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 more than or equal to 28mm(X axis)×28mm(Y axis)×24mm (Z axis) was assessed by measuring 8×8×7 (ratio step method (*1)) points (or more) for 3-6GHz frequency band.
Any additional peaks found in the Step2 which are within 2dB of limit are repeated with this Step3 (Zoom scan).
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. 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). 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.

*1. Ratio step method parameters used; the first measurement point: "1.4mm" from the phantom surface, the initial grid separation: "1.4mm", subsequent graded grid ratio: "1.4". These parameters comply with the requirement of the KDB 865664 D01 (v01) and recommended by Schmid & Partner Engineering AG (DASY5 manual).

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid

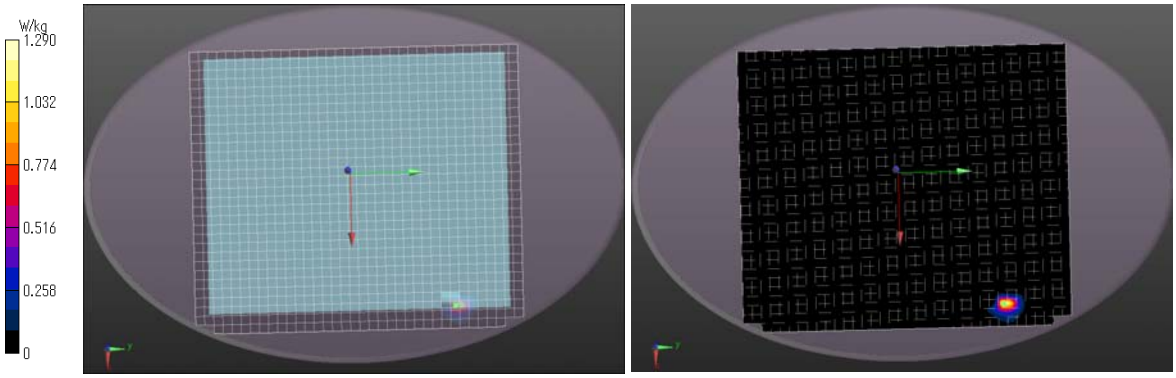
Step 0: Area scan on the whole surface of the front side of EUT (Reference purpose only)

Step 0a-1: 5280MHz (56ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5280 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5280 MHz; σ = 5.561 S/m; ε_r = 47.10; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.98, 3.98, 3.98); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-1,ant=main,frt&d=0mm,11a(6m),m5280/
Area Scan:312x360,10 (32x37x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.746 W/kg
Area Scan:312x360,10 (311x361x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.29 W/kg



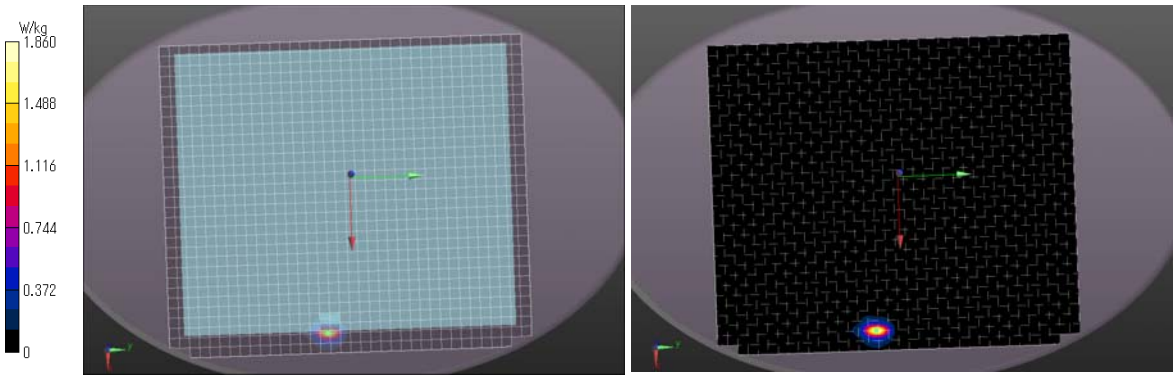
Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.0(start)/23.0(end)/23.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Step 0a-2: 5260MHz (52ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5260 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5260 MHz; σ = 5.553 S/m; ε_r = 47.22; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.98, 3.98, 3.98); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-2,ant=sub,frt&d=0mm,11a(6m),m5260/
Area Scan:312x360,10 (32x37x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.83 W/kg
Area Scan:312x360,10 (311x361x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.86 W/kg



Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.0(start)/23.0(end)/23.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid

Step 1a: Change the channels

Step 1a-1: 5180MHz (36ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35

Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5180 MHz; Crest Factor: 1.0

Medium: MSL5800; Medium parameters used: f = 5180 MHz; σ = 5.439 S/m; ε_r = 47.30; ρ = 1000 kg/m^3

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

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(4.13, 4.13, 4.13); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-7,ant=main,frt&d=0mm,11a(6m),m5180/

Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.63 W/kg

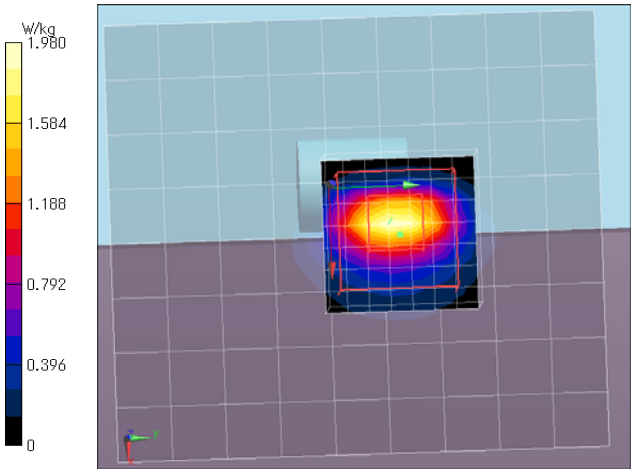
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.76 W/kg

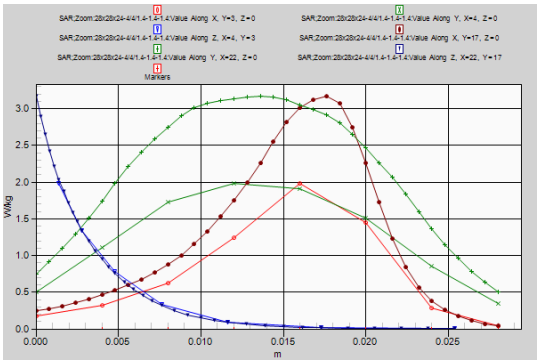
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.97 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 19.878 V/m; Power Drift = 0.14 dB, Maximum value of SAR (measured) = 1.98 W/kg

Peak SAR (extrapolated) = 3.175 mW/g

SAR(1 g) = 0.797 mW/g; SAR(10 g) = 0.220 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.1(start)/23.1(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

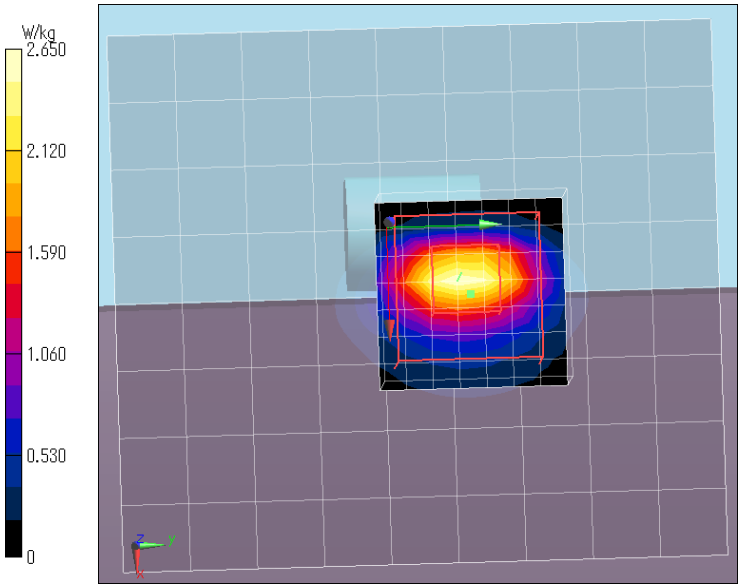
Step 1a-2: 5220MHz (36ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)
->Worst reported SAR(1g) of the main antenna in 5180-5320MHz (W52/53) band

