

APPENDIX 1 : SAR Measurement data

1. Evaluation procedure

The evaluation was performed with the following procedure:

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

Step 2: The SAR distribution at the exposed side of head or body position was measured at a distance of each device from the inner surface of the shell. The area covered the entire dimension of the antenna of EUT and the horizontal grid spacing was 15 mm x 15 mm for below 3GHz. (or 10mm x 10mm for above 3GHz.). 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 or more was assessed by measuring 7 x 7 x 7 points at least for below 3GHz and a volume of 28 mm x 28mm x 22.5mm or more was assessed by measuring 8 x 8 x 6(ratio step method (*1)) points at least for 5GHz band.

And for any secondary peaks found in the Step2 which are within 2dB of maximum peak and not with this Step3 (Zoom scan) is repeated. On the basis of this data set, the spatial peak SAR value was evaluated under the following procedure:

(1). The data at the surface were extrapolated, since the center of the dipoles is 1mm(EX3DV4) 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.

***1. Ratio step method parameters used;**

The first measurement point: 2mm from the phantom surface, the initial grid separation: 2mm, subsequent graded grid ratio: 1.5

These parameters comply with the requirement of the KDB 865664.

In the section of SAR Scan Procedures-Zoom Scan, in KDB 865664 (October 2006 revised, publication date: April 16, 2007): SAR Measurement Requirements

for 3-6GHz, the graded grids requirement is as follows;

“When graded grids are used (z), the first measurement point should be within 3mm of the phantom surface for measurements below 4.5GHz and within 2mm at or above 4.5GHz. The initial grid separation, closest to the phantom, should be 2.0mm. A subsequent graded ration of 1.5 is recommended and less than 2.0 is required. “

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2. Measurement data

i) WLAN 2.4GHz

m2450(tablet,2450MHz band(130502) /(mimo)ant=0&1,tablet-right&d=0mm,11n20(mcs8),m2437(6ch)

Date/Time: 2013/05/02 11:54:23

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;

-Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0, 161.0$

-Electronics: DAE4 Sn518; Calibrated: 2012/10/17

-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-5,(mimo)ant=0&1,right&d=0mm,11n20(mcs8),m2437/

Area Scan:60x120,15 (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.171 W/kg

Area Scan:60x120,15 (41x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.193 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: $dx=20$ mm, $dy=20$ mm, $dz=5$ mm

Maximum value of SAR (measured) = 0.185 W/kg

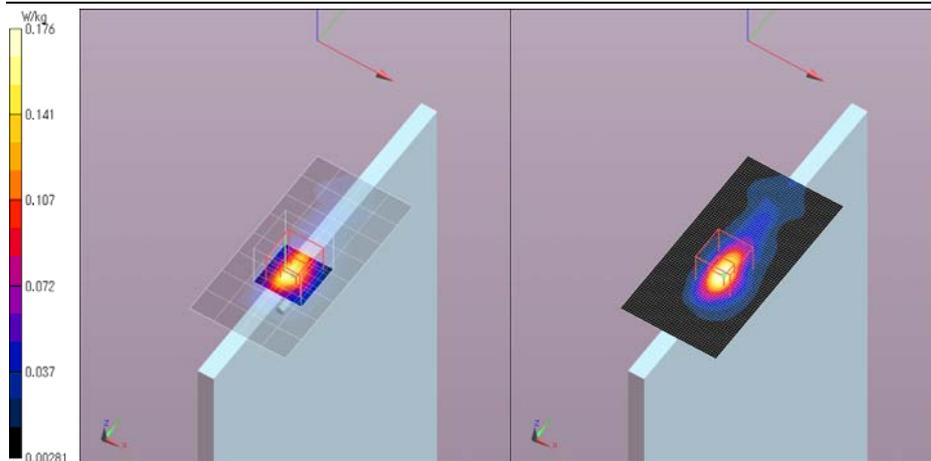
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.116 mW/g; SAR(10 g) = 0.048 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 9.661 V/m; Power Drift = -0.14 dB, Maximum value of SAR (measured) = 0.176 W/kg

