

APPENDIX 2: SAR Measurement data

Appendix 2-1: Evaluation procedure

The SAR evaluation was performed with the following procedure:

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

Step 2: The SAR distribution at the exposed side of 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 suitable horizontal grid spacing of EUT. Based on these data, the area of the maximum absorption was determined by splines interpolation.

Step 3: Around this point found in the Step 2 (area scan), a volume of 30mm(X axis)×30mm(Y axis)×30mm(Z axis) was assessed by measuring 7×7×7 points under 3GHz.

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 away from the tip of the probe and the distance between the surface and the lowest measuring point is 2mm. 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 (1g or 10g) 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 (10×10×10) 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 for the assessment of the power drift.

Step 5: Repeat Step 1-Step 4 with other condition or/and setup of EUT.

Appendix 2-2: Measurement data / Platform(1): Video camera(1)

Step 1: Worst position search

Step 1-1: Left & separation distance=10mm with a hand strap , 2462MHz, 11b(1Mbps), Battery=Large

EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1

Communication System: 11b(1Mbps, DBPSK/DSSS); **Frequency:** 2462 MHz; **Crest Factor:** 1.0

Medium: M2450; **Medium parameters used** (24.9deg.C.): $f = 2450 \text{ MHz}$; $\sigma = 1.99 \text{ S/m}$; $\epsilon_r = 50.2$; $\rho = 1000 \text{ kg/m}^3$

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r1,L.cvr.side&w/hand.strap&d10mm,11b(1m,14dbm),m2462/

Area Scan:105x105,stp15 (8x8x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.043 mW/g

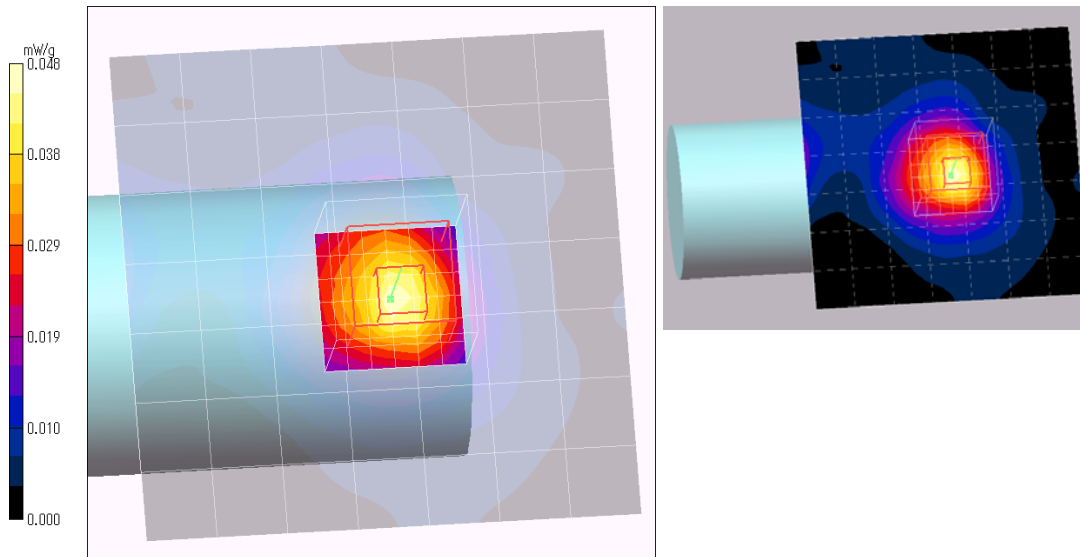
Area Scan:105x105,stp15 (71x71x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.049 mW/g

Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.54 V/m; Power Drift = 0.174 dB, Maximum value of SAR (measured) = 0.048 mW/g

Peak SAR (extrapolated) = 0.062 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.018 mW/g



Additional information:

- *position: distance of EUT to phantom: 10mm (12mm to liquid), liquid depth: 158mm
- *ambient: 24.9deg. C. / 47%RH; liquid temperature: (before) 24.8 deg.C. / (after) 24.6 deg.C.
- *white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 15, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 1: Worst position search (cont'd)****Step 1-2: Left & separation distance=10mm without a hand strap (air gap), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.9deg.C.): $f = 2450$ MHz; $\sigma = 1.99$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

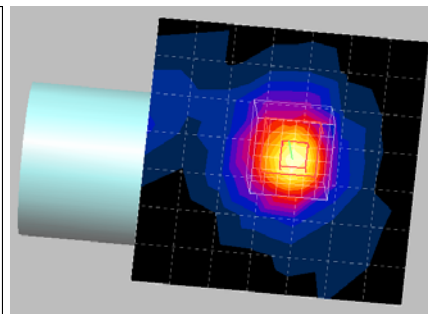
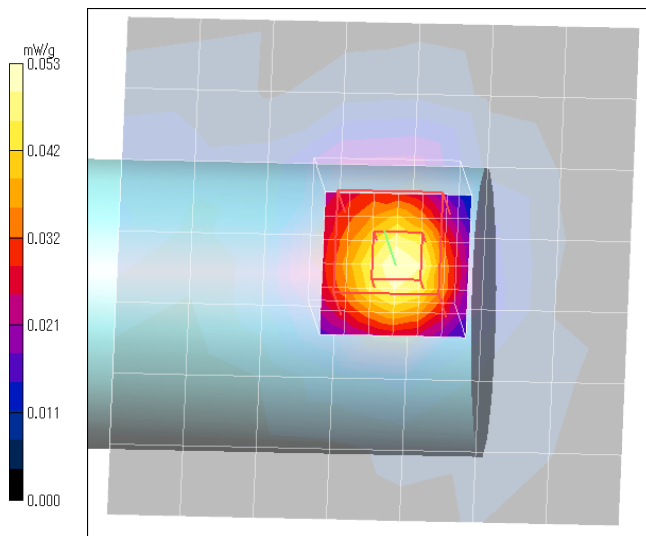
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.re-r1,L.cvr.side&no-hand.strap&d10mm,11b(1m,14dbm),m2462/**Area Scan:105x105,stp15 (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.047 mW/g**Area Scan: (71x71x1):** Measurement grid: dx=15mm, dy=15mm ; Maximum value of SAR (interpolated) = 0.056 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.89 V/m; Power Drift = -0.069 dB, Maximum value of SAR (measured) = 0.053 mW/g

Peak SAR (extrapolated) = 0.072 W/kg

SAR(1 g) = 0.037 mW/g; SAR(10 g) = 0.020 mW/g**Additional information:**

*position: distance of EUT to phantom: 10mm (12mm to liquid), liquid depth: 158mm

*ambient: 24.9deg. C. / 45%RH; liquid temperature: (before) 24.4 deg.C. / (after) 24.4 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 15, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 1: Worst position search (cont'd)****Step 1-3: Front (Lens) & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.9deg.C.): $f = 2450$ MHz; $\sigma = 1.99$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

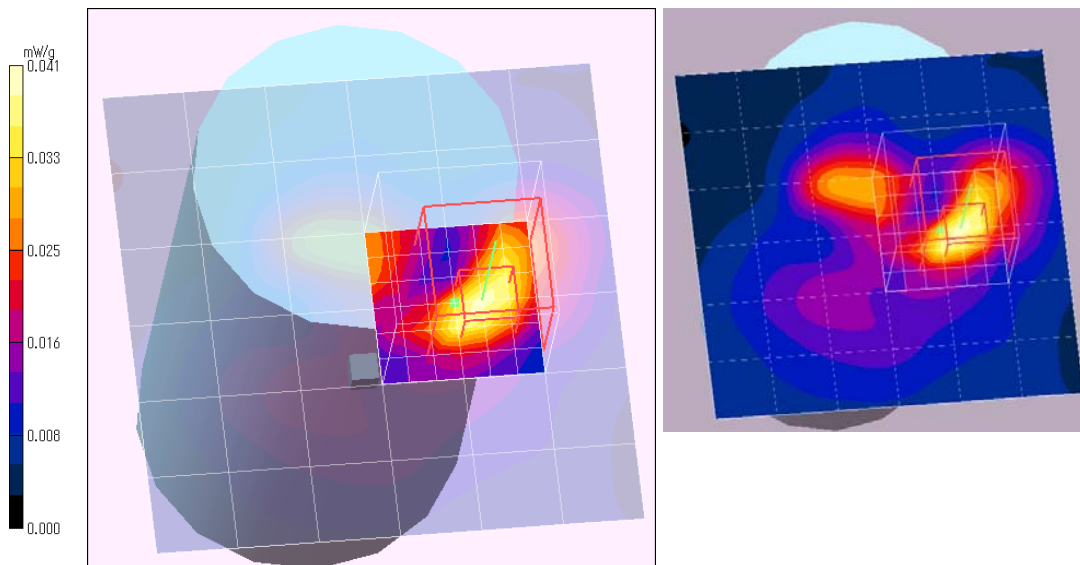
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r3,front&touch(d0),11b(1m,14dbm),m2462/**Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.034 mW/g**Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.034 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 2.67 V/m; Power Drift = 0.20 dB; Maximum value of SAR (measured) = 0.041 mW/g