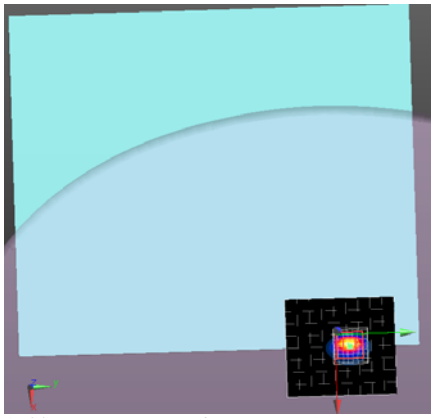
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5220 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5220 MHz; σ = 5.458 S/m; ε_r = 47.41; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

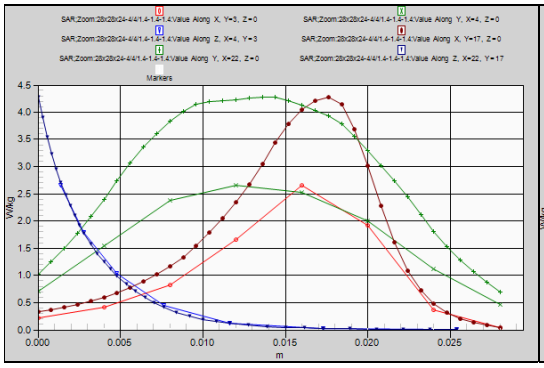
DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(4.13, 4.13, 4.13); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

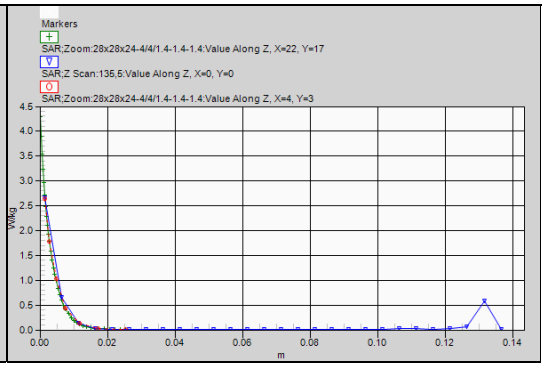
portable,near-body/b52/53-8,ant=main,frt&d=0mm,11a(6m),m5220/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 2.23 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 2.41 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.66 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 22.999 V/m; Power Drift = 0.11 dB, Maximum value of SAR (measured) = 2.65 W/kg
Peak SAR (extrapolated) = 4.283 mW/g
SAR(1 g) = 1.06 mW/g; SAR(10 g) = 0.294 mW/g




(With no transparency of an area scan.)





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.1(start)/23.2(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

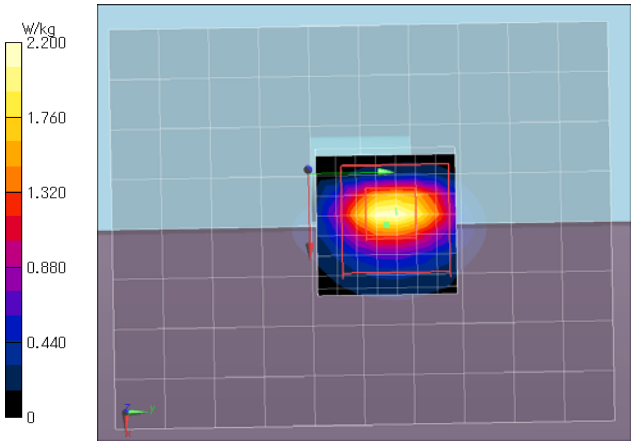
Step 1a-3: 5280MHz (56ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