Peak SAR (extrapolated) = 0.311 mW/g

SAR(1 g) = 0.111 mW/g; SAR(10 g) = 0.048 mW/g



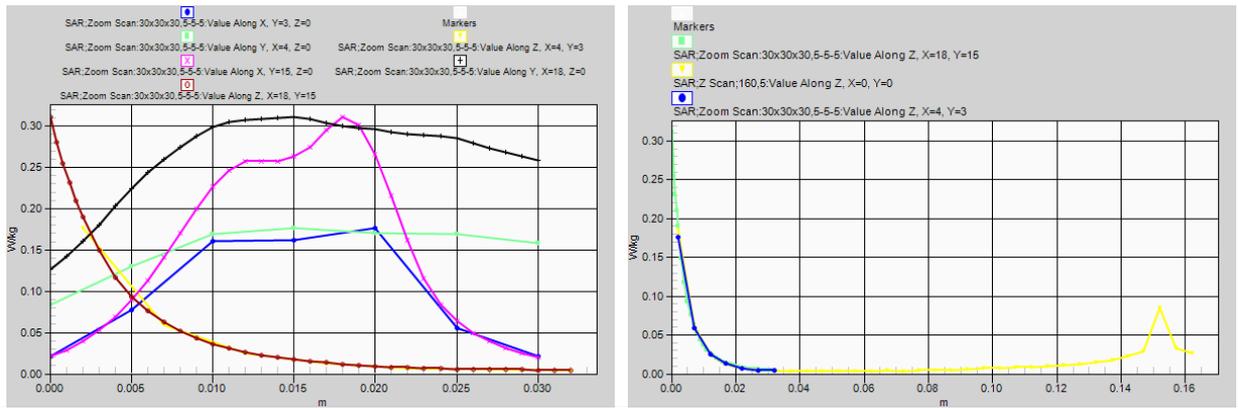
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Remarks: * Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place: No.7 shielded room,
* liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: $24.0 \pm 0.5 \text{ deg.C.} / 50 \pm 5 \% \text{ RH}$,
* liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; * White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

m2450(tablet,2450MHz band(130502) /(mimo)ant=0&1,tablet-rear&d=0mm,11n20(mcs8),m2437(6ch)

Date/Time: 2013/05/02 14:56:27

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;

-Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0$

-Electronics: DAE4 Sn518; Calibrated: 2012/10/17

-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-11,(mimo)ant=0&1,rear&d=0mm,11n20(mcs8),m2437/

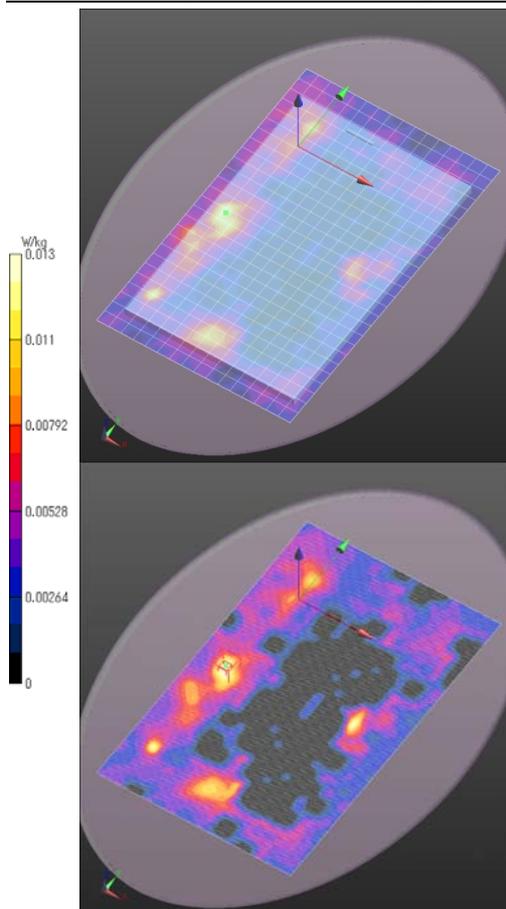
Area Scan:240x390,15 (17x27x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.0125 W/kg

Area Scan:240x390,15 (161x261x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0132 W/kg

Fast SAR(*.Polynomial fit): SAR(1 g) = 0.00901 mW/g; SAR(10 g) = 0.00506 mW/g



Remarks: * . Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place:No.7 shielded room,

*.liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.0 ± 0.5 deg.C. / 50 ± 5 %RH,

*.liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

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m2450(tablet,2450MHz band(130502) /(mimo)ant=0&1,laptop-bottom&d=0mm,11n20(mcs8),m2437(6ch)

Date/Time: 2013/05/02 16:23:35

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³

Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;

-Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0$

-Electronics: DAE4 Sn518; Calibrated: 2012/10/17

-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Laptop,msl2450(13.0502)/m2450-1-13,(mimo)ant=0&1,laptop-btm&d=0mm,11n20(mcs8),m2437/

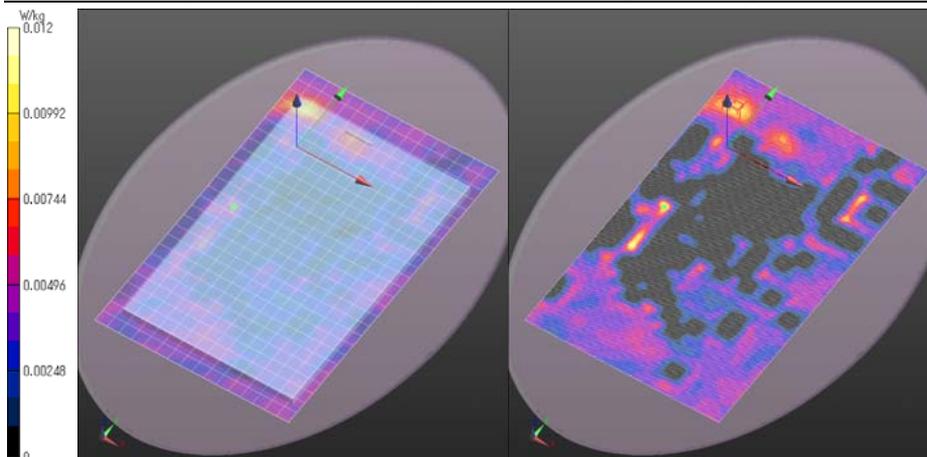
Area Scan:240x390,15 (17x27x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.0103 W/kg

