

SAR Plots & Tissue Measurement Data

Test Laboratory: KTL

1900MHz Validation – D1900V2; SN: 5d038

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(℃) : 22.0, Ambient Temperature(℃) : 21.0

Communication System: CW; Frequency: 1900 MHz; Duty Cycle: 1:1

Medium: HSL1900 Medium parameters used: $f = 1900 \text{ MHz}$; $\sigma = 1.41 \text{ mho/m}$; $\epsilon_r = 39.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(5, 5, 5); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (61x71x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$

Maximum value of SAR (interpolated) = 13.0 mW/g

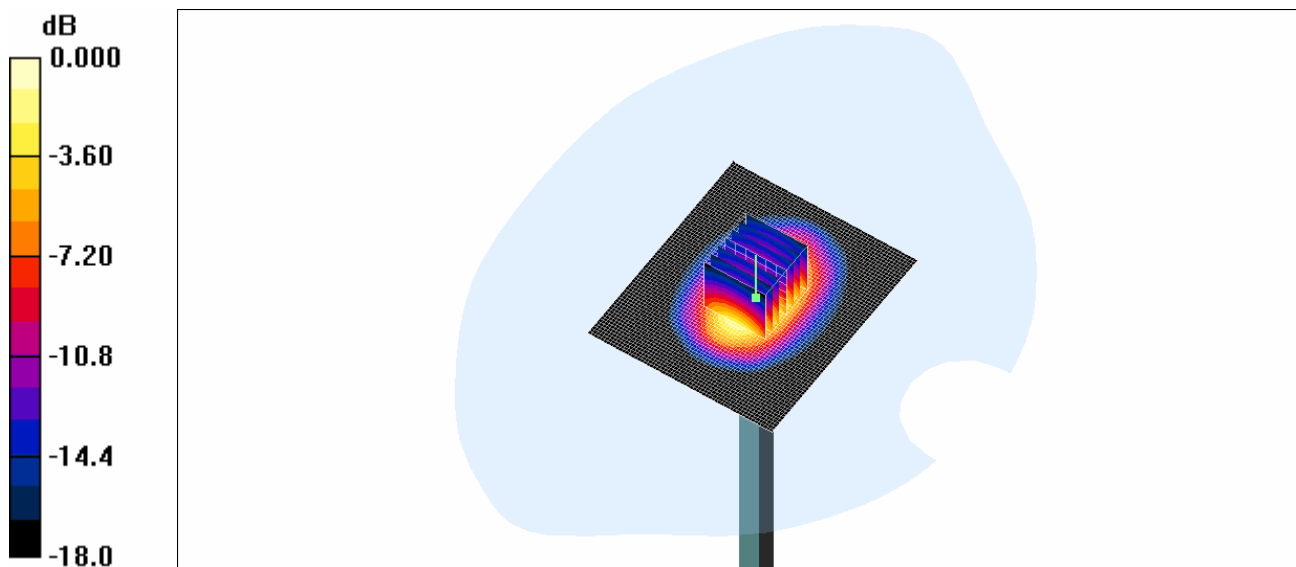
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 91.7 V/m ; Power Drift = 0.008 dB

Peak SAR (extrapolated) = 19.5 W/kg

SAR(1 g) = 10.4 mW/g ; SAR(10 g) = 5.27 mW/g

Maximum value of SAR (measured) = 11.8 mW/g



0 dB = 11.8 mW/g

Test Laboratory: KTL

SMT-I8110 UPCS Ch.1 Body –Top to phantom

*Test Date : 06th/Mar./2008

Measured Liquid Temperature(°C) : 22.0, Ambient Temperature(°C) : 21.0

Communication System: UPCS1900; Frequency: 1921.54 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1921.54 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (41x111x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.043 mW/g

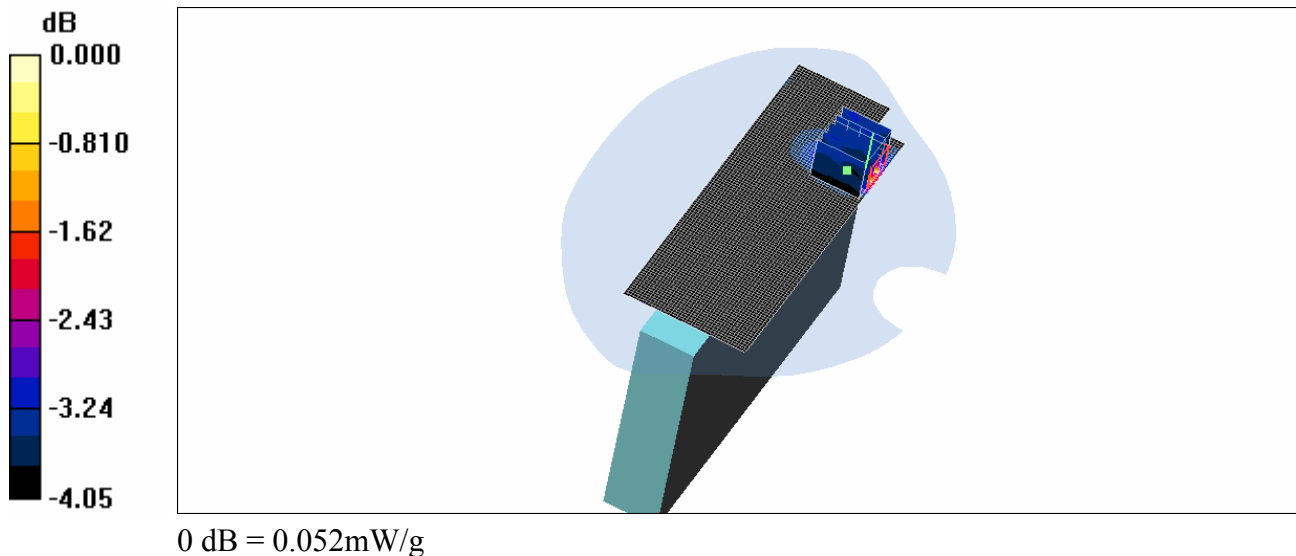
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.61 V/m; Power Drift = -0.027 dB

Peak SAR (extrapolated) = 0.165 W/kg

SAR(1 g) = 0.056 mW/g; SAR(10 g) = 0.035 mW/g

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



Test Laboratory: KTL

SMT-I8110 UPCS Ch.1 Body –Top to phantom with 802.11b 1CH Simultaneous transmit

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(℃) : 22.0, Ambient Temperature(℃) : 21.0

Communication System: UPCS1900; Frequency: 1921.54 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1921.54 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (41x111x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.082 mW/g

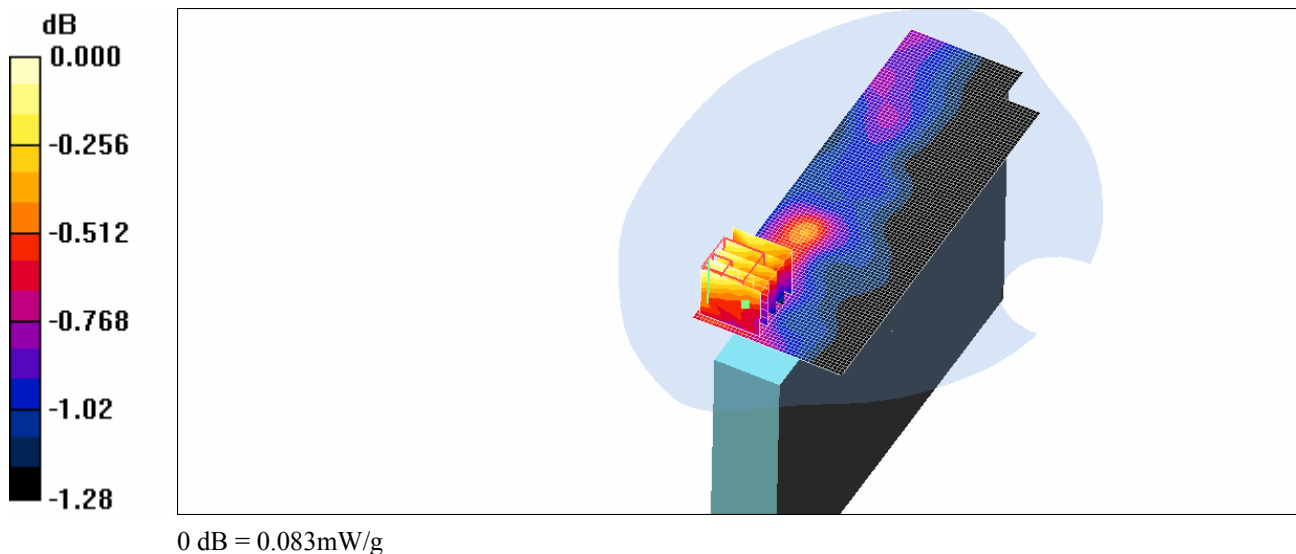
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.52 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 0.090 W/kg

SAR(1 g) = 0.080 mW/g; SAR(10 g) = 0.077 mW/g

Maximum value of SAR (measured) = 0.083 mW/g



Test Laboratory: KTL

SMT-I8110 UPCS Ch.1 Body –Top to phantom with 802.11g 1CH Simultaneous transmit

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 22.0, Ambient Temperature(°C) : 21.0 Communication System:

UPCS1900; Frequency: 1921.54 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1921.54 \text{ MHz}$; $\sigma = 1.53 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (41x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.083 mW/g

Z Scan (1x1x16): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=20\text{mm}$