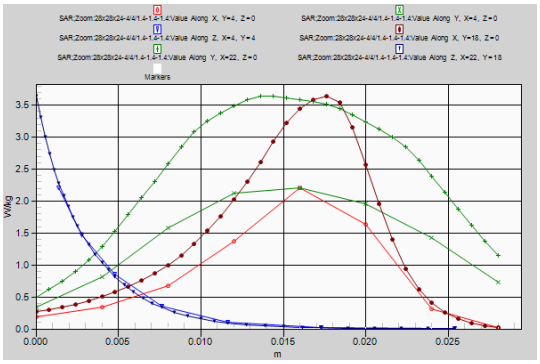
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5280 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5280 MHz; σ = 5.561 S/m; ε_r = 47.10; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:[-Probe: EX3DV4 - SN3679; ConvF(3.98, 3.98, 3.98); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-6,ant=main,frt&d=0mm,11a(6m),m5280/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.69 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 2.04 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.22 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 20.955 V/m; Power Drift = 0.00 dB, Maximum value of SAR (measured) = 2.20 W/kg
Peak SAR (extrapolated) = 3.648 mW/g
SAR(1 g) = 0.880 mW/g; SAR(10 g) = 0.242 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.2(start)/23.1(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

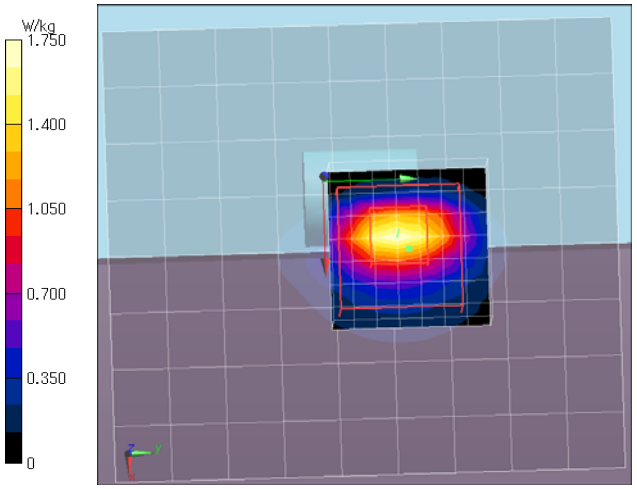
Step 1a-4: 5320MHz (64ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

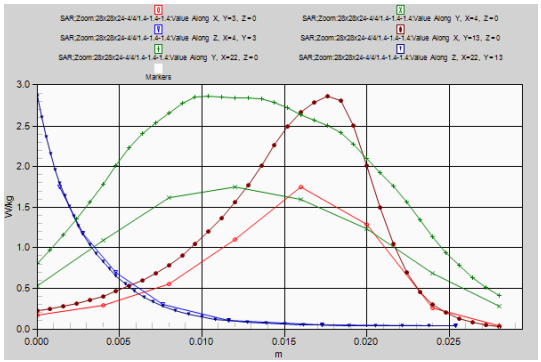
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5320 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5320 MHz; σ = 5.616 S/m; ε_r = 47.23; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.98, 3.98, 3.98); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-9,ant=main,frt&d=0mm,11a(6m),m5320/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.49 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.58 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.76 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 18.316 V/m; Power Drift = 0.02 dB, Maximum value of SAR (measured) = 1.75 W/kg
Peak SAR (extrapolated) = 2.873 mW/g
SAR(1 g) = 0.708 mW/g; SAR(10 g) = 0.216 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.2(start)/23.3(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