Peak SAR (extrapolated) = 0.063 W/kg

SAR(1 g) = 0.027 mW/g; SAR(10 g) = 0.014 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm

*ambient: 24.9deg. C. / 45%RH; liquid temperature: (before) 24.3 deg.C. / (after) 24.2 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 15, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 1: Worst position search (cont'd)****Step 1-4: Right(LCD: normal close position) & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.9deg.C.): $f = 2450$ MHz; $\sigma = 1.99$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

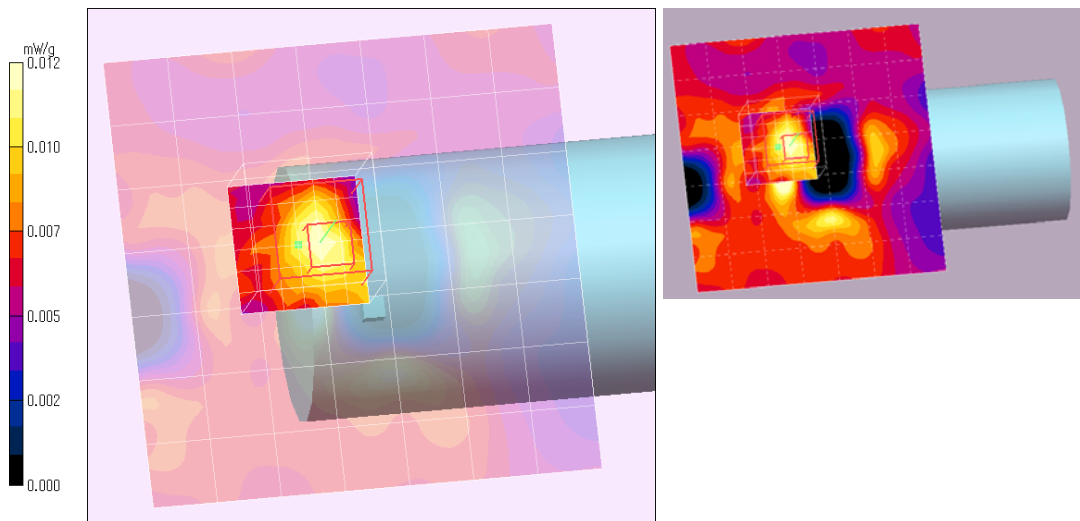
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r4,R.cvr:side/lcd-close&touch(d0,11b(1m,14dbm),m2462/**Area Scan:105x105,stp15 (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.014 mW/g**Area Scan:105x105,stp15 (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.021 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 2.32 V/m; Power Drift = 0.0541 dB; Maximum value of SAR (measured) = 0.012 mW/g

Peak SAR (extrapolated) = 0.020 W/kg

SAR(1 g) = 0.00938 mW/g; SAR(10 g) = 0.00708 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm

*ambient: 24.9deg. C. / 46%RH; liquid temperature: (before) 24.2 deg.C. / (after) 24.1 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 15, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 1: Worst position search (cont'd)****Step 1-5: Bottom & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

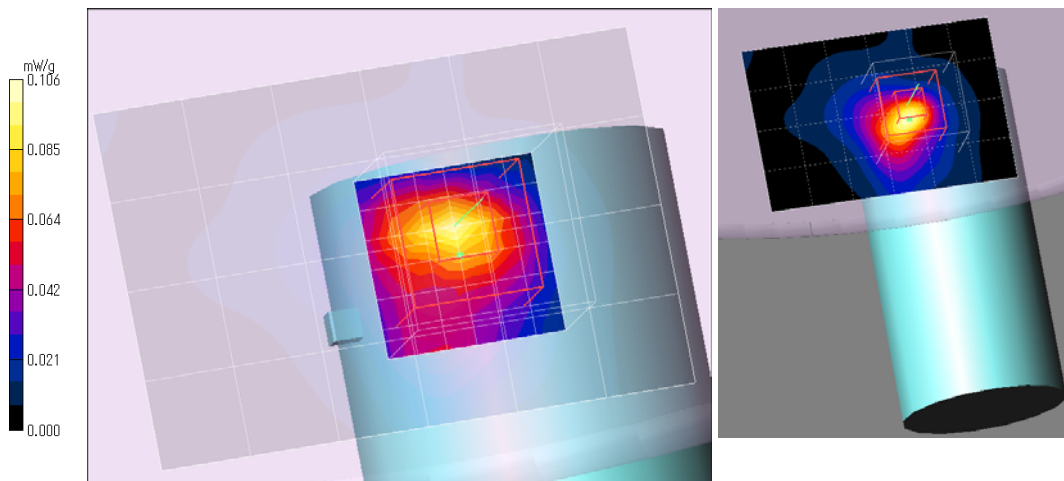
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r5,Btm&touch(d0),11b(1m,14dbm),m2462/**Area Scan (7x5x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.079 mW/g**Area Scan (61x41x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.103 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 7.18 V/m; Power Drift = -0.176 dB; Maximum value of SAR (measured) = 0.106 mW/g

Peak SAR (extrapolated) = 0.144 W/kg

SAR(1 g) = 0.063 mW/g; SAR(10 g) = 0.032 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm

*ambient: 24.9deg.C. / 49%RH; liquid temperature: (before) 24.4 deg.C. / (after) 24.3 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 1: Worst position search (cont'd)****Step 1-6: Top & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

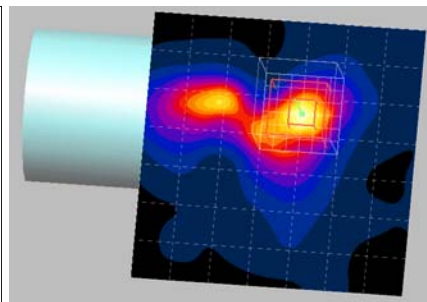
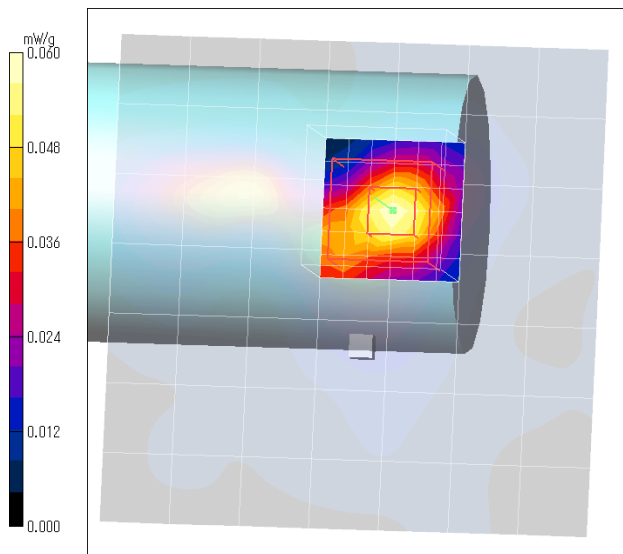
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r6,Top&touch(d0),11b(1m,14dbm),m2462/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.048 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.061 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.19 V/m; Power Drift = -0.060 dB; Maximum value of SAR (measured) = 0.060 mW/g

