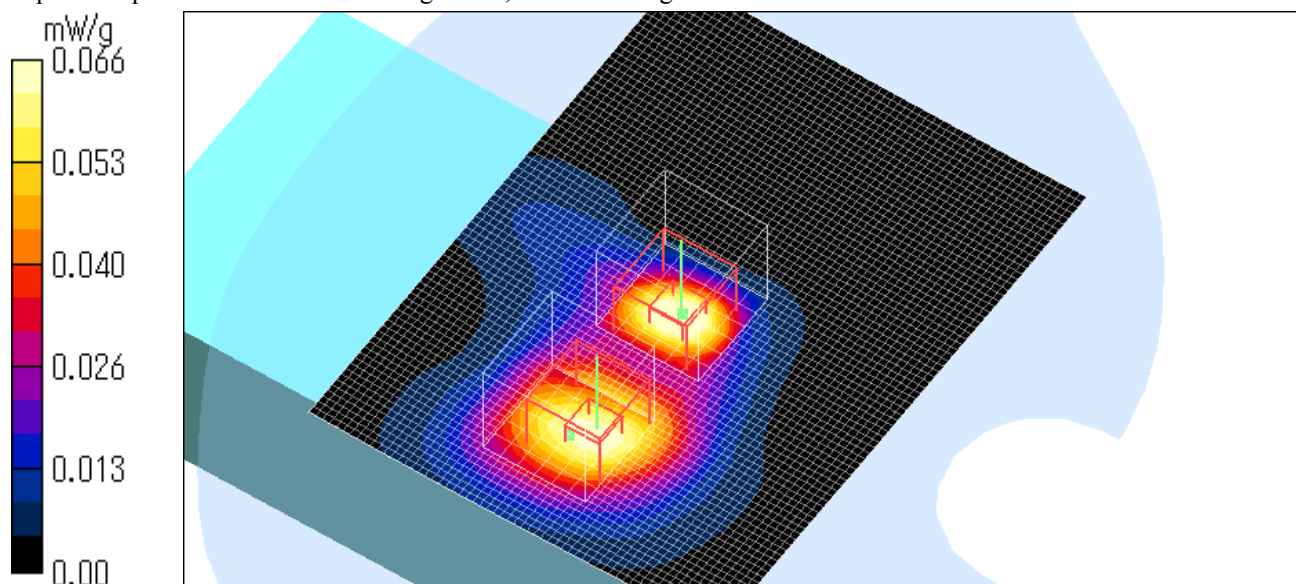
SAR(1 g) = 0.062 mW/g; SAR(10 g) = 0.036 mW/g

Maximum value of SAR (measured) = 0.066 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.9 degree.C. , After 24.9 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-High ch (2462MHz) -Front 10mm

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

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

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

Reference Value = 4.35 V/m; Power Drift = -0.057 dB

Peak SAR (extrapolated) = 0.071 W/kg

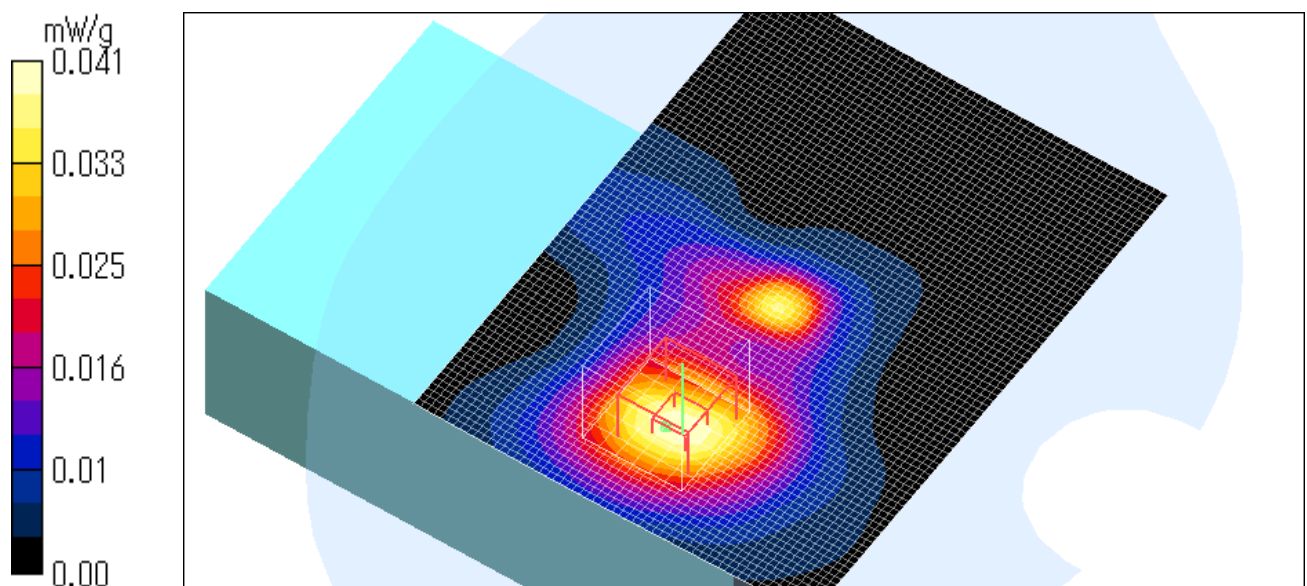
SAR(1 g) = 0.038 mW/g; SAR(10 g) = 0.022 mW/g