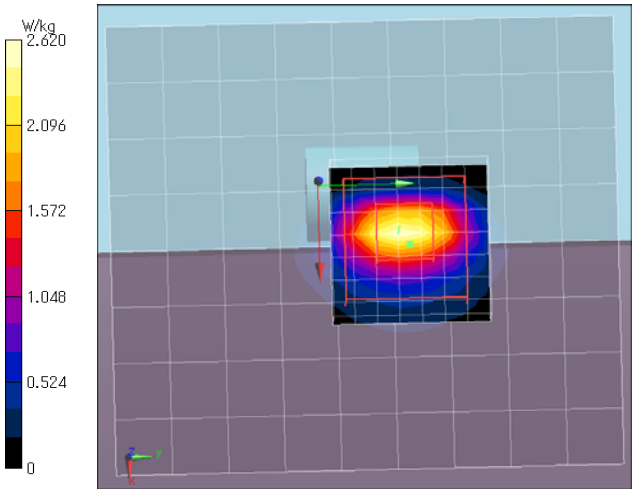
Step 1a-5: 5220MHz (44ch)-repeated / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

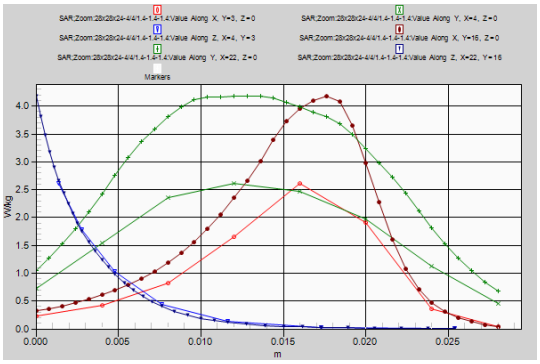
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5220 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5220 MHz; σ = 5.458 S/m; ε_r = 47.41; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(4.13, 4.13, 4.13); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-10(#8-rep),ant=main,frt&d=0mm,11a(6m),m5220/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 2.17 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 2.32 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.64 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 22.933 V/m; Power Drift = 0.14 dB, Maximum value of SAR (measured) = 2.62 W/kg
Peak SAR (extrapolated) = 4.186 mW/g
SAR(1 g) = 1.05 mW/g; SAR(10 g) = 0.290 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.3(start)/23.3(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

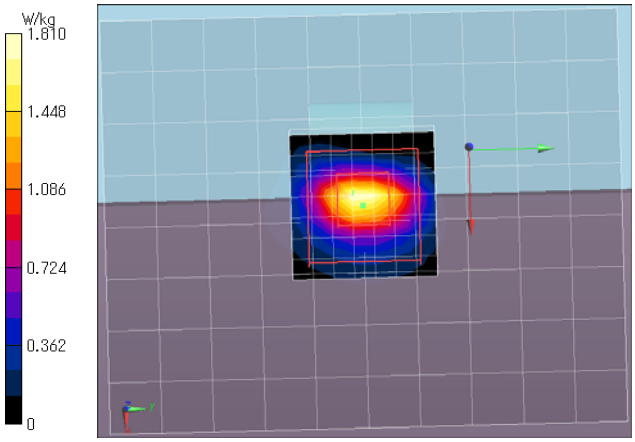
Step 1a-6: 5180MHz (36ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

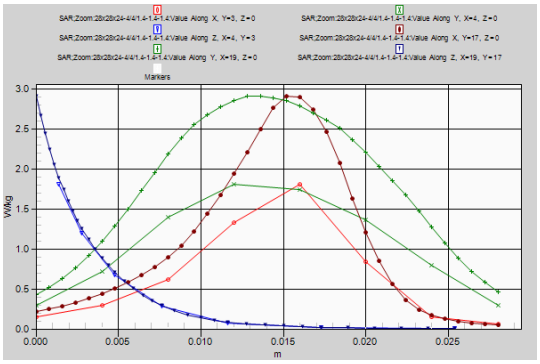
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5180 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5180 MHz; σ = 5.439 S/m; ε_r = 47.30; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(4.13, 4.13, 4.13); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-2,ant=sub,frt&d=0mm,11a(6m),m5180/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.14 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.27 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.81 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 20.416 V/m; Power Drift = 0.03 dB, Maximum value of SAR (measured) = 1.81 W/kg
Peak SAR (extrapolated) = 2.919 mW/g
SAR(1 g) = 0.691 mW/g; SAR(10 g) = 0.183 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.1(start)/23.2(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