Peak SAR (extrapolated) = 0.082 W/kg

SAR(1 g) = 0.042 mW/g; SAR(10 g) = 0.021 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm

*ambient: 24.9deg. C. / 46%RH; liquid temperature: (before) 24.2 deg.C. / (after) 24.2 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)

Step 1: Worst position search (cont'd)

Step 1-7: Left-top & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large

>Worst SAR(1g) of platform(1)

EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1

Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r8,Chg.CH;L.cvr.-top.side&touch(d0),11b(1m,14dbm),m2462(11)/

Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.261 mW/g

Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.383 mW/g

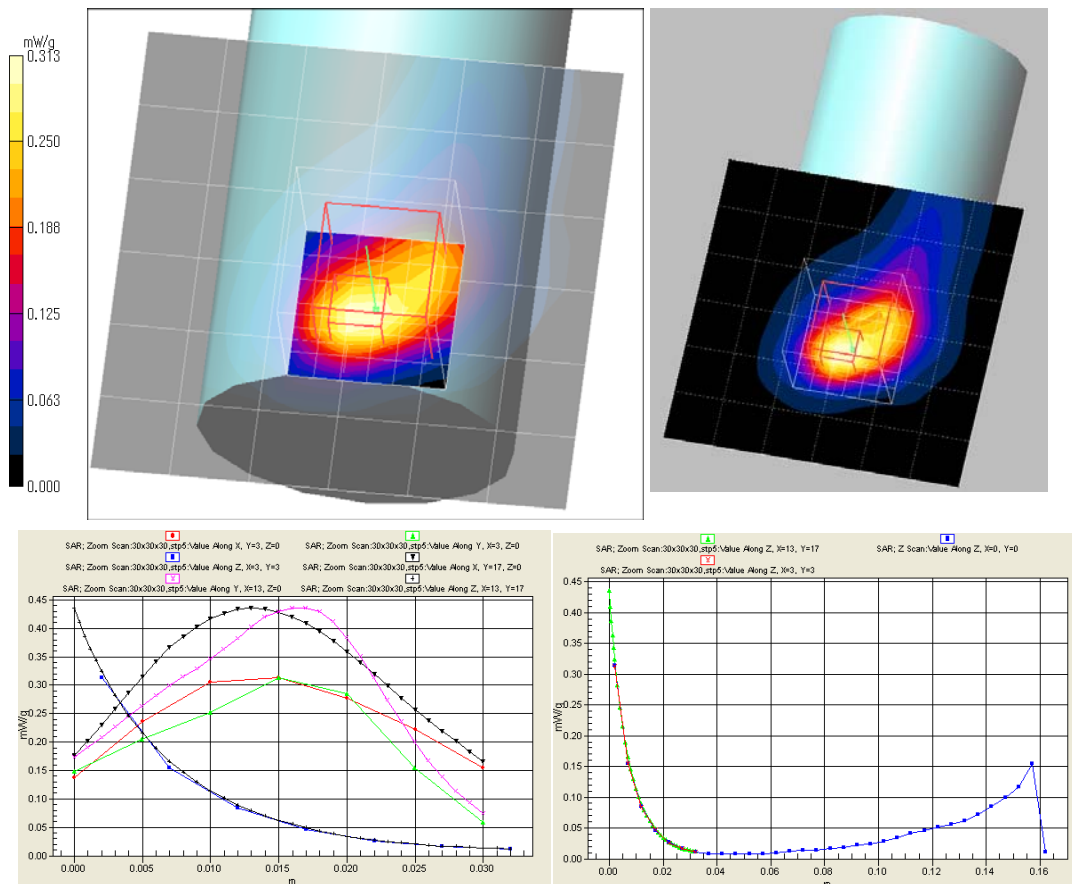
Z Scan (1x1x33): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 0.314 mW/g

Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 10.6 V/m; Power Drift = -0.20 dB; Maximum value of SAR (measured) = 0.313 mW/g

Peak SAR (extrapolated) = 0.436 W/kg

SAR(1 g) = 0.214 mW/g (Worst SAR(1g) of platform(1)); SAR(10 g) = 0.106 mW/g



Additional information:

- *position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm
- *ambient: 24.9deg.C. / 44%RH; liquid temperature: (before) 24.0 deg.C. / (after) 24.0 deg.C.
- *white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

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Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)

Step 2: Change the channels

Step 2-1: 2437MHz / 11b(1Mbps), Left-top & touch (separation distance=0mm), Battery=Large

EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1

Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r7,Chg.CH;L.cvr.-top.side&touch(d0),11b(1m,14dbm),m2437(6)/

Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.224 mW/g

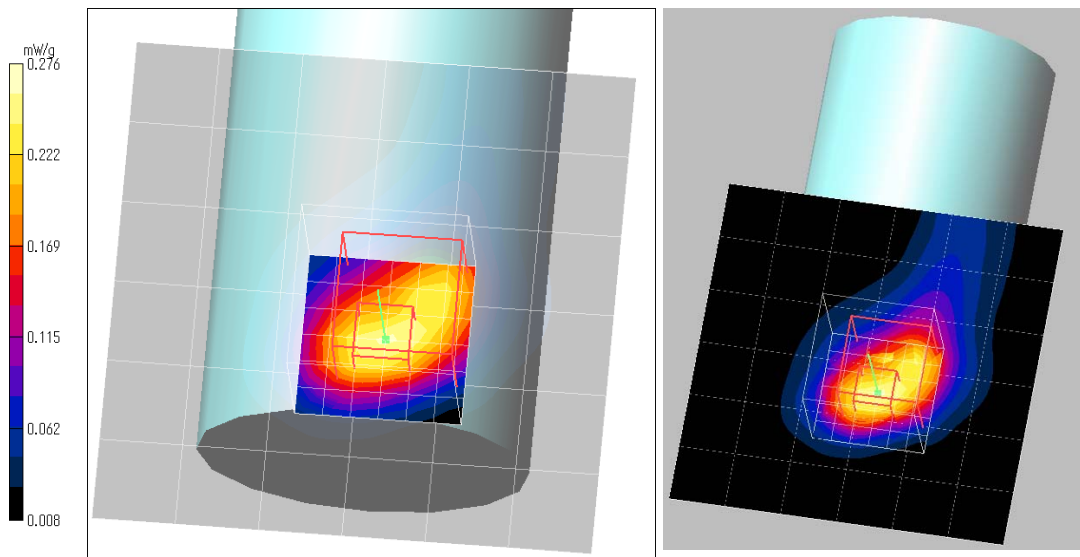
Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.334 mW/g

Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 10.0 V/m; Power Drift = -0.13 dB; Maximum value of SAR (measured) = 0.265 mW/g

Peak SAR (extrapolated) = 0.344 W/kg

SAR(1 g) = 0.179 mW/g; SAR(10 g) = 0.093 mW/g



Additional information:

- *position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm
- *ambient: 24.9deg.C. / 44%RH; liquid temperature: (before) 24.1 deg.C. / (after) 24.0 deg.C.
- *white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 2: Change the channels (cont'd)****Step 2-2: 2412MHz / 11b(1Mbps), Left-top & touch (separation distance=0mm), Battery=Large****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2412 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

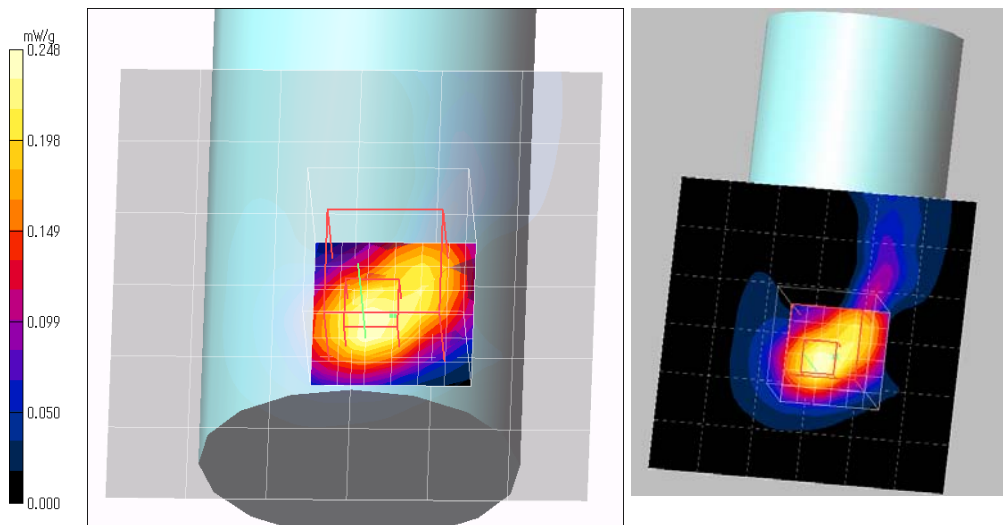
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r9(re-r2),Chg.CH;L.cvr.-top.side&touch(d0),11b(1m,14dbm),m2412(1)/**Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.189 mW/g**Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.457 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 9.37 V/m; Power Drift = 0.188 dB; Maximum value of SAR (measured) = 0.248 mW/g