Maximum value of SAR (interpolated) = 0.186 mW/g

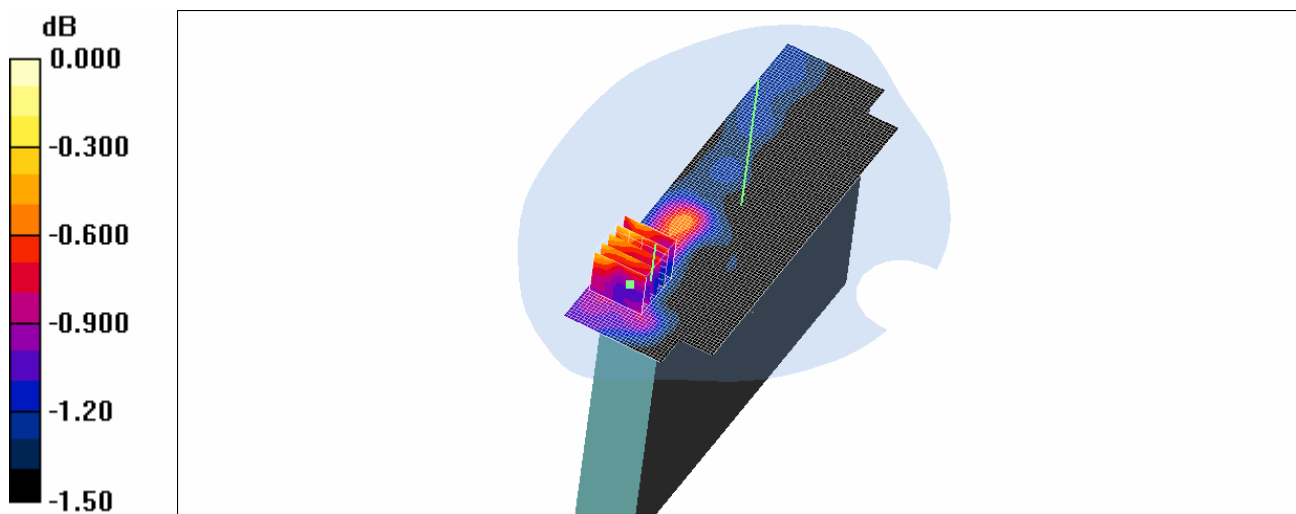
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 6.39 V/m; Power Drift = 0.035 dB

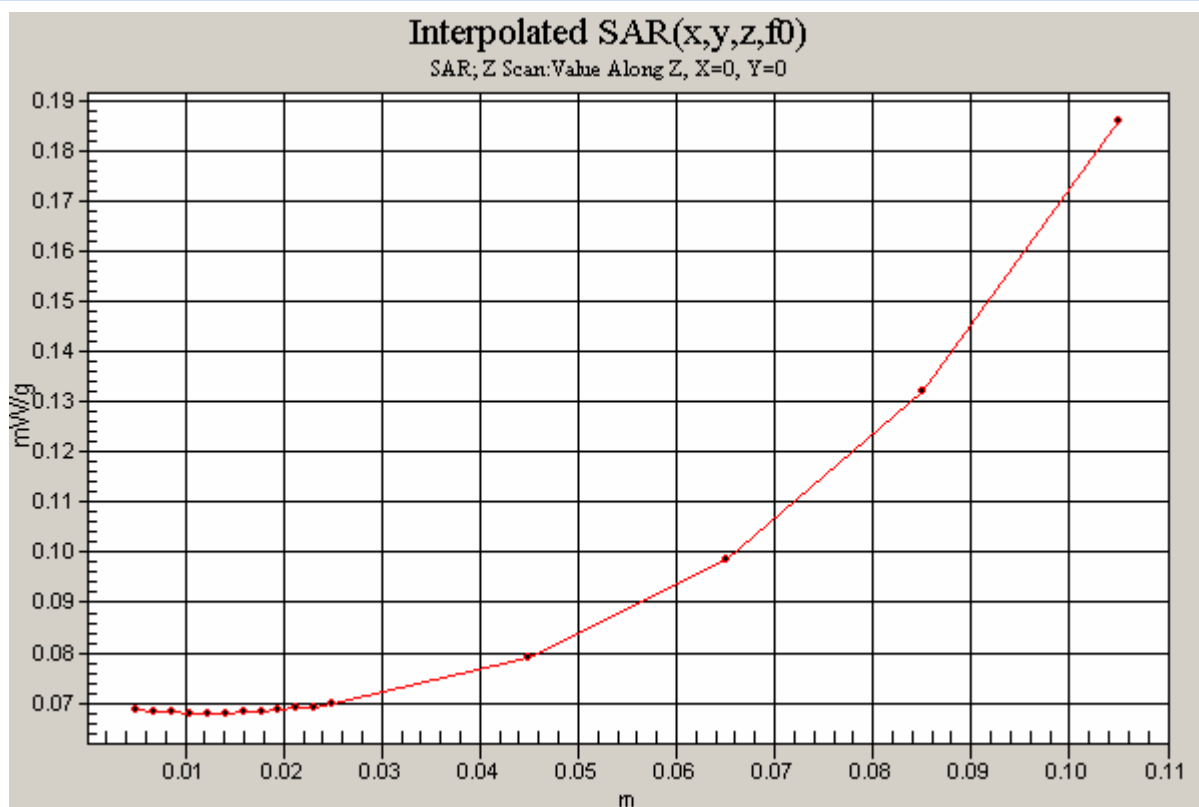
Peak SAR (extrapolated) = 0.112 W/kg

SAR(1 g) = 0.084 mW/g; SAR(10 g) = 0.075 mW/g

Maximum value of SAR (measured) = 0.086 mW/g



0 dB = 0.086mW/g



Test Laboratory: KTL

SMT-I8110 UPCS Ch.3 Body –Front to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 22.0, Ambient Temperature(°C) : 21.0Communication System

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (71x111x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

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

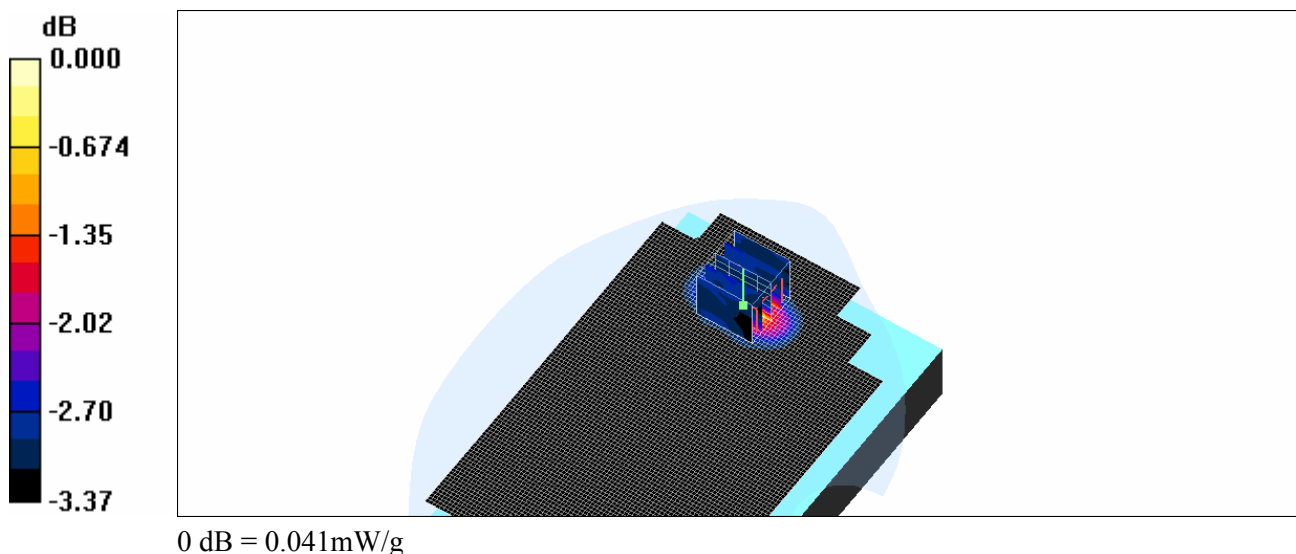
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.32 V/m; Power Drift = 0.169 dB

Peak SAR (extrapolated) = 0.065 W/kg

SAR(1 g) = 0.039 mW/g; SAR(10 g) = 0.028 mW/g

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



Test Laboratory: KTL

SMT-I8110 UPCS Ch.3 Body –Rear to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 22.0, Ambient Temperature(°C) : 21.0Communication System

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (61x111x1): Measurement grid: $dx=20$ mm, $dy=20$ mm

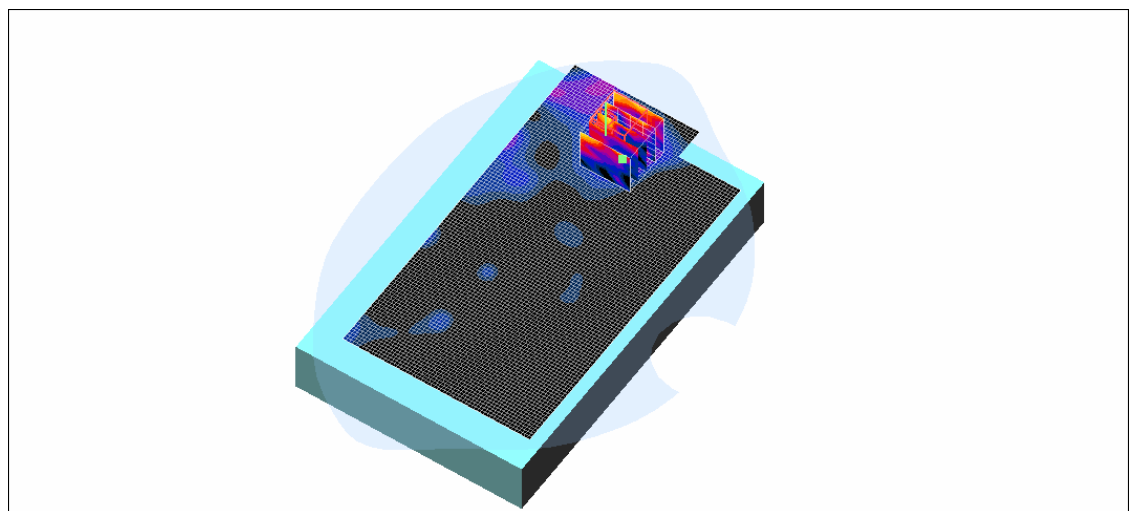
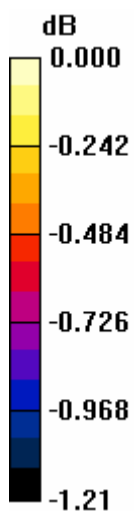
Maximum value of SAR (interpolated) = 0.012 mW/g