Area Scan:240x390,15 (161x261x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0124 W/kg

Fast SAR(*.Polynomial fit): SAR(1 g) = 0.00727 mW/g; SAR(10 g) = 0.00399 mW/g



Remarks: *. Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place:No.7 shielded room,

*.liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.0 ± 0.5 deg.C. / 50 ± 5 %RH,

*.liquid temperature: 23.5(start)23.5(end)23.5(in check) deg.C.; *. White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

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m2450(tablet,2450MHz band(130502) /(mimo)ant=0&1,tablet-bottom edge&d=0mm,11n20(mcs8),m2437(6ch)

Date/Time: 2013/05/02 14:14:37

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;

-Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0$

-Electronics: DAE4 Sn518; Calibrated: 2012/10/17

-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-9,(mimo)ant=0&1,btm-edge&d=0mm,11n20(mcs8),m2437/

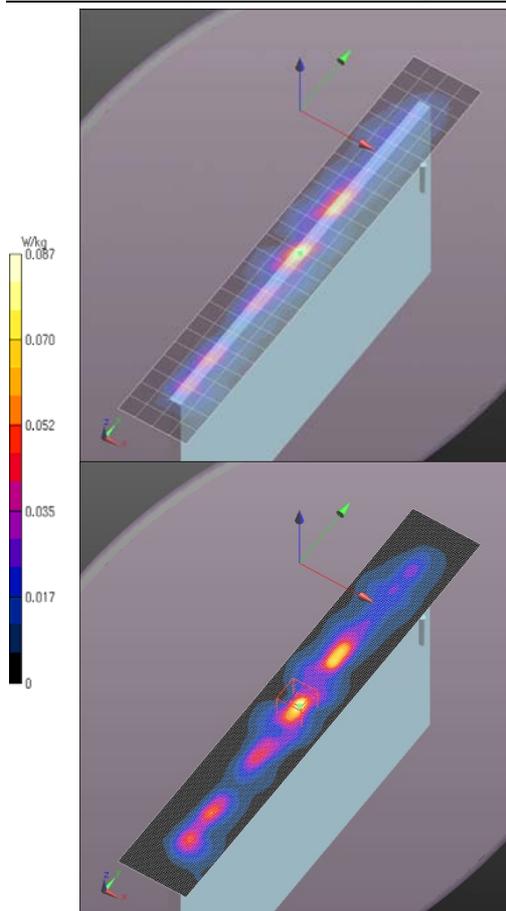
Area Scan:60x390,15 (5x27x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.0866 W/kg

Area Scan:60x390,15 (41x261x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.0875 W/kg

Fast SAR(*.Polynomial fit): SAR(1 g) = 0.050 mW/g; SAR(10 g) = 0.021 mW/g



Remarks: * . Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place:No.7 shielded room,

*.liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.0 ± 0.5 deg.C. / 50 ± 5 %RH,

*.liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

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m2450(tablet,2450MHz band(130502) /ant=0,tablet-right&d=0mm,11b(1m),m2437(6ch)

Date/Time: 2013/05/02 10:13:05

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³

Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;

-Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0, 161.0$

-Electronics: DAE4 Sn518; Calibrated: 2012/10/17

-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-1,ant=0,right&d=0mm,11b(1m),m2437/

Area Scan:60x240,15 (5x17x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.206 W/kg

Area Scan:60x240,15 (41x161x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.279 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: $dx=20$ mm, $dy=20$ mm, $dz=5$ mm

Maximum value of SAR (measured) = 0.225 W/kg

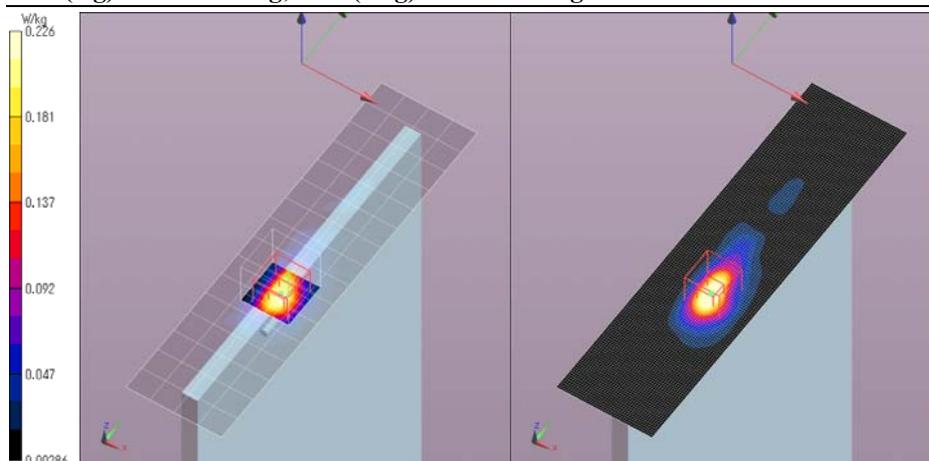
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.165 mW/g; SAR(10 g) = 0.072 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 10.380 V/m; Power Drift = 0.01 dB, Maximum value of SAR (measured) = 0.226 W/kg