Peak SAR (extrapolated) = 0.346 W/kg

SAR(1 g) = 0.170 mW/g; SAR(10 g) = 0.087 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm

*ambient: 24.9deg. C. / 43%RH; liquid temperature: (before) 24.0 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 3: Change the battery size****Step 3-1: Battery=Medium / 2462MHz, 11b(1Mbps), Left-top & touch (separation distance=0mm)****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

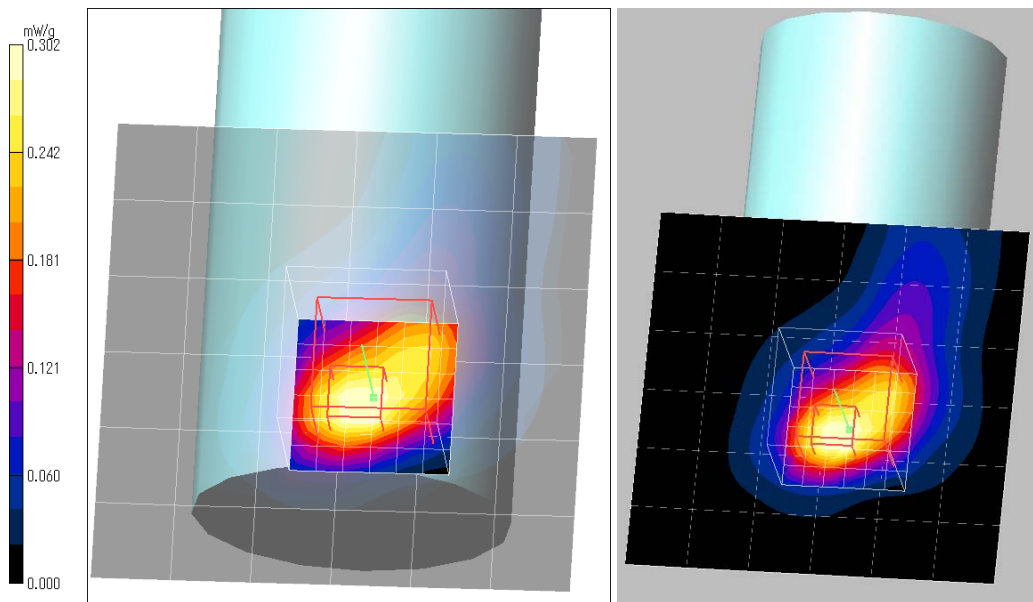
DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r11.chg.Bty=medium;L.cvr.-top.side&touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.256 mW/g**Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.392 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 10.3 V/m; Power Drift = -0.20 dB; Maximum value of SAR (measured) = 0.302 mW/g

Peak SAR (extrapolated) = 0.431 W/kg

SAR(1 g) = 0.211 mW/g; SAR(10 g) = 0.105 mW/g**Additional information:**

- *.position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm
- *.ambient: 24.9deg. C. / 43%RH; liquid temperature: (before) 23.8 deg.C. / (after) 23.7 deg.C.
- *.white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *.Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)**Step 3: Change the battery size (cont'd)****Step 3-2: Battery=Small / 2462MHz, 11b(1Mbps), Left-top & touch (separation distance=0mm)****EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

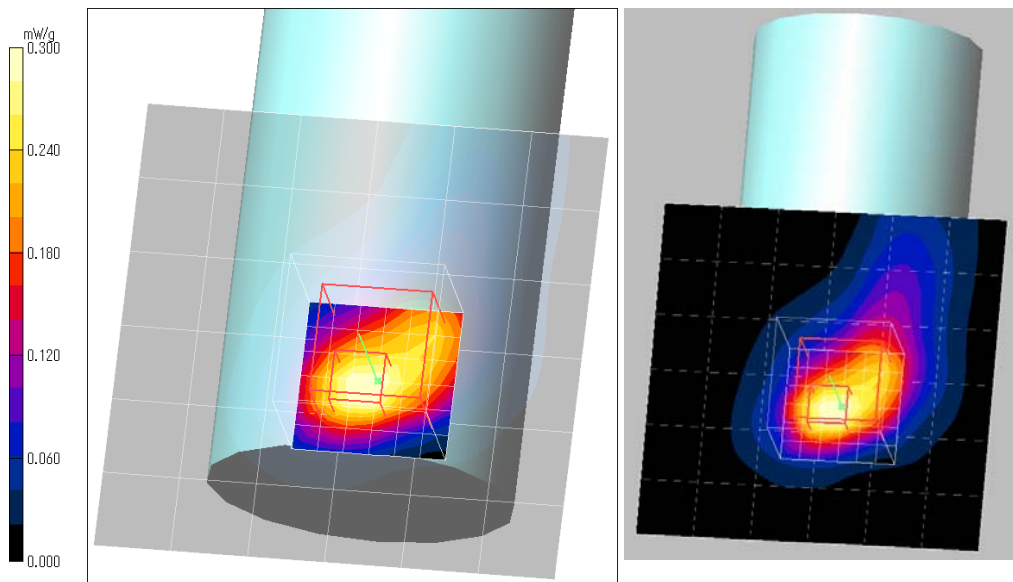
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r12,chg.Bty=small;L.cvr.-top.side&touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (7x7x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.252 mW/g**Area Scan (61x61x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.379 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 10.3 V/m; Power Drift = 0.073 dB; Maximum value of SAR (measured) = 0.300 mW/g

Peak SAR (extrapolated) = 0.428 W/kg

SAR(1 g) = 0.206 mW/g; SAR(10 g) = 0.101 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm

*ambient: 24.9deg. C. / 42%RH; liquid temperature: (before) 23.7 deg.C. / (after) 23.6 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-2: Measurement data / Platform(1): Video camera(1) (cont'd)

Step 4: Change the operation mode

Step 4-1: 11n-40HT(MCS0) / 2422MHz, Left-top & touch (separation distance=0mm), Battery=Medium

EUT: WLAN module (Platform: Video camera(1)); Type: WM217; Serial: 8C1

Communication System: 11n-40HT(MCS0, BPSK/OFDM); Frequency: 2422 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used (24.5deg.C.): $f = 2450$ MHz; $\sigma = 1.94$ S/m; $\epsilon_r = 50.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r10,Chg.mode;L.cvr.-top.side&touch(d0),11n-40ht(mcs0,12dbm),m2422(3)/