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

Reference Value = 2.53 V/m; Power Drift = 0.125 dB

Peak SAR (extrapolated) = 0.014 W/kg

SAR(1 g) = 0.013 mW/g; SAR(10 g) = 0.012 mW/g



0 dB = 0.014mW/g

Test Laboratory: KTL

SMT-I8110 UPCS Ch.3 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 22.0, Ambient Temperature(°C) : 21.0Communication System

Communication System: UPCS1900; Frequency: 1924.99 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1924.99 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.4$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (41x111x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

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

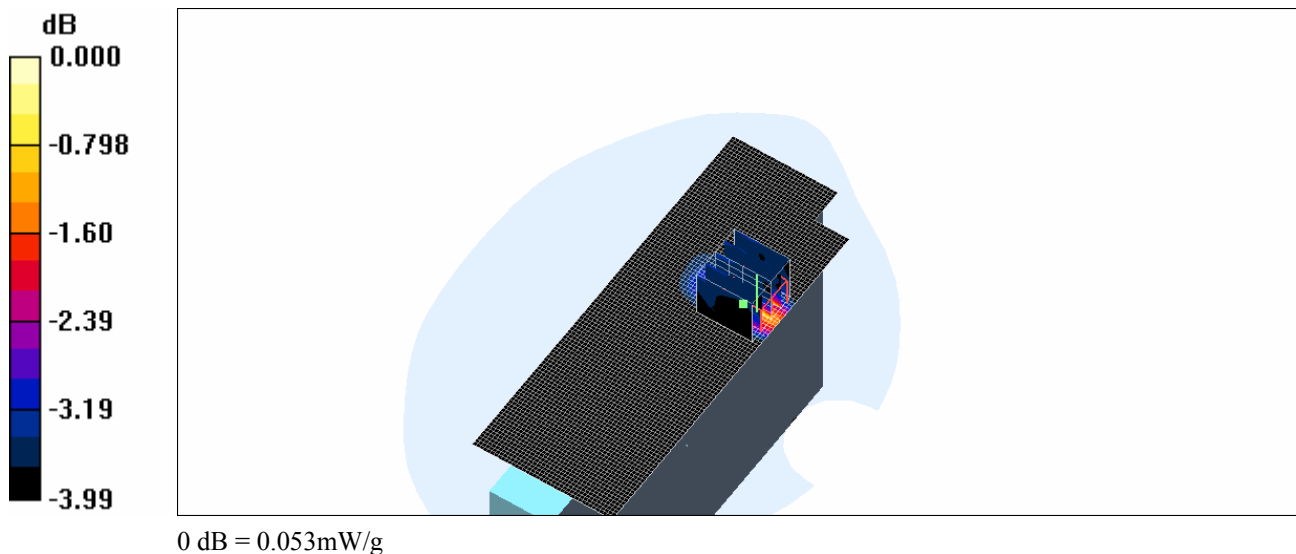
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.65 V/m; Power Drift = 0.045 dB

Peak SAR (extrapolated) = 0.132 W/kg

SAR(1 g) = 0.054 mW/g; SAR(10 g) = 0.034 mW/g

Maximum value of SAR (measured) = 0.053 mW/g



Test Laboratory: KTL

SMT-I8110 UPCS Ch.5 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 22.0, Ambient Temperature(°C) : 21.0Communication System

Communication System: UPCS1900; Frequency: 1928.45 MHz; Duty Cycle: 1:24

Medium: HSL1900 Medium parameters used: $f = 1928.45 \text{ MHz}$; $\sigma = 1.54 \text{ mho/m}$; $\epsilon_r = 52.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.4, 4.4, 4.4); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (41x111x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

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

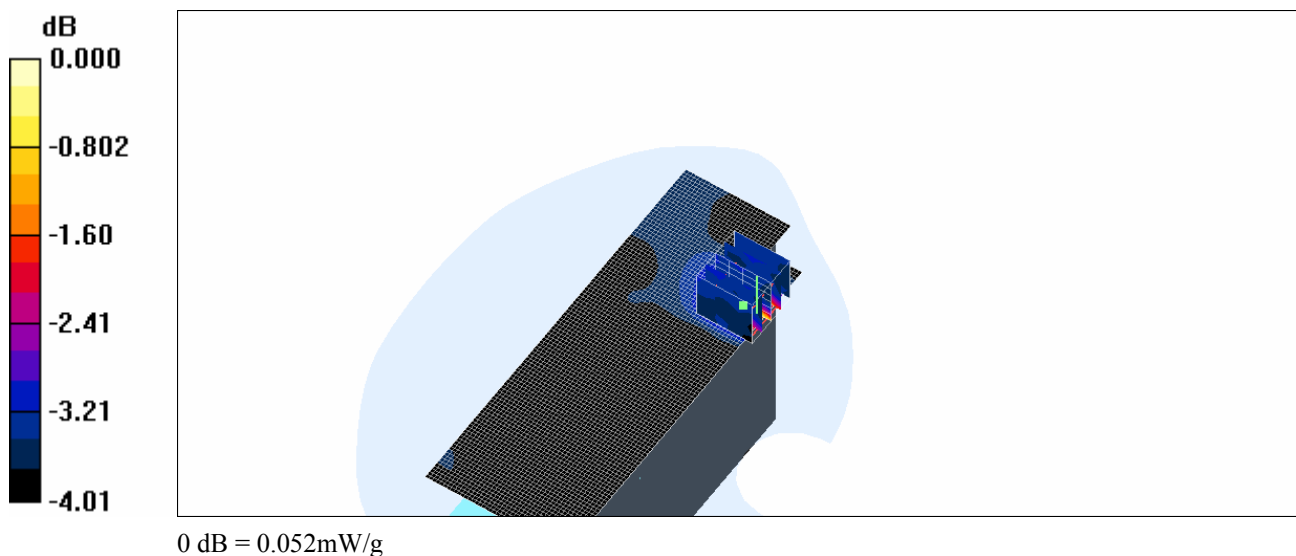
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 3.64 V/m; Power Drift = 0.014 dB

Peak SAR (extrapolated) = 0.096 W/kg

SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.034 mW/g

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



Test Laboratory: KTL

2450MHz Validation – D2450V2; SN:746

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: CW; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: M2450 Medium parameters used: $f = 2450 \text{ MHz}$; $\sigma = 1.81 \text{ mho/m}$; $\epsilon_r = 39.0$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(4.24, 4.24, 4.24); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_1800MHz; Type: SAM; Serial: TP-1433
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

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

Maximum value of SAR (interpolated) = 18.0 mW/g

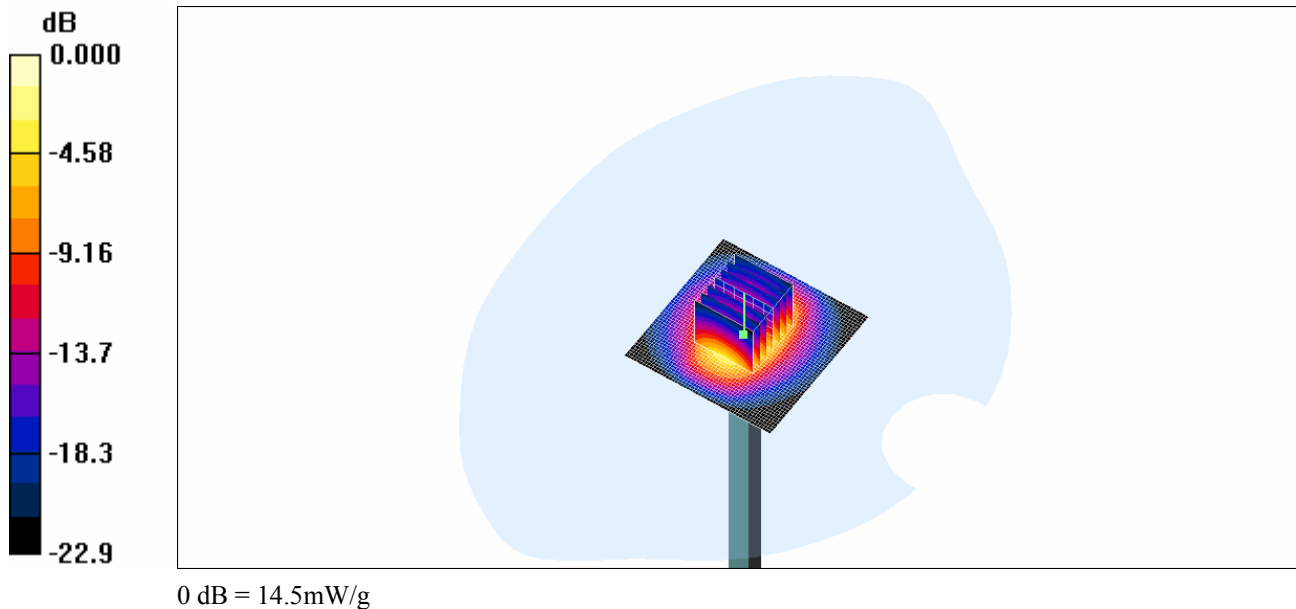
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 93.2 V/m ; Power Drift = -0.024 dB