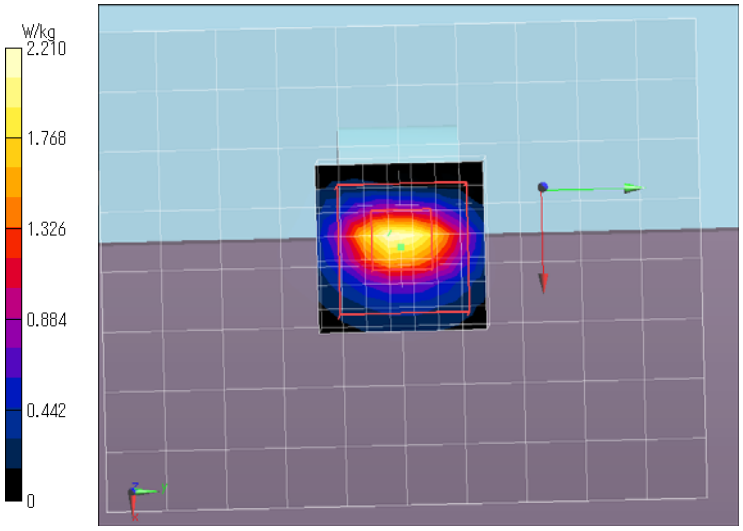
Step 1a-7: 5240MHz (48ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)
->Worst reported SAR(1g) of the Sub antenna in 5180-5320MHz (W52/53) band

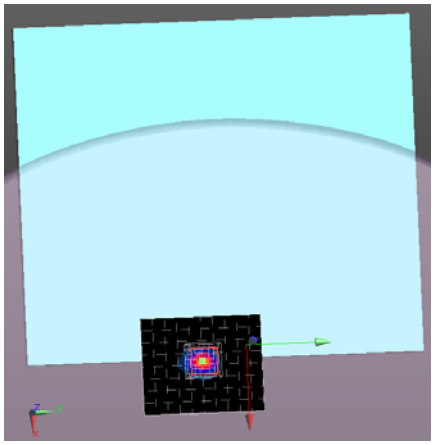
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5240 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5240 MHz; σ = 5.474 S/m; ε_r = 47.37; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

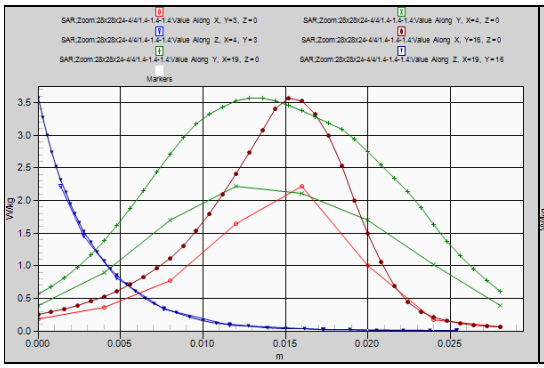
DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(4.13, 4.13, 4.13); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