Area Scan (7x7x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.139 mW/g

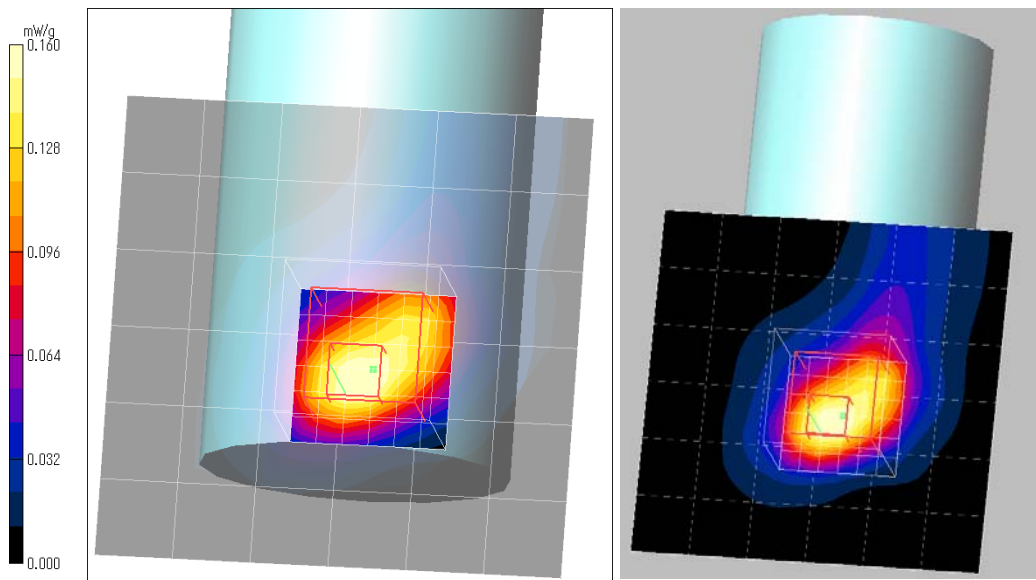
Area Scan (61x61x1): Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.211 mW/g

Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 7.96 V/m; Power Drift = -0.178 dB; Maximum value of SAR (measured) = 0.160 mW/g

Peak SAR (extrapolated) = 0.232 W/kg

SAR(1 g) = 0.113 mW/g; SAR(10 g) = 0.059 mW/g



Additional information:

- *position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 158mm
- *ambient: 24.9deg.C. / 43%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.8 deg.C.
- *white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 16, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2)**Step 1: Worst position search****Step 1-1: Left & separation distance=10mm with a hand strap , 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

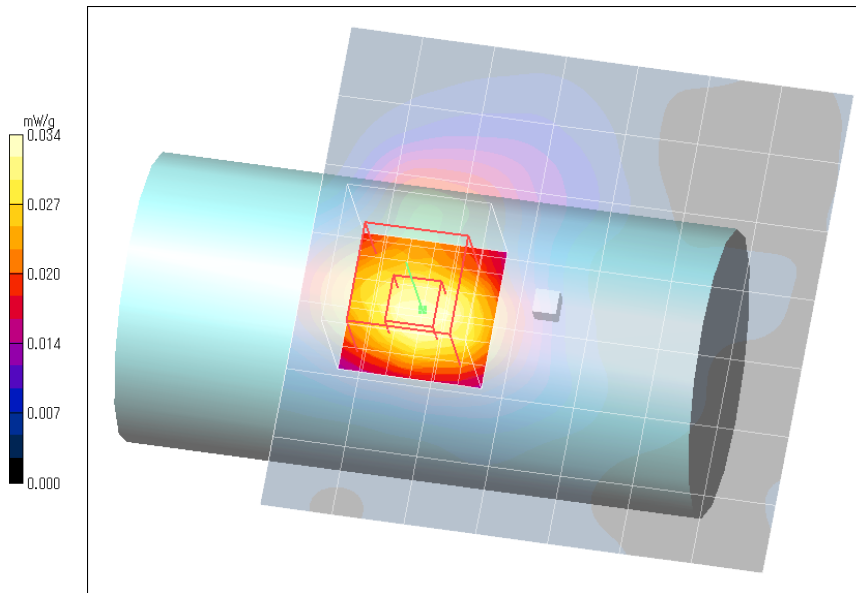
- Phantom: ELI4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r14(re-r2),L.cvr.side&w/hand.starp&touch(d10mm),11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.035 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.037 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 1.94 V/m; Power Drift = 0.20 dB, Maximum value of SAR (measured) = 0.034 mW/g

Peak SAR (extrapolated) = 0.043 W/kg

SAR(1 g) = 0.025 mW/g; SAR(10 g) = 0.015 mW/g**Additional information:**

*position: distance of EUT to phantom: 10mm (12mm to liquid), liquid depth: 154mm

*ambient: 24.4deg. C. / 52%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 1: Worst position search (cont'd)****Step 1-2: Left & separation distance=10mm without a hand strap (air gap), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

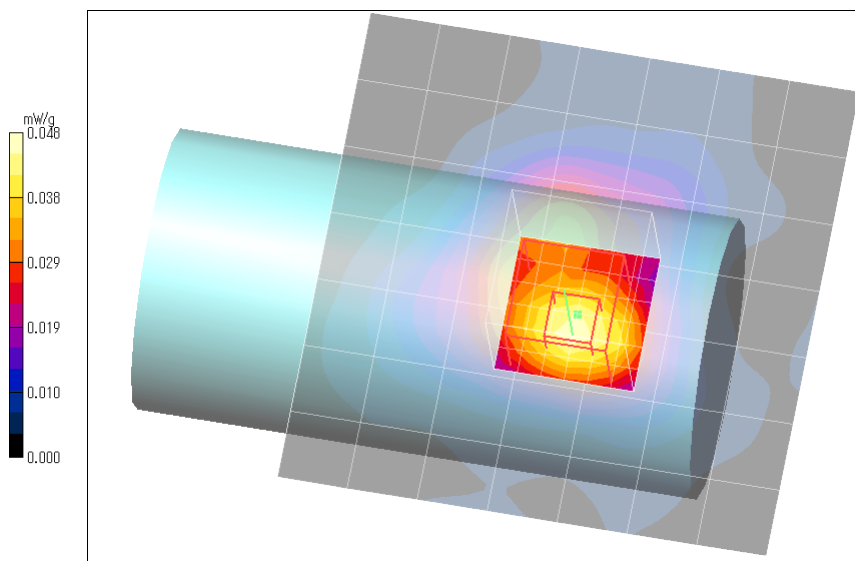
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r15(re-r3),L.cvr.side&no-hand.strap&d10mm,11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.046 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.051 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.36 V/m; Power Drift = -0.179 dB; Maximum value of SAR (measured) = 0.048 mW/g

Peak SAR (extrapolated) = 0.064 W/kg

SAR(1 g) = 0.034 mW/g; SAR(10 g) = 0.020 mW/g**Additional information:**

*position: distance of EUT to phantom: 10mm (12mm to liquid), liquid depth: 154mm

*ambient: 24.4deg.C. / 52%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 1: Worst position search (cont'd)****Step 1-3: Right (LCD: normal close position) & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

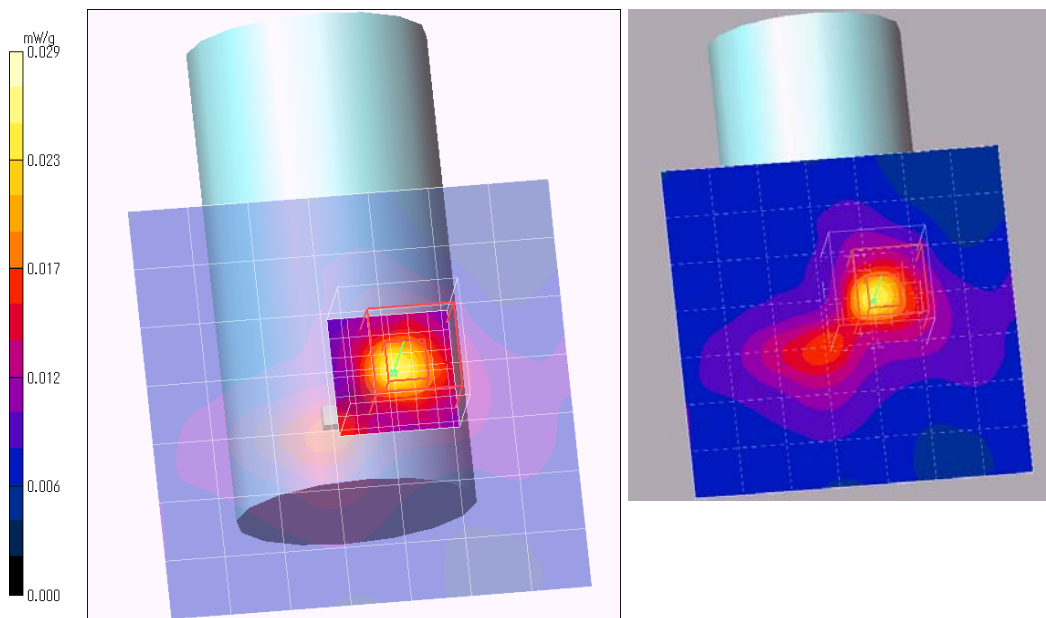
DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r10,R.cvr.side/lcd-close&touch(d0,11b(1m,14dbm),m2462/**Area Scan: (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.025 mW/g**Area Scan: (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.025 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 1.98 V/m; Power Drift = 0.168 dB; Maximum value of SAR (measured) = 0.029 mW/g