Peak SAR (extrapolated) = 27.6 W/kg

SAR(1 g) = 12.9 mW/g ; SAR(10 g) = 5.87 mW/g

Maximum value of SAR (measured) = 14.5 mW/g



Test Laboratory: KTL

SMT-I8110 802.11b Ch.1 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

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

Medium: MSL2450 Medium parameters used: $f = 2412$ MHz; $\sigma = 1.87$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.460 mW/g

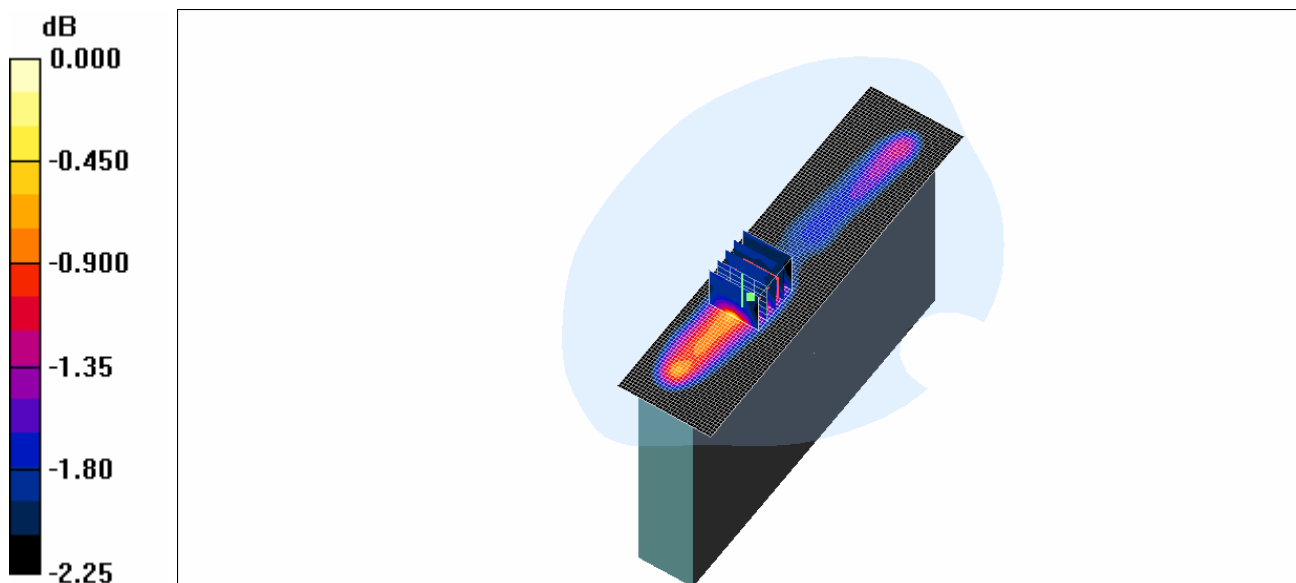
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 14.1 V/m; Power Drift = -0.201 dB

Peak SAR (extrapolated) = 0.768 W/kg

SAR(1 g) = 0.500 mW/g; SAR(10 g) = 0.405 mW/g

Maximum value of SAR (measured) = 0.528 mW/g



0 dB = 0.528mW/g

Test Laboratory: KTL

SMT-I8110 802.11b Ch.7 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: WLAN; Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2442$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.436 mW/g

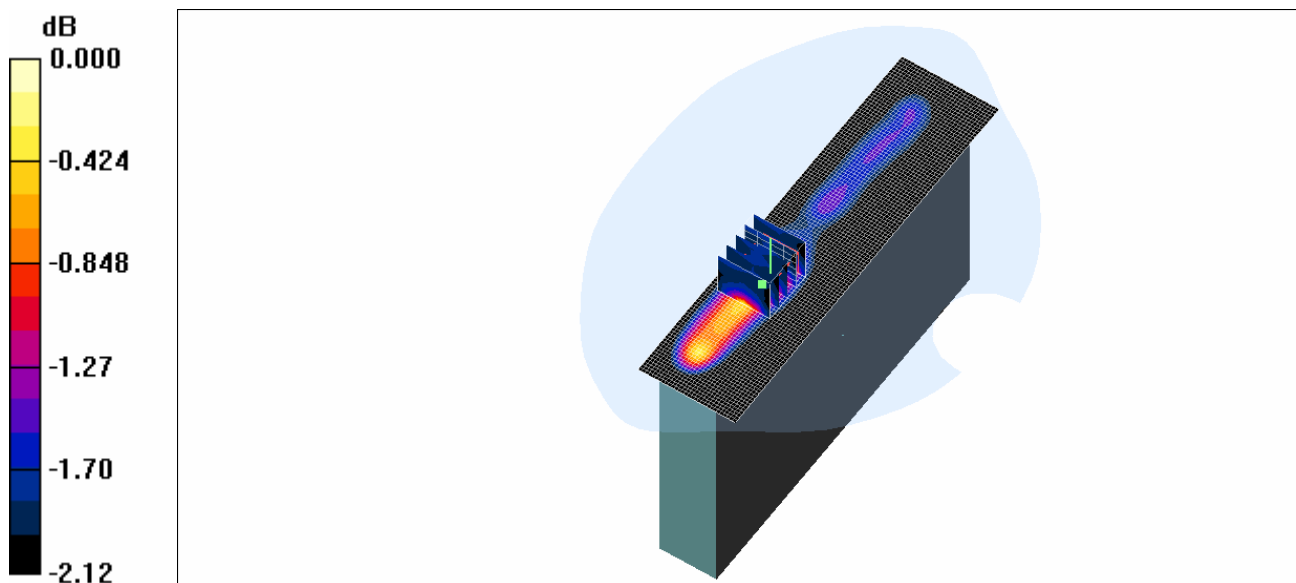
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 12.7 V/m; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.442 mW/g; SAR(10 g) = 0.359 mW/g

Maximum value of SAR (measured) = 0.462 mW/g



Test Laboratory: KTL

SMT-I8110 802.11b Ch.11 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

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

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.468 mW/g

Z Scan (1x1x16): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=20\text{mm}$

Maximum value of SAR (interpolated) = 1.14 mW/g

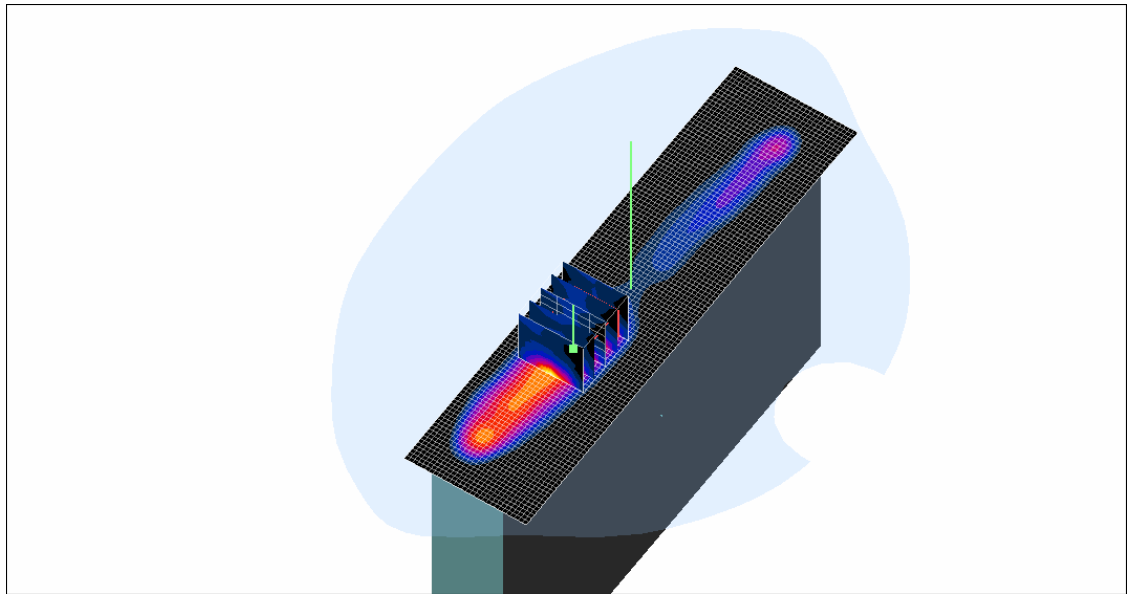
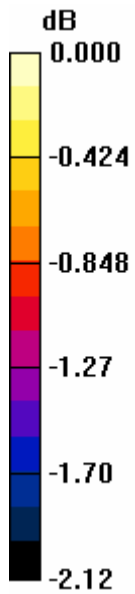
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.9 V/m; Power Drift = -0.108 dB