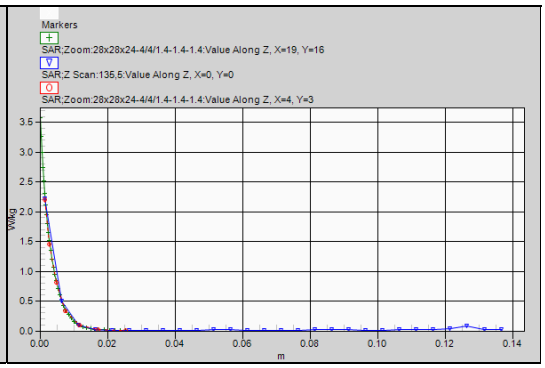
portable,near-body/b52/53-3,ant=sub,frt&d=0mm,11a(6m),m5240/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.41 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.56 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.22 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 22.550 V/m; Power Drift = 0.07 dB, Maximum value of SAR (measured) = 2.21 W/kg
Peak SAR (extrapolated) = 3.573 mW/g
SAR(1 g) = 0.837 mW/g; SAR(10 g) = 0.222 mW/g




(With no transparency of an area scan.)





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.2(start)/23.2(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

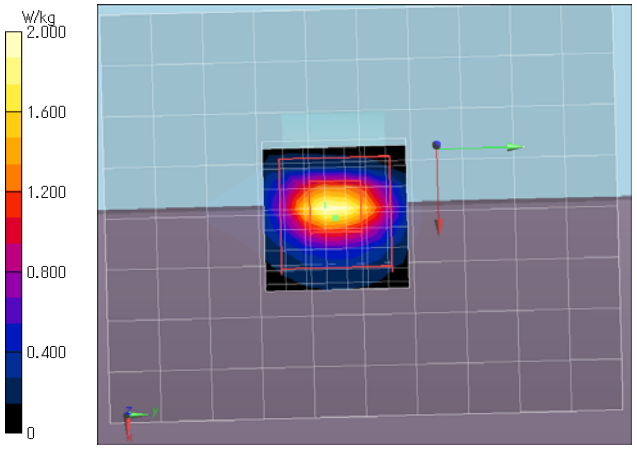
Step 1a-8: 5260MHz (52ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

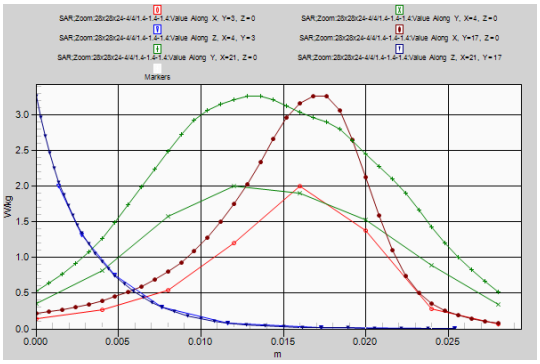
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5260 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5260 MHz; σ = 5.553 S/m; ε_r = 47.22; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.98, 3.98, 3.98); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-1,ant=sub,frt&d=0mm,11a(6m),m5260/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.59 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.91 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.02 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 19.849 V/m; Power Drift = 0.01 dB, Maximum value of SAR (measured) = 2.00 W/kg
Peak SAR (extrapolated) = 3.265 mW/g
SAR(1 g) = 0.763 mW/g; SAR(10 g) = 0.202 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.0(start)/23.1(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

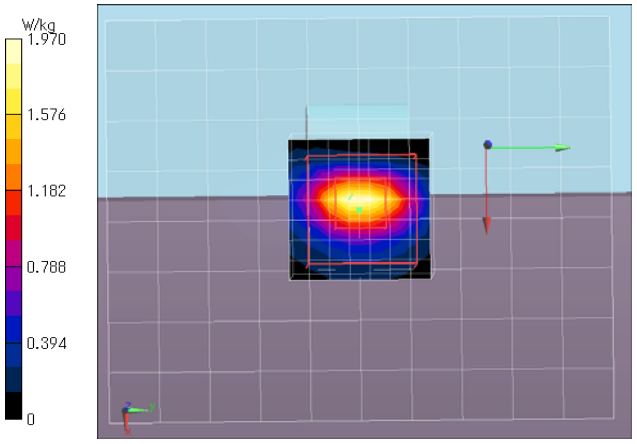
Step 1a-9: 5320MHz (64ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