Peak SAR (extrapolated) = 0.358 mW/g

SAR(1 g) = 0.143 mW/g; SAR(10 g) = 0.063 mW/g



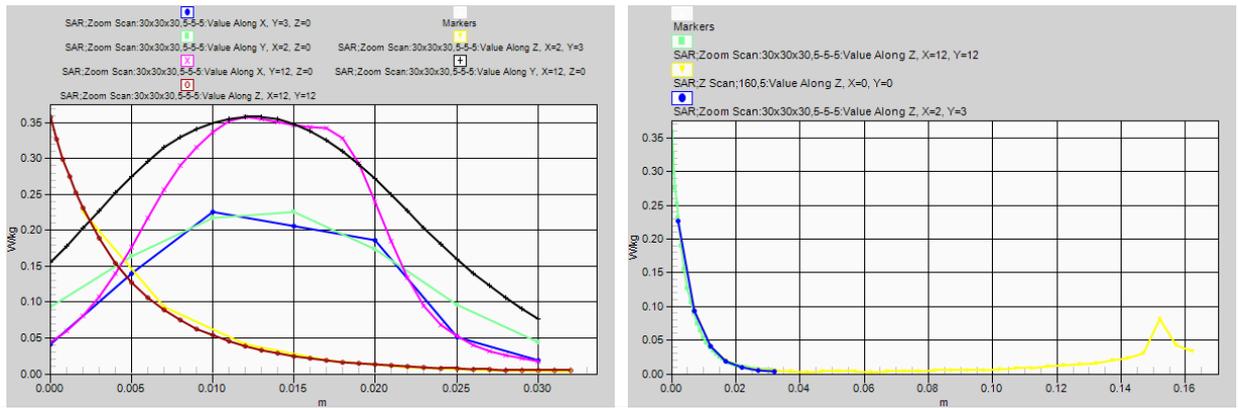
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Remarks: * Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place: No.7 shielded room,
* liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: $24.0 \pm 0.5 \text{ deg.C.} / 50 \pm 5 \% \text{ RH}$,
* liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *. White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

m2450(tablet,2450MHz band(130502) /ant=0,tablet-right&d=0mm,11g(6m),m2437(6ch)

Date/Time: 2013/05/02 10:46:50

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0
Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;
-Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0, 161.0
-Electronics: DAE4 Sn518; Calibrated: 2012/10/17
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-2,ant=0,right&d=0mm,11g(6m),m2437/

Area Scan:60x120,15 (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.236 W/kg

Area Scan:60x120,15 (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.304 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.255 W/kg

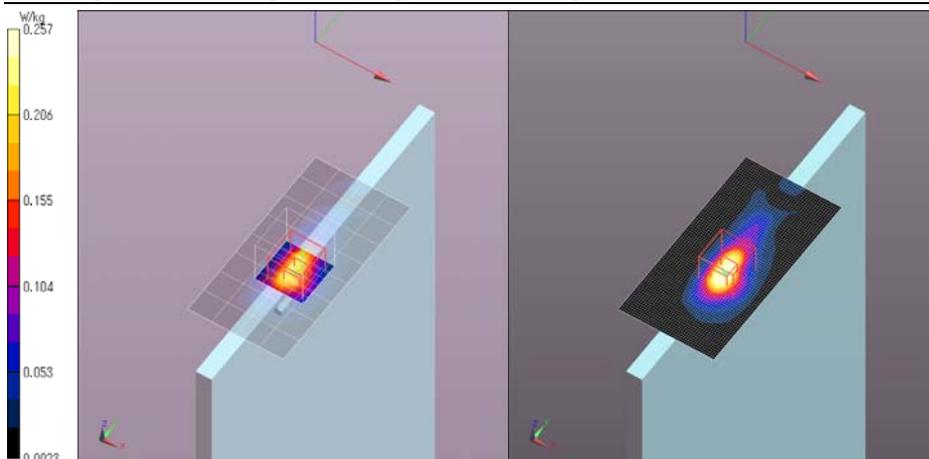
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.184 mW/g; SAR(10 g) = 0.080 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.569 V/m; Power Drift = -0.18 dB, Maximum value of SAR (measured) = 0.257 W/kg