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

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.6 degree.C. , After 24.8 degree.C.



UL Apex Co., Ltd.

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

6180210-11b-Body-11Mbps-High ch (2462MHz) -Front 15mm

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.92$ mho/m; $\epsilon_r = 50.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.14, 4.14, 4.14); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (61x81x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

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

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

Reference Value = 3.14 V/m; Power Drift = -0.120 dB

Peak SAR (extrapolated) = 0.043 W/kg

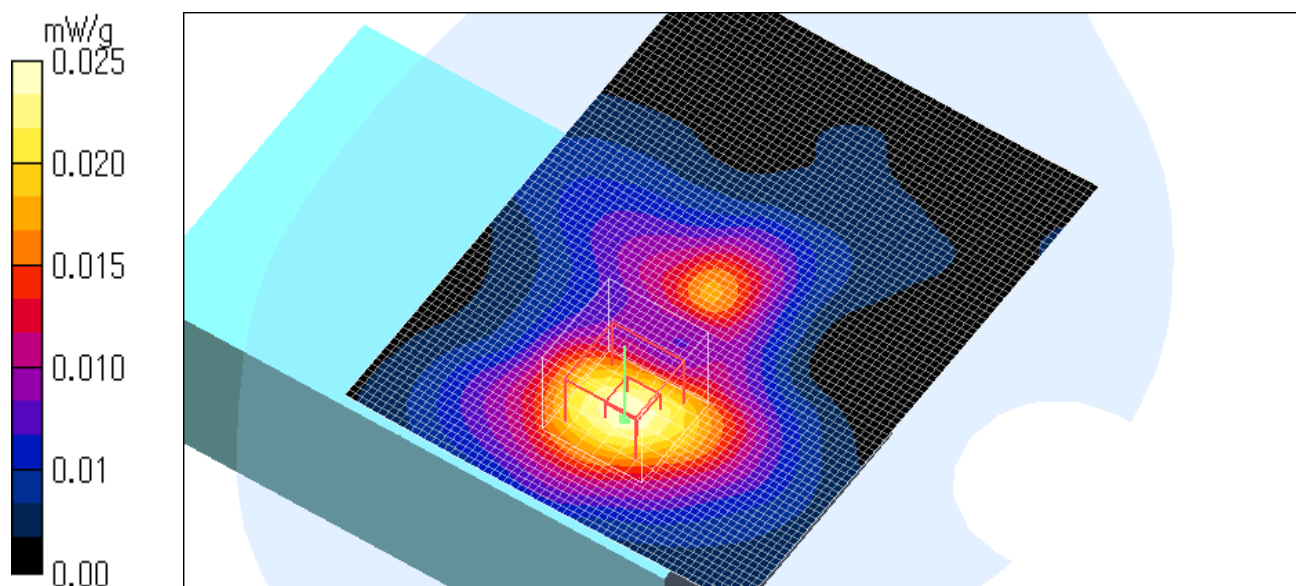
SAR(1 g) = 0.023 mW/g; SAR(10 g) = 0.013 mW/g

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

Test Date = 05/21/05

Ambient Temperature = 25.0 degree.C.