Peak SAR (extrapolated) = 0.053 W/kg

SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.012 mW/g**Additional information:**

- *.position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm
- *.ambient: 24.9deg. C. / 62%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.
- *.white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *.Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 1: Worst position search (cont'd)****Step 1-4: Front (Lens) & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

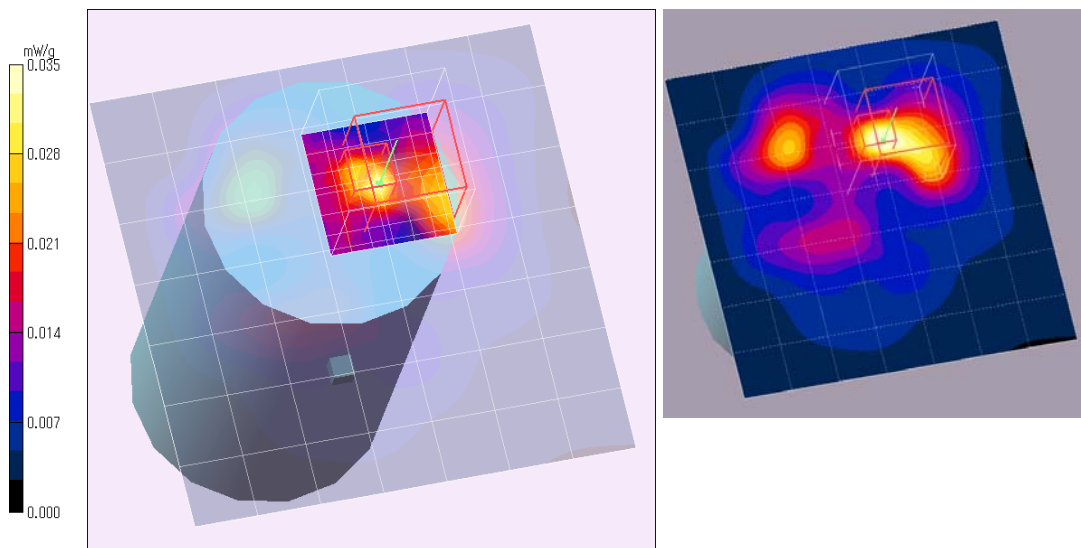
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r11,front&touch(d0),11b(1m,14dbm),m2462/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.037 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.038 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 2.15 V/m; Power Drift = 0.20 dB; Maximum value of SAR (measured) = 0.035 mW/g

Peak SAR (extrapolated) = 0.074 W/kg

SAR(1 g) = 0.017 mW/g; SAR(10 g) = 0.00928 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*ambient: 24.9deg.C. / 62%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 1: Worst position search (cont'd)****Step 1-5: Top & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

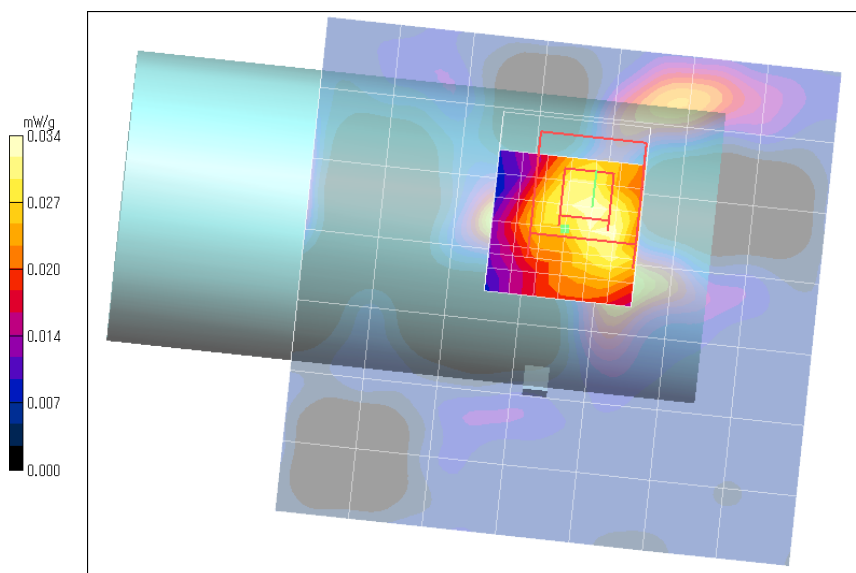
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc,r12,Top&touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.028 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.061 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 3.23 V/m; Power Drift = 0.146 dB; Maximum value of SAR (measured) = 0.034 mW/g

Peak SAR (extrapolated) = 0.048 W/kg

SAR(1 g) = 0.024 mW/g; SAR(10 g) = 0.015 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*ambient: 24.9deg. C. / 62%RH; liquid temperature: (before) 24.0 deg.C./(after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 1: Worst position search (cont'd)****Step 1-6: Bottom & touch (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

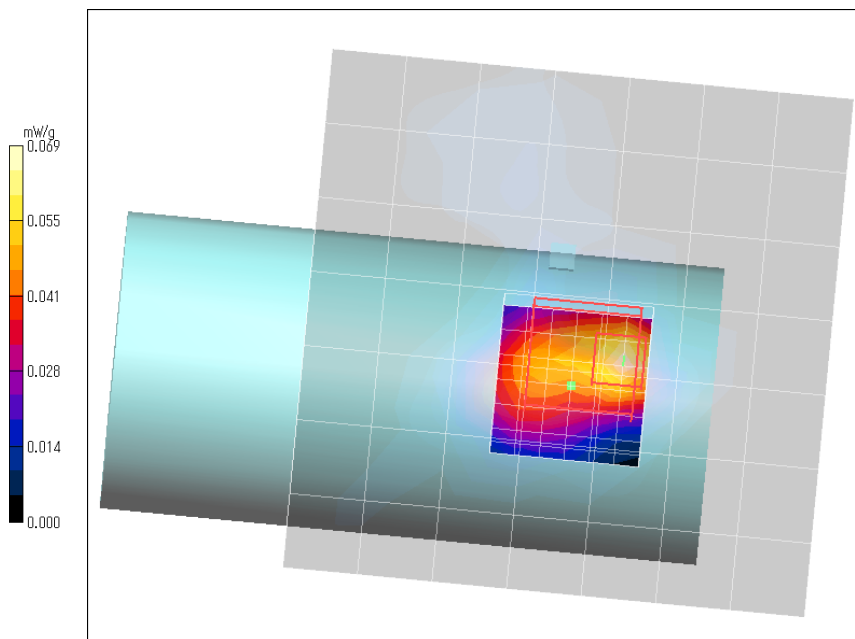
- Phantom: ELI4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc,r13-2,Btm&touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.056 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.090 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 1.60 V/m; Power Drift = 0.20 dB; Maximum value of SAR (measured) = 0.069 mW/g

Peak SAR (extrapolated) = 0.095 W/kg

SAR(1 g) = 0.044 mW/g; SAR(10 g) = 0.023 mW/g**Additional information:**

*.position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*.ambient: 24.4deg.C. / 52%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*.white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*.Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 1: Worst position search (cont'd)****Step 1-7: Left-top & touch** (separation distance=0mm), 2462MHz, 11b(1Mbps), Battery=Large**EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