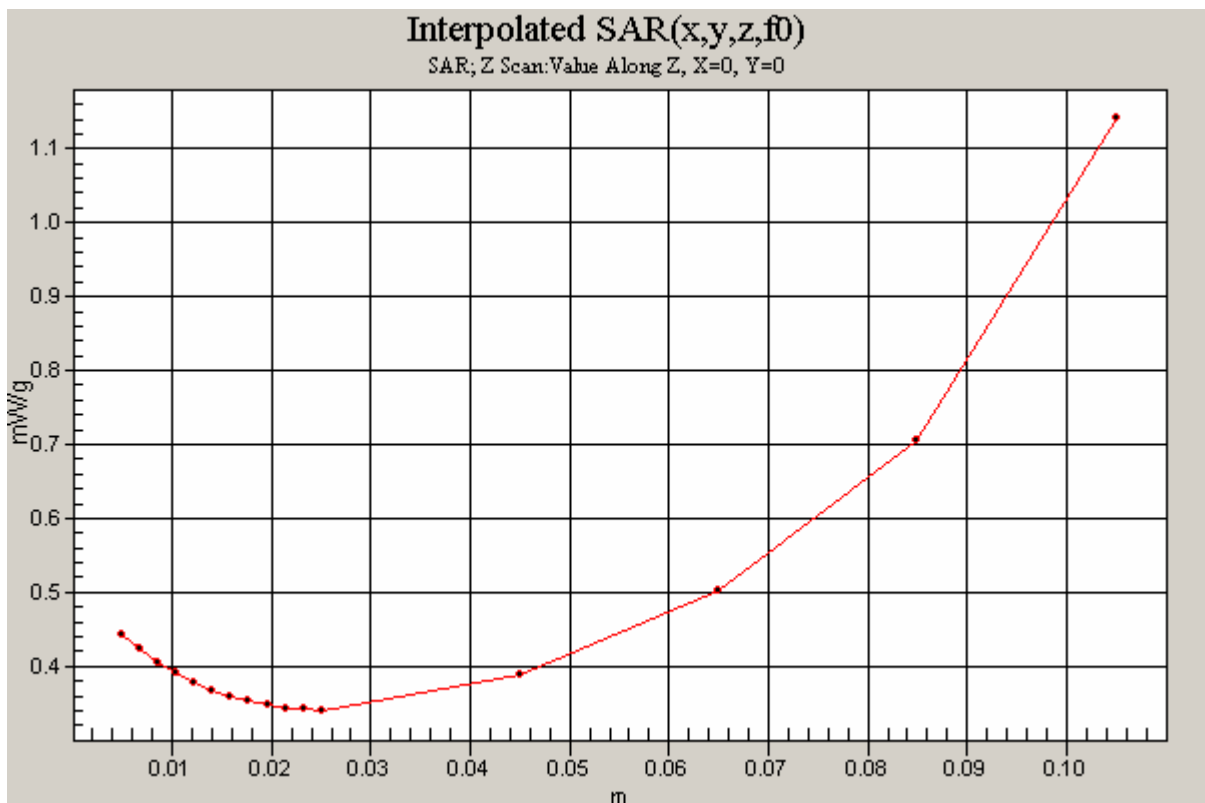
Peak SAR (extrapolated) = 0.808 W/kg

SAR(1 g) = 0.510 mW/g; SAR(10 g) = 0.412 mW/g

Maximum value of SAR (measured) = 0.533 mW/g



0 dB = 0.533mW/g



Test Laboratory: KTL

SMT-I8110 802.11b Ch.7 Body –Front to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: WLAN; Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2442$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (61x121x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.356 mW/g

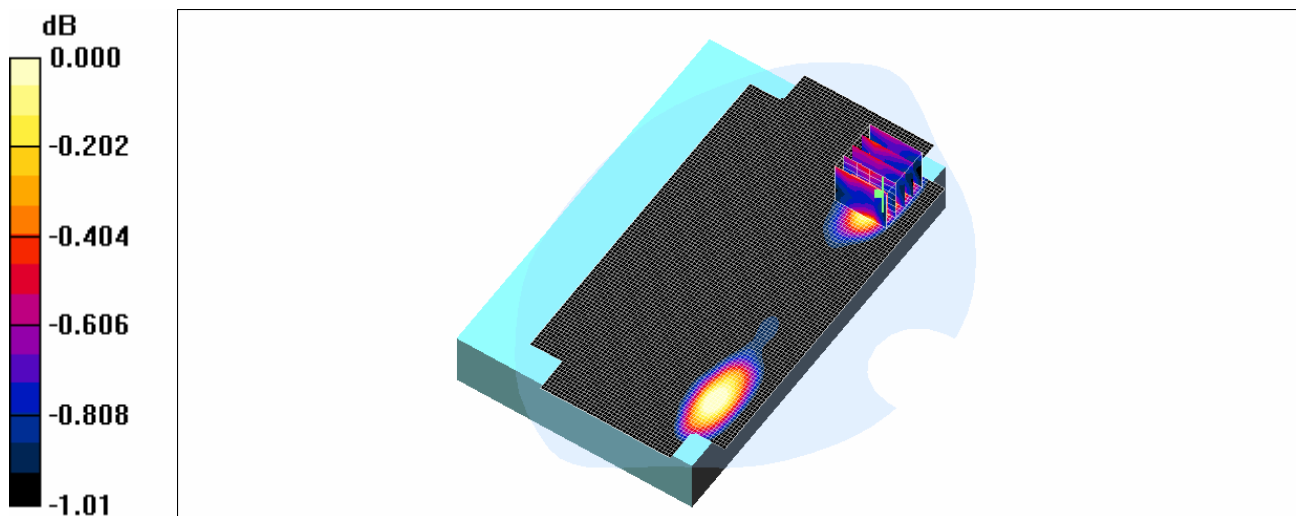
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.6 V/m; Power Drift = -0.041 dB

Peak SAR (extrapolated) = 0.405 W/kg

SAR(1 g) = 0.336 mW/g; SAR(10 g) = 0.308 mW/g

Maximum value of SAR (measured) = 0.347 mW/g



0 dB = 0.347mW/g

Test Laboratory: KTL

SMT-I8110 802.11b Ch.7 Body –rear to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: WLAN; Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2442 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (61x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.116 mW/g

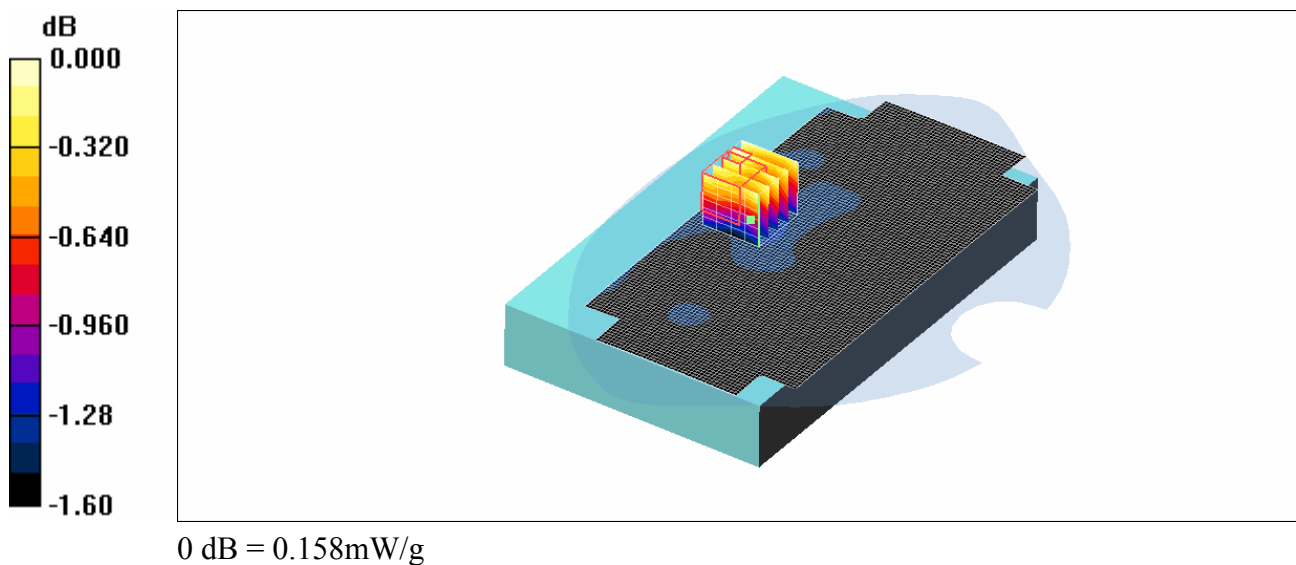
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 7.53 V/m; Power Drift = 0.165 dB

Peak SAR (extrapolated) = 0.158 W/kg

SAR(1 g) = 0.147 mW/g; SAR(10 g) = 0.137 mW/g

Maximum value of SAR (measured) = 0.158 mW/g



Test Laboratory: KTL

SMT-I8110 802.11b Ch.11 Body –Top to phantom with UPCS 5CH transmit simultaneously