Peak SAR (extrapolated) = 0.397 mW/g

SAR(1 g) = 0.155 mW/g; SAR(10 g) = 0.069 mW/g



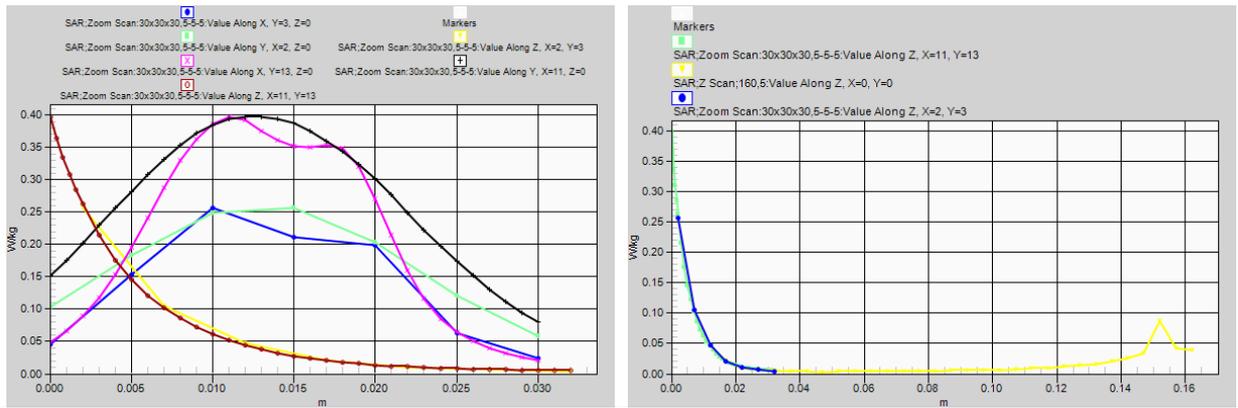
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Remarks: * Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place: No.7 shielded room,
* liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: $24.0 \pm 0.5 \text{ deg.C.} / 50 \pm 5 \% \text{ RH}$,
* liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *. White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

m2450(tablet,2450MHz band(130502) /(miso)ant=0&1,tablet-right&d=0mm,11n40(mcs0),m2437(6ch)

Date/Time: 2013/05/02 11:32:15

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0
Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;
-Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0, 161.0$
-Electronics: DAE4 Sn518; Calibrated: 2012/10/17
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-4,(miso)ant=0,right&d=0mm,11n40(mcs0),m2437/

Area Scan:60x120,15 (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.0998 W/kg

Area Scan:60x120,15 (41x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.132 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: $dx=20$ mm, $dy=20$ mm, $dz=5$ mm

Maximum value of SAR (measured) = 0.130 W/kg

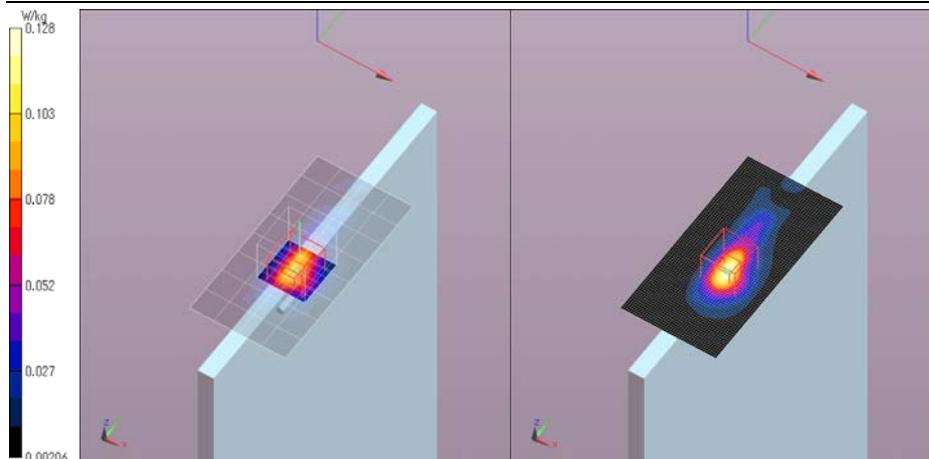
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.080 mW/g; SAR(10 g) = 0.035 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.088 V/m; Power Drift = -0.07 dB, Maximum value of SAR (measured) = 0.128 W/kg