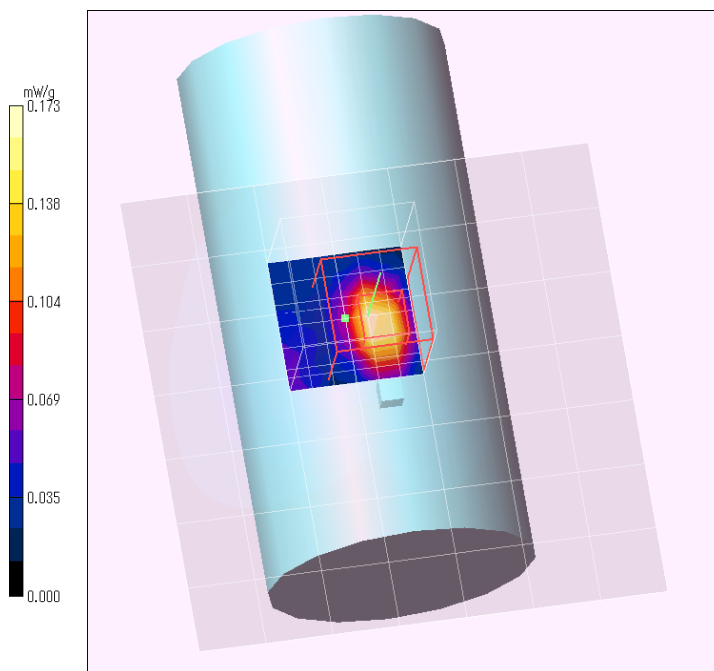
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r4,L.cvr.-top.side&hand-grip&touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.072 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.076 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.88 V/m; Power Drift = 0.112 dB; Maximum value of SAR (measured) = 0.173 mW/g

Peak SAR (extrapolated) = 0.282 W/kg

SAR(1 g) = 0.110 mW/g; SAR(10 g) = 0.040 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*ambient: 24.2deg.C. / 60%RH; liquid temperature: (before) 23.8 deg.C. / (after) 23.8 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)

Step 2: Change the channels

Step 2-1: 2437MHz / 11b(1Mbps), Left-top & touch (separation distance=0mm), Battery=Large

EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1

Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2437 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r7(re-r6),chg,CH:L.cvr.-top.side&hand-grip&touch(d0),11b(1m,14dbm),m2437(6)/

Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.108 mW/g

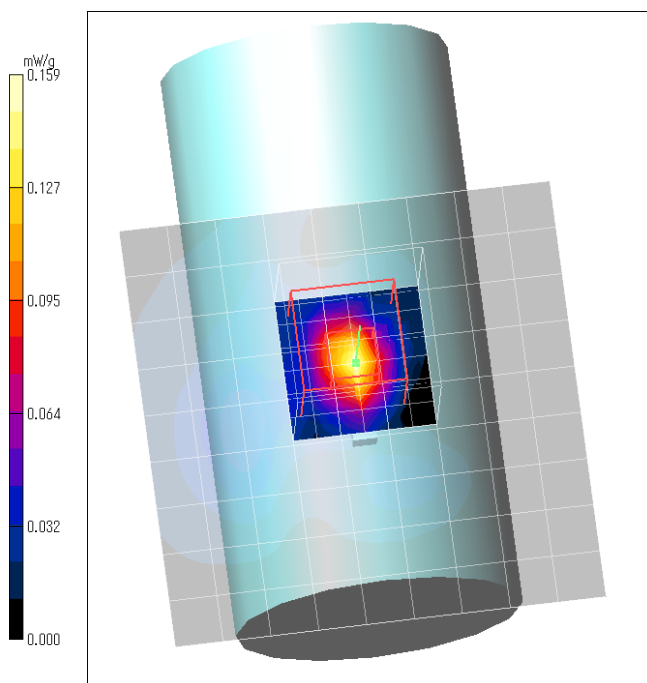
Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (interpolated) = 0.141 mW/g

Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.29 V/m; Power Drift = 0.20 dB; Maximum value of SAR (measured) = 0.159 mW/g

Peak SAR (extrapolated) = 0.232 W/kg

SAR(1 g) = 0.094 mW/g; SAR(10 g) = 0.035 mW/g



Additional information:

- *position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm
- *ambient: 24.6deg. C. / 62%RH; liquid temperature: (before) 23.8 deg.C. / (after) 23.8 deg.C.
- *white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 2: Change the channels (con'td)****Step 2-2: 2412MHz / 11b(1Mbps), Left-top & touch (separation distance=0mm), Battery=Large****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2412 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

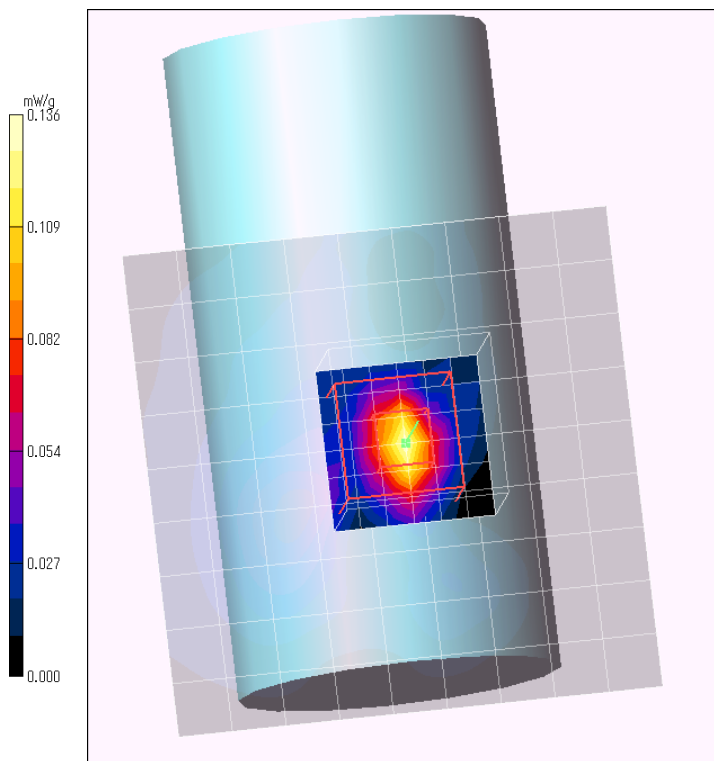
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r8(re-r5),chg,CH:L.cvr.-top.side&hand-grip&touch(d0),11b(1m,14dbm),m2412(1)/**Area Scan (10x10x1):** Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.117 mW/g**Area Scan (91x91x1):** Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (interpolated) = 0.126 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 5.71 V/m; Power Drift = 0.20 dB; Maximum value of SAR (measured) = 0.136 mW/g

Peak SAR (extrapolated) = 0.194 W/kg

SAR(1 g) = 0.078 mW/g; SAR(10 g) = 0.030 mW/g**Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*ambient: 24.6deg.C. / 62%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 3: Change the battery size****Step 3-1: Battery=Medium / 2462MHz, 11b(1Mbps), Left-top & touch (separation distance=0mm)****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

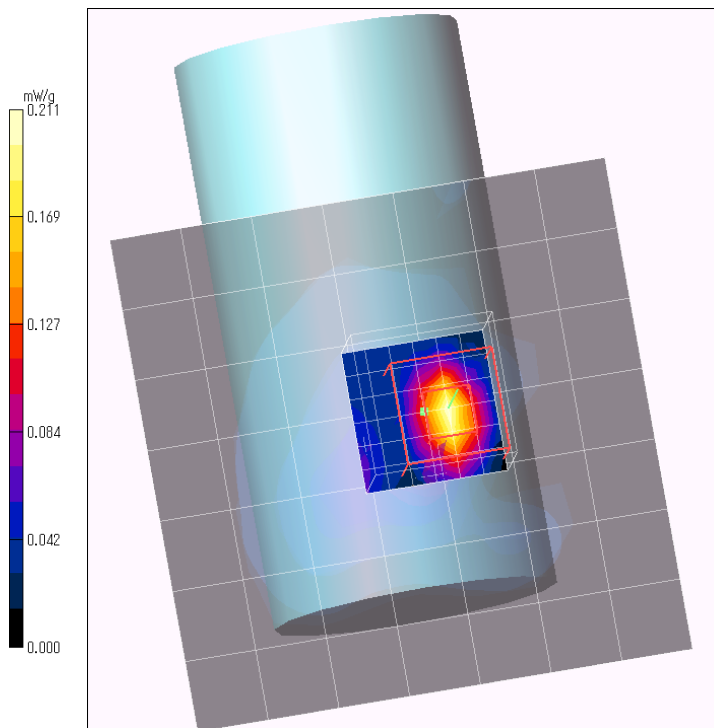
DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn626; Calibrated: 2011/02/10
- Phantom: ELI4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r16,Battery=M,L.cvr.-top.side&body-touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.158 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.170 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.43 V/m; Power Drift = 0.0987 dB; Maximum value of SAR (measured) = 0.211 mW/g