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

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

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.414 mW/g

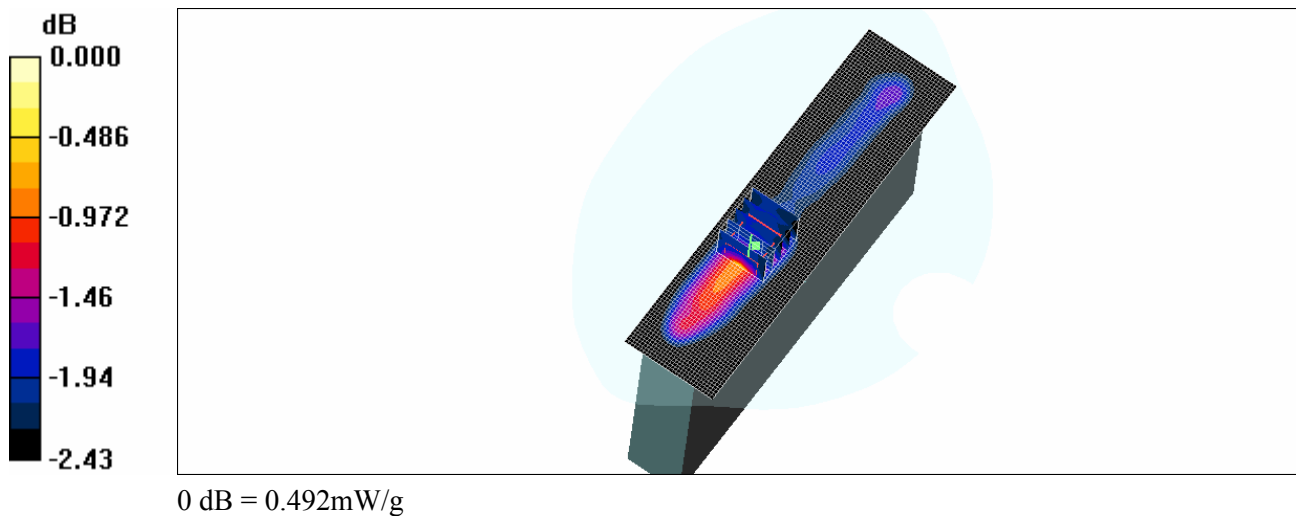
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.3 V/m; Power Drift = 0.020 dB

Peak SAR (extrapolated) = 0.695 W/kg

SAR(1 g) = 0.459 mW/g; SAR(10 g) = 0.369 mW/g

Maximum value of SAR (measured) = 0.492 mW/g



Test Laboratory: KTL

SMT-I8110 802.11g Ch.1 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

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

Medium: MSL2450 Medium parameters used: $f = 2412 \text{ MHz}$; $\sigma = 1.87 \text{ mho/m}$; $\epsilon_r = 51.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.418 mW/g

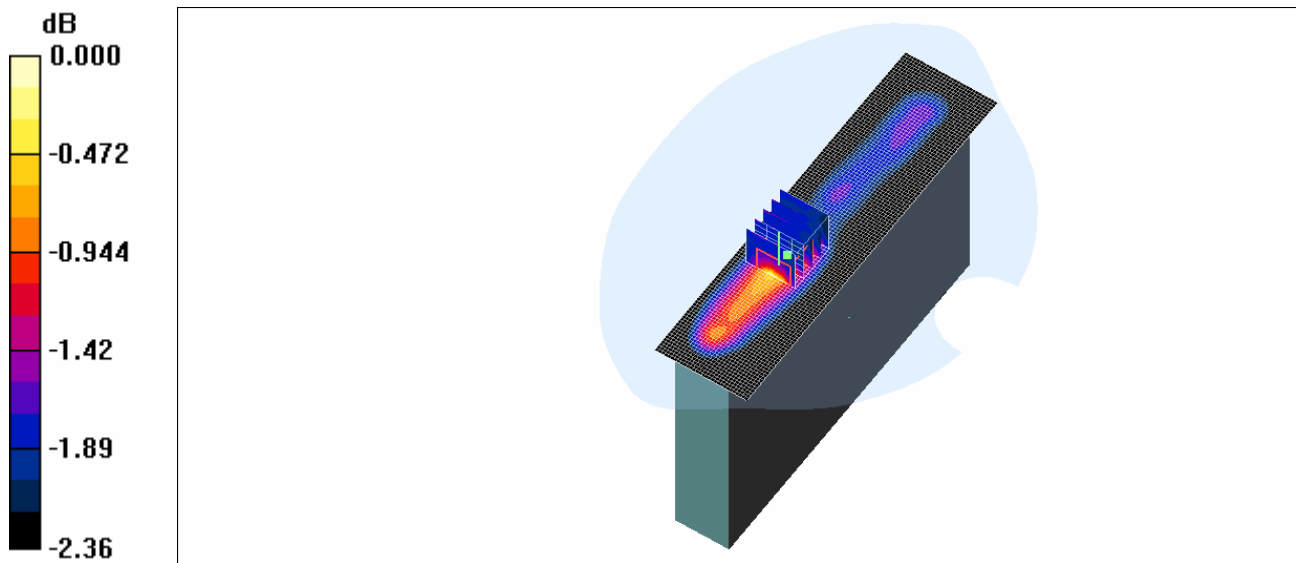
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.0 V/m; Power Drift = -0.059 dB

Peak SAR (extrapolated) = 0.664 W/kg

SAR(1 g) = 0.449 mW/g; SAR(10 g) = 0.367 mW/g

Maximum value of SAR (measured) = 0.464 mW/g



0 dB = 0.464mW/g

Test Laboratory: KTL

SMT-I8110 802.11g Ch.7 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: WLAN; Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2442 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.437 mW/g

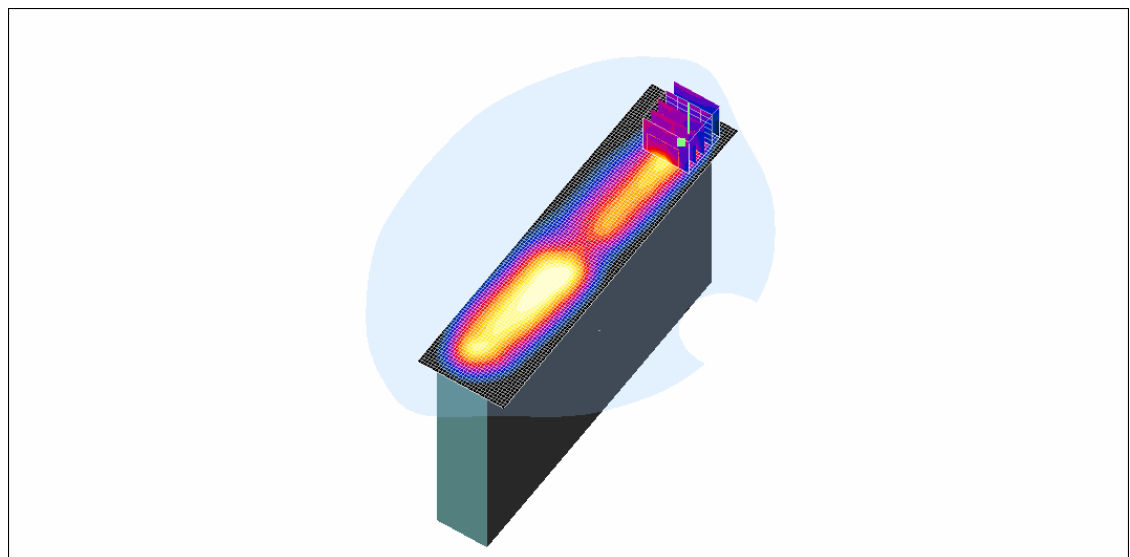
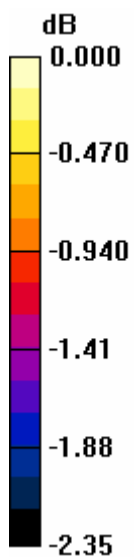
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.6 V/m ; Power Drift = -0.091 dB

Peak SAR (extrapolated) = 0.581 W/kg

SAR(1 g) = 0.400 mW/g ; SAR(10 g) = 0.332 mW/g

Maximum value of SAR (measured) = 0.420 mW/g



0 dB = 0.420 mW/g

Test Laboratory: KTL

SMT-I8110 802.11g Ch.7 Body –Front to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: WLAN; Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2442 \text{ MHz}$; $\sigma = 1.91 \text{ mho/m}$; $\epsilon_r = 51.9$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (61x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.294 mW/g

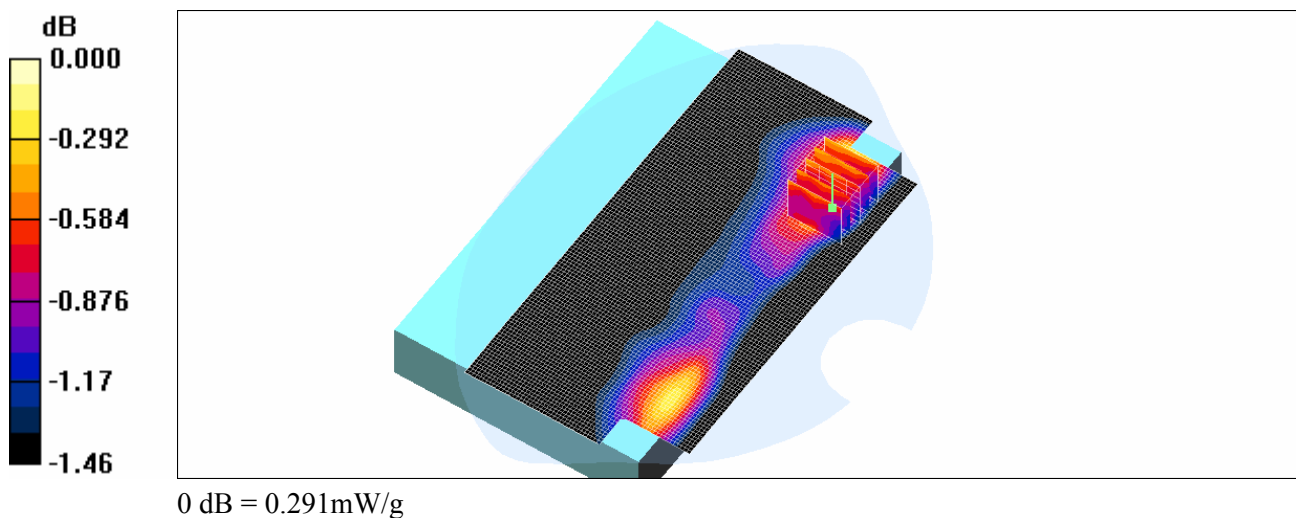
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 10.9 V/m; Power Drift = -0.120 dB