Peak SAR (extrapolated) = 0.215 mW/g

SAR(1 g) = 0.077 mW/g; SAR(10 g) = 0.034 mW/g



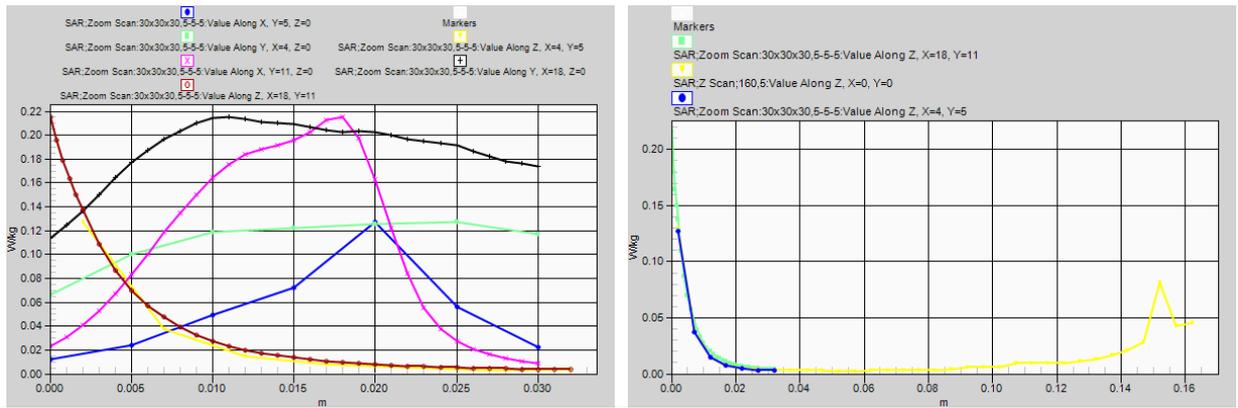
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Remarks: * Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place: No.7 shielded room,
* liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: $24.0 \pm 0.5 \text{ deg.C.} / 50 \pm 5 \% \text{ RH}$,
* liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *. White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

m2450(tablet,2450MHz band(130502) /(mimo)ant=0&1,tablet-right&d=0mm,11n40(mcs8),m2437(6ch)

Date/Time: 2013/05/02 12:15:37

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0
Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;
-Sensor-Surface: 2mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0, 161.0$
-Electronics: DAE4 Sn518; Calibrated: 2012/10/17
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-6,(mimo)ant=0&1,right&d=0mm,11n40(mcs8),m2437/

Area Scan:60x120,15 (5x9x1): Measurement grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (measured) = 0.114 W/kg

Area Scan:60x120,15 (41x81x1): Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

Maximum value of SAR (interpolated) = 0.122 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: $dx=20$ mm, $dy=20$ mm, $dz=5$ mm

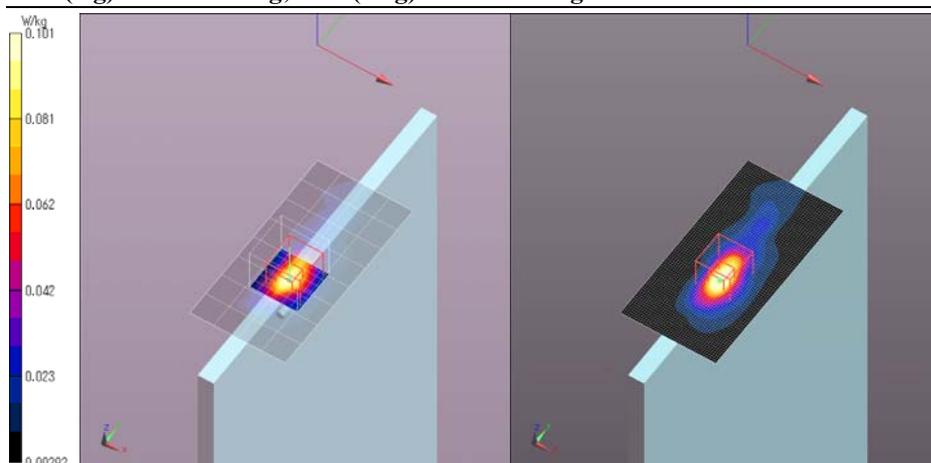
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.030 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 7.333 V/m; Power Drift = -0.04 dB, Maximum value of SAR (measured) = 0.101 W/kg

Peak SAR (extrapolated) = 0.170 mW/g

SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.028 mW/g



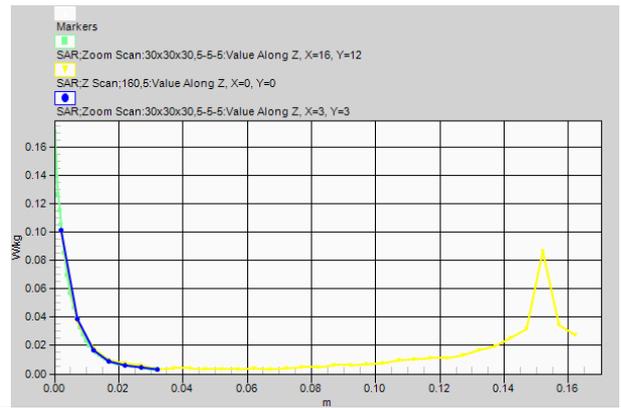
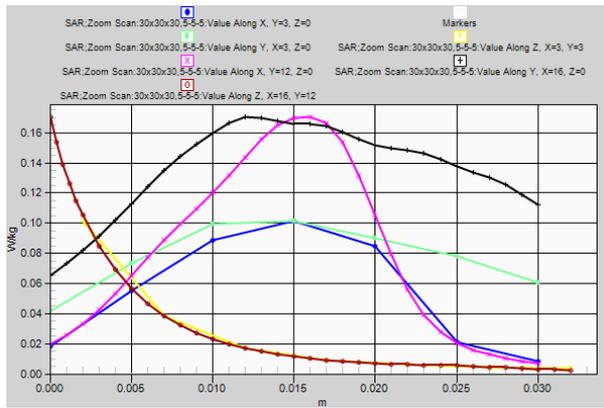
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Remarks: * .Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place:No.7 shielded room,
 * .liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.0 ± 0.5deg.C. / 50 ± 5 %RH,
 * .liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