Liquid Temperature = Before 24.8 degree.C. , After 24.7 degree.C.



UL Apex Co., Ltd.

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

APPENDIX 3 : Validation Measurement data

System Validation / Dipole 2450MHz / Forward Conducted Power : 250mW

Crest factor: 1

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.79$ mho/m; $\epsilon_r = 36.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

Dipole 2450MHz;

-Type: D2450V2; Serial: SN: 713

DASY4 Configuration:

Probe: ET3DV6 - SN1684; ConvF(4.39, 4.39, 4.39); Calibrated: 2004/09/02

Sensor-Surface: 4mm (Mechanical And Optical Surface Detection)

Electronics: DAE3 Sn516; Calibrated: 2005/03/10

Phantom: SAM 1196

Measurement SW: DASY4, V4.5 Build 19; Postprocessing SW: SEMCAD, V1.8 Build 145

Area Scan (51x51x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

Maximum value of SAR (interpolated) = 21.7 mW/g

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

Reference Value = 97.4 V/m; Power Drift = 0.021 dB

Peak SAR (extrapolated) = 28.6 W/kg

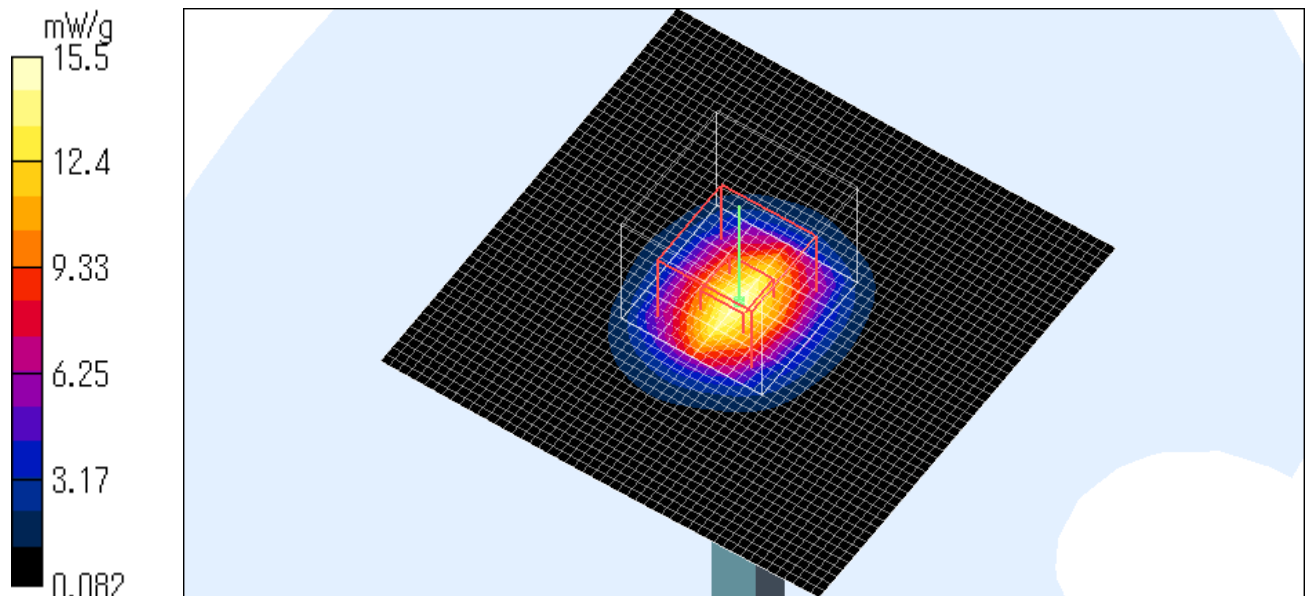
SAR(1 g) = 13.8 mW/g; SAR(10 g) = 6.44 mW/g

Maximum value of SAR (measured) = 15.5 mW/g

Test Date = 05/21/05

Ambient Temperature = 25.0degree.C.

Liquid Temperature = Before 24.9 degree.C. , After 25.0 degree.C.



UL Apex Co., Ltd.

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