Peak SAR (extrapolated) = 0.322 W/kg

SAR(1 g) = 0.282 mW/g; SAR(10 g) = 0.260 mW/g

Maximum value of SAR (measured) = 0.291 mW/g



Test Laboratory: KTL

SMT-I8110 802.11g Ch.7 Body –Back to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

Communication System: WLAN; Frequency: 2442 MHz; Duty Cycle: 1:1

Medium: MSL2450 Medium parameters used: $f = 2442$ MHz; $\sigma = 1.91$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn614; Calibrated: DAE not calibrated
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (61x121x1): Measurement grid: dx=20mm, dy=20mm

Maximum value of SAR (interpolated) = 0.119 mW/g

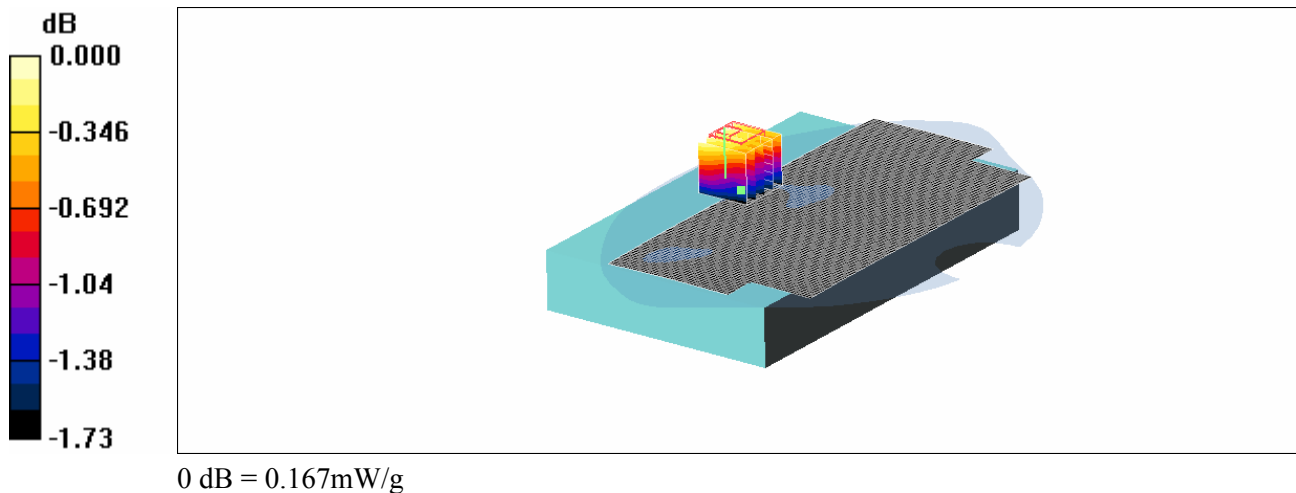
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.68 V/m; Power Drift = 0.065 dB

Peak SAR (extrapolated) = 0.167 W/kg

SAR(1 g) = 0.153 mW/g; SAR(10 g) = 0.144 mW/g

Maximum value of SAR (measured) = 0.167 mW/g



Test Laboratory: KTL

SMT-I8110 802.11g Ch.11 Body –Top to phantom

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

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

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection) Sensor-Surface: 0mm (Fix Surface)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.422 mW/g

Z Scan (1x1x16): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=20\text{mm}$

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

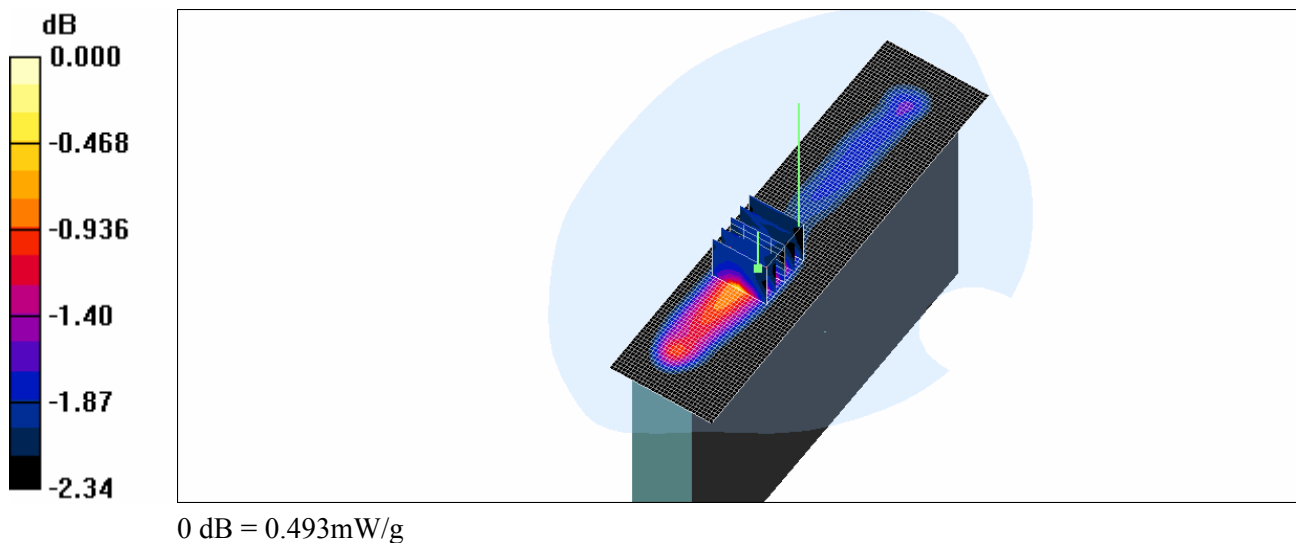
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

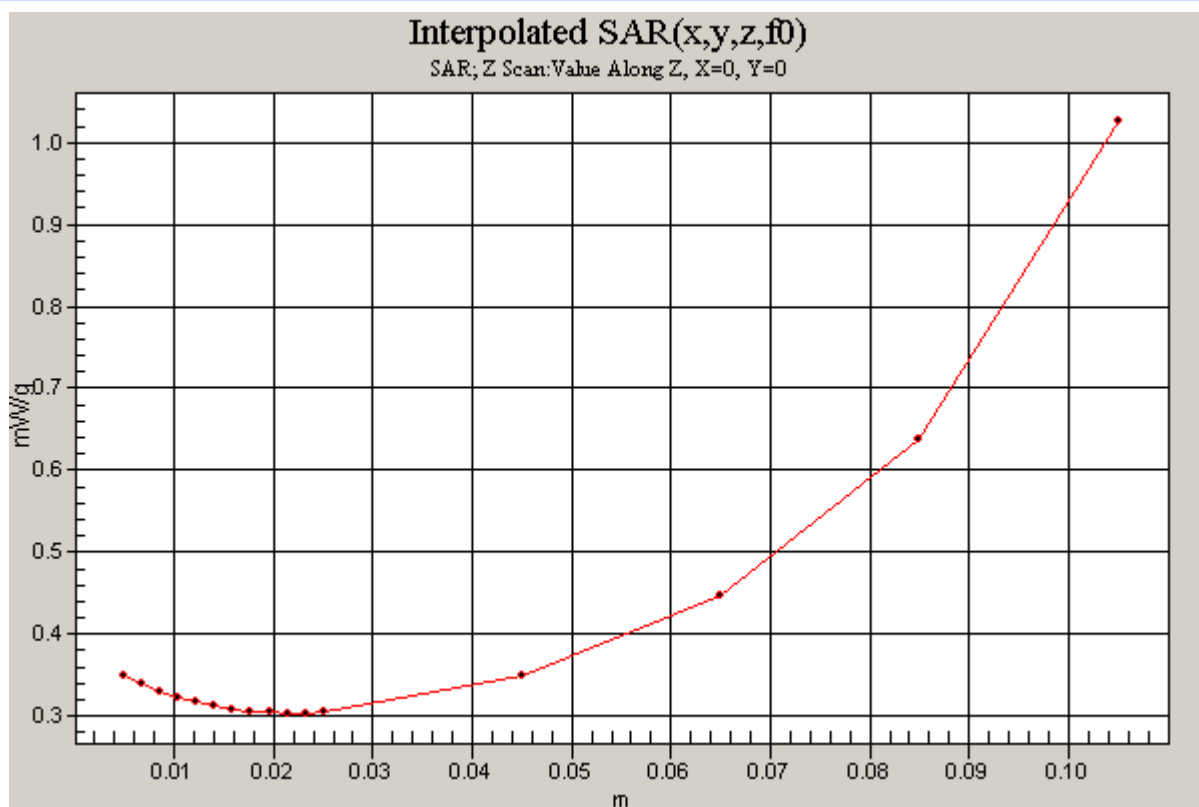
Reference Value = 13.0 V/m ; Power Drift = -0.022 dB

Peak SAR (extrapolated) = 0.729 W/kg

SAR(1 g) = 0.466 mW/g ; SAR(10 g) = 0.373 mW/g

Maximum value of SAR (measured) = 0.493 mW/g





Test Laboratory: KTL

SMT-I8110 802.11g Ch.11 Body –Top to phantom with UPCS 5CH transmit simultaneously

***Test Date : 06th/Mar./2008**

Measured Liquid Temperature(°C) : 21.0, Ambient Temperature(°C) : 21.0

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

Medium: MSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.94 \text{ mho/m}$; $\epsilon_r = 51.7$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV3 - SN3020; ConvF(3.89, 3.89, 3.89); Calibrated: 2007-07-18
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: : DAE4 Sn559; Calibrated: 2007-04-17
- Phantom: SAM Twin Phantom_835MHz; Type: SAM; Serial: TP-1276
- Measurement SW: DASY4, V4.7 Build 55; Postprocessing SW: SEMCAD, V1.8 Build 176