Peak SAR (extrapolated) = 0.300 W/kg

SAR(1 g) = 0.123 mW/g; SAR(10 g) = 0.046 mW/g**Additional information:**

- *.position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm
- *.ambient: 24.4deg.C. / 52%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.
- *.white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)
- *.Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)**Step 3: Change the battery size (cont'd)****Step 3-2: Battery=Small / 2462MHz, 11b(1Mbps), Left-top & touch (separation distance=0mm)****> Worst SAR(1g) of platform (2)****EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1****Communication System: 11b(1Mbps, DBPSK/DSSS); Frequency: 2462 MHz; Crest Factor: 1.0****Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³**

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

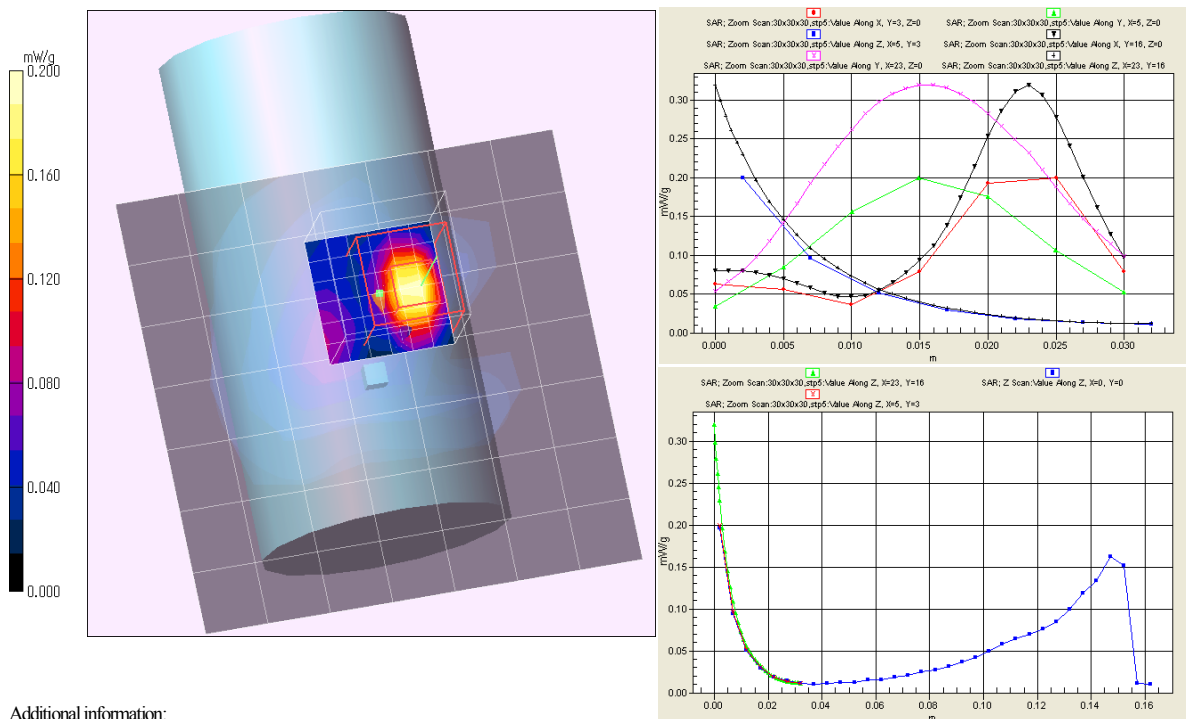
- Phantom: ELI4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r17,Battery=S,L.cvr.-top.side&body-touch(d0),11b(1m,14dbm),m2462(11)/**Area Scan (8x8x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.139 mW/g**Area Scan (71x71x1):** Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (interpolated) = 0.152 mW/g**Z Scan (1x1x33):** Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 0.196 mW/g**Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 2.48 V/m; Power Drift = -0.167 dB; Maximum value of SAR (measured) = 0.200 mW/g

Peak SAR (extrapolated) = 0.320 W/kg

SAR(1 g) = 0.131 mW/g (Worst SAR(1g) of platform (2));**SAR(10 g) = 0.049 mW/g****Additional information:**

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*ambient: 24.5deg.C. / 55%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011

Appendix 2-3: Measurement data / Platform(2): Video camera(2) (con'd)

Step 4: Change the operation mode

Step 4-1: 11n(40HT) (MCS0) / 2422MHz, Left-top & touch (separation distance=0mm) , Battery=Large

EUT: WLAN module (Platform: Video camera(2)); Type: WM217; Serial: 8C1

Communication System: 11n-40HT(MCS0, BPSK/OFDM); Frequency: 2422 MHz; Crest Factor: 1.0

Medium: M2450; Medium parameters used(24.1deg.C.): $f = 2450$ MHz; $\sigma = 1.93$ S/m; $\epsilon_r = 50.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3679; ConvF(7.34, 7.34, 7.34); Calibrated: 2011/05/19

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

- Electronics: DAE4 Sn626; Calibrated: 2011/02/10

- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section

- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 184

fcc.r9,chg.mode:11n-40HT(mcs0),L.cvr.-top.side&hand-grip&touch(d0),m2422(3)/

Area Scan (10x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.081 mW/g

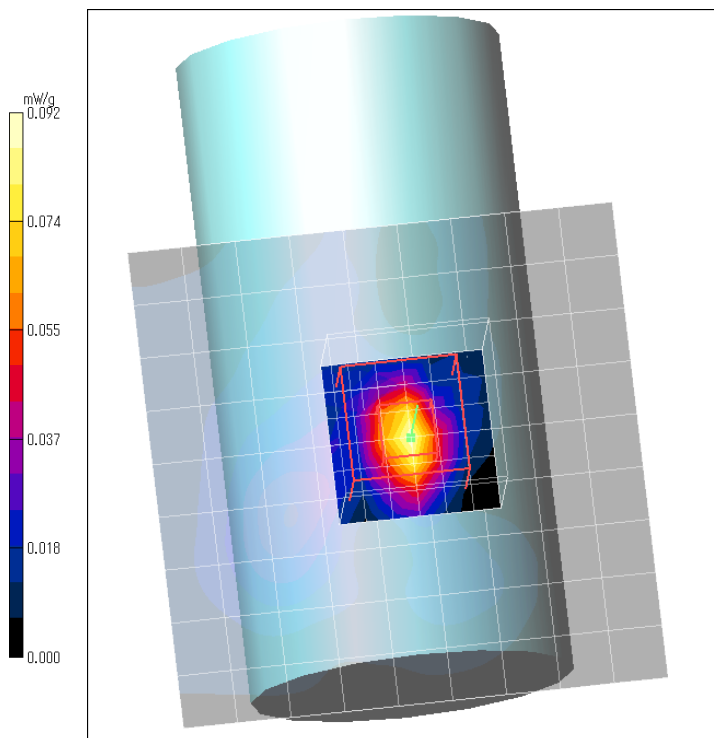
Area Scan (91x91x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (interpolated) = 0.088 mW/g

Zoom Scan:30x30x30,stp5 (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm;

Reference Value = 4.74 V/m; Power Drift = 0.20 dB, Maximum value of SAR (measured) = 0.092 mW/g

Peak SAR (extrapolated) = 0.135 W/kg

SAR(1 g) = 0.055 mW/g; SAR(10 g) = 0.021 mW/g



Additional information:

*position: distance of EUT to phantom: 0mm (2mm to liquid), liquid depth: 154mm

*ambient: 24.6deg. C. / 62%RH; liquid temperature: (before) 23.9 deg.C. / (after) 23.9 deg.C.

*white cubic: zoom scan area, red big cubic: SAR(10g), red small cubic: SAR(1g)

*Tested by: Hiroshi Naka / Tested place: No.7 shielded room / Date tested: September 21, 2011