m2450(tablet,2450MHz band(130502)/(mimo)ant=0&1,tablet-left&d=0mm,11n20(mcs8),m2437(6ch)

Date/Time: 2013/05/02 13:10:41

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0
Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³
Measurement Standard: DASYS (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;
-Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0, 161.0
-Electronics: DAE4 Sn518; Calibrated: 2012/10/17
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-7,(mimo)ant=0&1,left&d=0mm,11n20(mcs8),m2437/

Area Scan:60x240,15 (5x17x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.164 W/kg

Area Scan:60x240,15 (41x161x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.167 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.236 W/kg

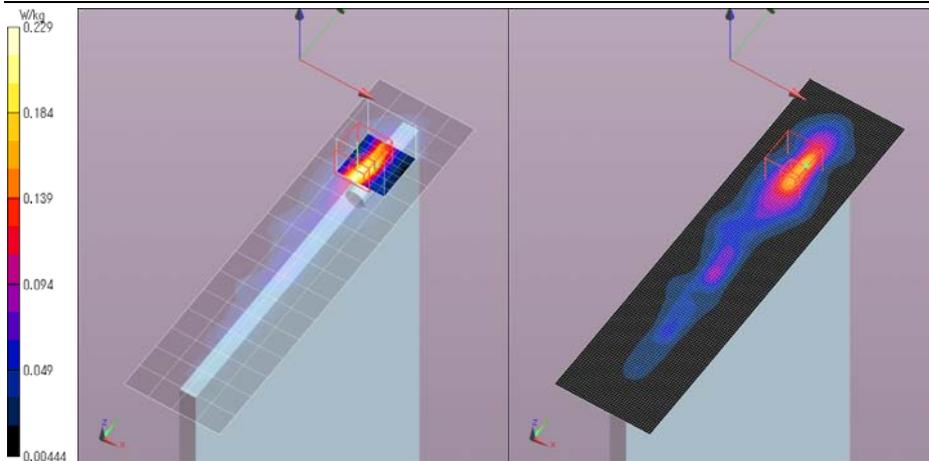
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.107 mW/g; SAR(10 g) = 0.050 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.825 V/m; Power Drift = 0.17 dB, Maximum value of SAR (measured) = 0.229 W/kg

Peak SAR (extrapolated) = 0.408 mW/g

SAR(1 g) = 0.131 mW/g; SAR(10 g) = 0.051 mW/g



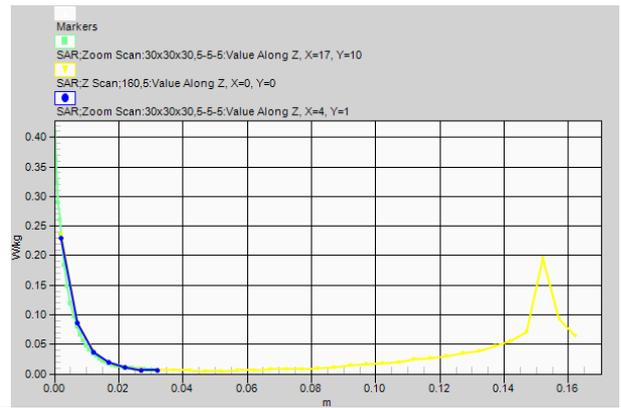
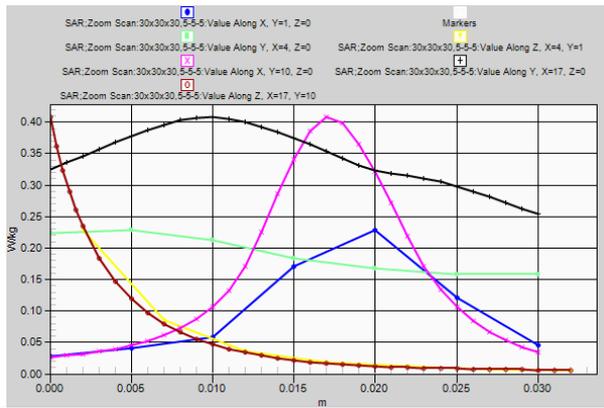
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Remarks: * Date tested: 2013/05/02; Tested by: Tomochika Sato; Tested place: No.7 shielded room,
* liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: $24.0 \pm 0.5 \text{ deg.C.} / 50 \pm 5 \% \text{ RH}$,
* liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *. White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

m2450(tablet,2450MHz band(130502) /(mimo)ant=0&1,tablet-left&d=0mm,11n40(mcs8),m2437(6ch)