Area Scan (31x121x1): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$

Maximum value of SAR (interpolated) = 0.429 mW/g

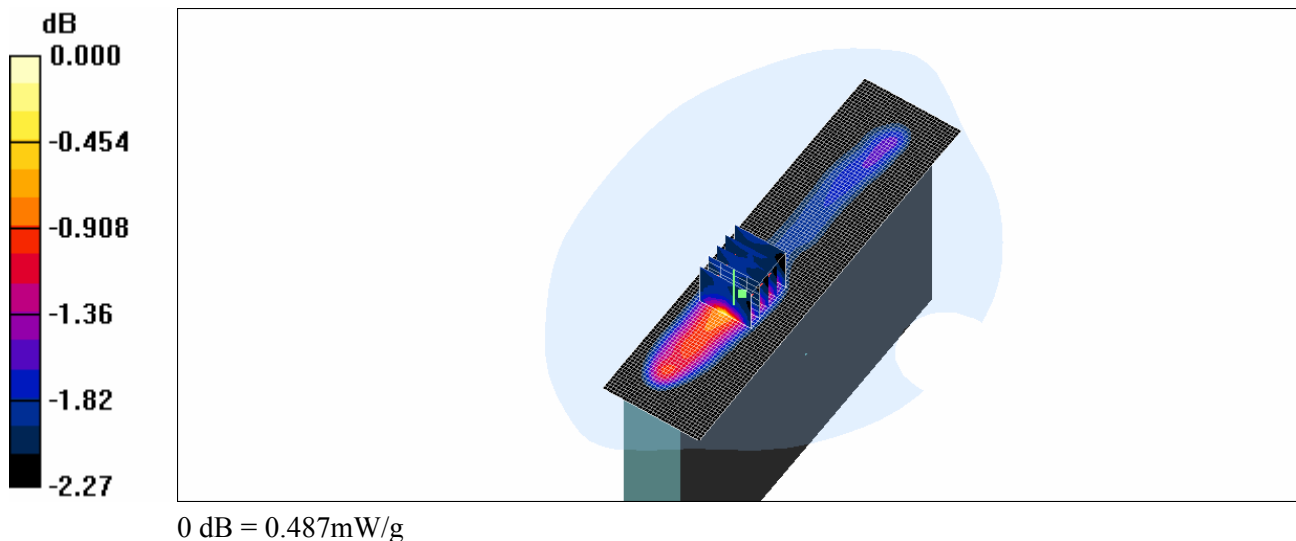
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 13.3 V/m; Power Drift = -0.026 dB

Peak SAR (extrapolated) = 0.710 W/kg

SAR(1 g) = 0.463 mW/g; SAR(10 g) = 0.372 mW/g

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



Title

SubTitle

March 06, 2008 16:05 PM

Frequency	e'	e''
1900000000	52.8637	14.2407
1901000000	52.8426	14.2464
1902000000	52.8214	14.2521
1903000000	52.8003	14.2578
1904000000	52.7792	14.2635
1905000000	52.7581	14.2692
1906000000	52.7370	14.2749
1907000000	52.7159	14.2806
1908000000	52.6948	14.2863
1909000000	52.6737	14.2920
1910000000	52.6526	14.2978
1911000000	52.6316	14.3035
1912000000	52.6105	14.3092
1913000000	52.5895	14.3149
1914000000	52.5684	14.3207
1915000000	52.5474	14.3264
1916000000	52.5264	14.3321
1917000000	52.5054	14.3378
1918000000	52.4844	14.3436
1919000000	52.4634	14.3493
1920000000	52.4424	14.3551
1921000000	52.4214	14.3608
1922000000	52.4004	14.3665
1923000000	52.3795	14.3723
1924000000	52.3585	14.3780
1925000000	52.3376	14.3838
1926000000	52.3167	14.3895
1927000000	52.2957	14.3953
1928000000	52.2748	14.4011
1929000000	52.2539	14.4068
1930000000	52.2330	14.4126
1931000000	52.2121	14.4183

1932000000	52.1912	14.4241
1933000000	52.1703	14.4299
1934000000	52.1495	14.4357
1935000000	52.1286	14.4414
1936000000	52.1078	14.4472
1937000000	52.0869	14.4530
1938000000	52.0661	14.4588
1939000000	52.0453	14.4646
1940000000	52.0244	14.4703

Title

SubTitle

March 06, 2008 14:30 PM

Frequency	e'	e''
1900000000	39.2843	13.3824
1901000000	39.2686	13.3770
1902000000	39.2529	13.3717
1903000000	39.2372	13.3663
1904000000	39.2215	13.3610
1905000000	39.2058	13.3557
1906000000	39.1901	13.3503
1907000000	39.1744	13.3450
1908000000	39.1588	13.3396
1909000000	39.1431	13.3343
1910000000	39.1274	13.3290
1911000000	39.1118	13.3236
1912000000	39.0961	13.3183
1913000000	39.0805	13.3130
1914000000	39.0649	13.3077
1915000000	39.0493	13.3023
1916000000	39.0336	13.2970
1917000000	39.0180	13.2917
1918000000	39.0024	13.2864
1919000000	38.9868	13.2811
1920000000	38.9712	13.2757
1921000000	38.9556	13.2704
1922000000	38.9400	13.2651
1923000000	38.9245	13.2598
1924000000	38.9089	13.2545
1925000000	38.8933	13.2492
1926000000	38.8778	13.2439
1927000000	38.8622	13.2386
1928000000	38.8467	13.2333
1929000000	38.8311	13.2280
1930000000	38.8156	13.2227

1931000000	38.8001	13.2175
1932000000	38.7846	13.2122
1933000000	38.7691	13.2069
1934000000	38.7535	13.2016
1935000000	38.7380	13.1963
1936000000	38.7225	13.1910
1937000000	38.7071	13.1858
1938000000	38.6916	13.1805
1939000000	38.6761	13.1752
1940000000	38.6606	13.1699

Title

SubTitle

March 06, 2008 10:15 AM

Frequency	e'	e''
2400000000	52.2138	13.9436
2402000000	52.1982	13.9506
2404000000	52.1825	13.9575
2406000000	52.1669	13.9645
2408000000	52.1512	13.9715
2410000000	52.1356	13.9785
2412000000	52.1200	13.9855
2414000000	52.1043	13.9925
2416000000	52.0887	13.9995
2418000000	52.0731	14.0065
2420000000	52.0575	14.0135
2422000000	52.0419	14.0205
2424000000	52.0262	14.0275
2426000000	52.0106	14.0345
2428000000	51.9950	14.0415
2430000000	51.9794	14.0485
2432000000	51.9639	14.0556
2434000000	51.9483	14.0626
2436000000	51.9327	14.0696
2438000000	51.9171	14.0767
2440000000	51.9015	14.0837
2442000000	51.8860	14.0907
2444000000	51.8704	14.0978
2446000000	51.8549	14.1048
2448000000	51.8393	14.1119
2450000000	51.8238	14.1189
2452000000	51.8082	14.1260
2454000000	51.7927	14.1331
2456000000	51.7772	14.1401
2458000000	51.7616	14.1472
2460000000	51.7461	14.1543
2462000000	51.7306	14.1614

2464000000	51.7151	14.1684
2466000000	51.6996	14.1755
2468000000	51.6841	14.1826
2470000000	51.6686	14.1897
2472000000	51.6531	14.1968
2474000000	51.6376	14.2039
2476000000	51.6221	14.2110
2478000000	51.6066	14.2181
2480000000	51.5911	14.2252
2482000000	51.5756	14.2323
2484000000	51.5602	14.2394
2486000000	51.5447	14.2466
2488000000	51.5293	14.2537
2490000000	51.5138	14.2608

Title

SubTitle

March 06, 2008 10:05 AM

Frequency	e'	e''
2400000000	39.3273	13.1028
2402000000	39.3155	13.1094
2404000000	39.3037	13.1159
2406000000	39.2919	13.1225
2408000000	39.2801	13.1290
2410000000	39.2683	13.1356
2412000000	39.2566	13.1422
2414000000	39.2448	13.1487
2416000000	39.2330	13.1553
2418000000	39.2212	13.1619
2420000000	39.2095	13.1685
2422000000	39.1977	13.1750
2424000000	39.1860	13.1816
2426000000	39.1742	13.1882
2428000000	39.1625	13.1948
2430000000	39.1507	13.2014
2432000000	39.1390	13.2080
2434000000	39.1272	13.2146
2436000000	39.1155	13.2212
2438000000	39.1038	13.2278
2440000000	39.0921	13.2345
2442000000	39.0803	13.2411
2444000000	39.0686	13.2477
2446000000	39.0569	13.2543
2448000000	39.0452	13.2609
2450000000	39.0335	13.2676
2452000000	39.0218	13.2742
2454000000	39.0101	13.2808
2456000000	38.9984	13.2875
2458000000	38.9867	13.2941
2460000000	38.9750	13.3008
2462000000	38.9633	13.3074

2464000000	38.9516	13.3141
2466000000	38.9399	13.3207
2468000000	38.9282	13.3274
2470000000	38.9166	13.3341
2472000000	38.9049	13.3407
2474000000	38.8932	13.3474
2476000000	38.8816	13.3541
2478000000	38.8699	13.3607
2480000000	38.8582	13.3674
2482000000	38.8466	13.3741
2484000000	38.8349	13.3808
2486000000	38.8233	13.3875
2488000000	38.8116	13.3942
2490000000	38.8000	13.4009