Date/Time: 2013/05/02 13:39:19

Communication System: 11bgn40-all; Frequency: 2437 MHz; Crest Factor: 1.0
Medium: M2450; Medium parameters used: $f = 2437$ MHz; $\sigma = 1.956$ S/m; $\epsilon_r = 51.044$; $\rho = 1000$ kg/m³
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

-Probe: EX3DV4 - SN3679; ConvF(6.77, 6.77, 6.77); Calibrated: 2012/06/21;
-Sensor-Surface: 2mm (Mechanical Surface Detection), z = 1.0, 31.0, 161.0
-Electronics: DAE4 Sn518; Calibrated: 2012/10/17
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

Tablet,msl2450(13.0502)/m2450-1-8,(mimo)ant=0&1,left&d=0mm,11n40(mcs8),m2437/

Area Scan:60x120,15 (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 0.0950 W/kg

Area Scan:60x120,15 (41x81x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.0968 W/kg

Z Scan;160,5 (1x1x33): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 0.181 W/kg

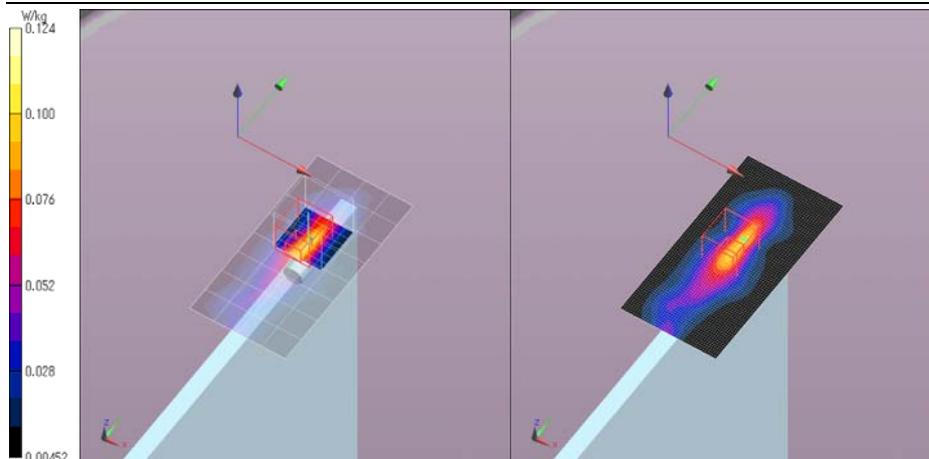
Fast SAR(*.Polynomial fit): SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.029 mW/g

Zoom Scan:30x30x30,5-5-5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.581 V/m; Power Drift = 0.01 dB, Maximum value of SAR (measured) = 0.124 W/kg

Peak SAR (extrapolated) = 0.229 mW/g

SAR(1 g) = 0.072 mW/g; SAR(10 g) = 0.029 mW/g



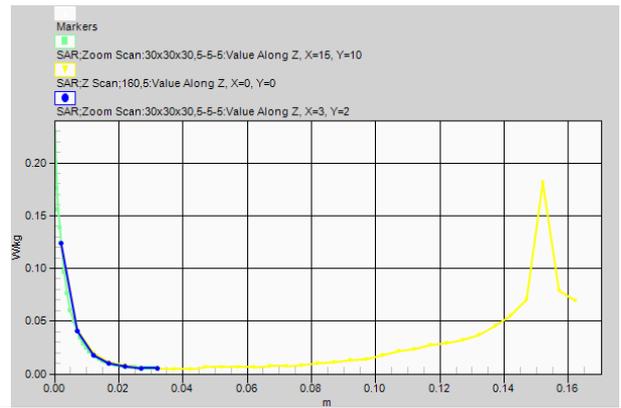
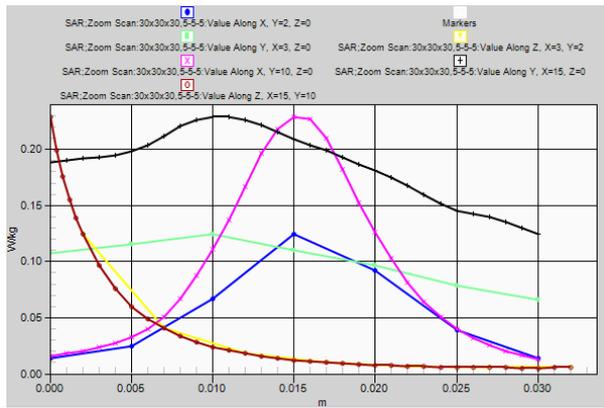
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* liquid depth: 149mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: $24.0 \pm 0.5 \text{ deg.C.} / 50 \pm 5 \% \text{ RH}$,
* liquid temperature: 23.5(start)/23.5(end)/23.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)