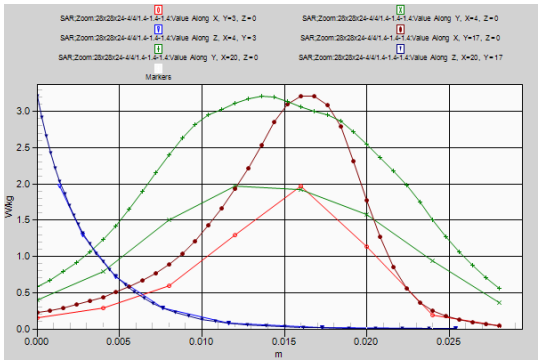
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5320 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5320 MHz; σ = 5.616 S/m; ε_r = 47.23; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.98, 3.98, 3.98); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-4,ant=sub,frt&d=0mm,11a(6m),m5320/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.33 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.41 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.94 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 20.317 V/m; Power Drift = -0.01 dB, Maximum value of SAR (measured) = 1.97 W/kg
Peak SAR (extrapolated) = 3.215 mW/g
SAR(1 g) = 0.741 mW/g; SAR(10 g) = 0.197 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.2(start)/23.2(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-2: Measurement data (5180-5320 MHz, W52/53 band) / Body liquid (cont'd)
Step 1a: Change the channels (cont'd)

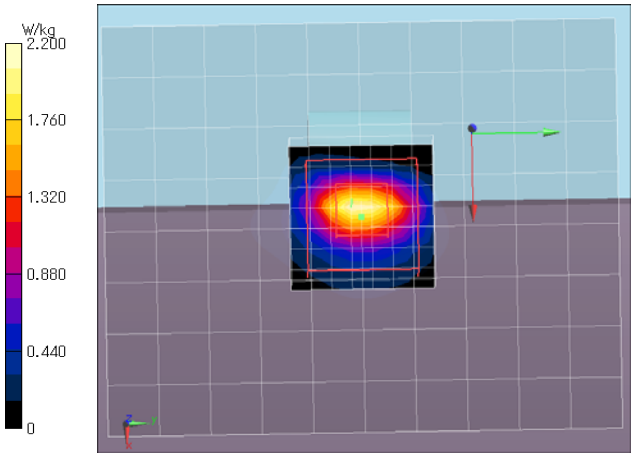
Step 1a-10:5240MHz (48ch)-repeated / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

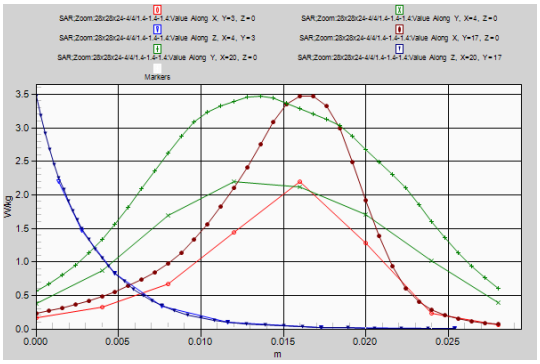
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5240 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5240 MHz; σ = 5.474 S/m; ε_r = 47.37; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(4.13, 4.13, 4.13); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b52/53-5(#3-rep),ant=sub,frt&d=0mm,11a(6m),m5240/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.47 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.55 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.24 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 21.633 V/m; Power Drift = 0.12 dB, Maximum value of SAR (measured) = 2.20 W/kg
Peak SAR (extrapolated) = 3.477 mW/g
SAR(1 g) = 0.831 mW/g; SAR(10 g) = 0.220 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.2(start)/23.2(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid

Step 1b: Change the channels

Step 1b-1: 5500MHz (100ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35

Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5500 MHz; Crest Factor: 1.0

Medium: MSL5800; Medium parameters used: f = 5500 MHz; σ = 5.87 S/m; ε_r = 46.86; ρ = 1000 kg/m^3

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

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.7, 3.7, 3.7); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

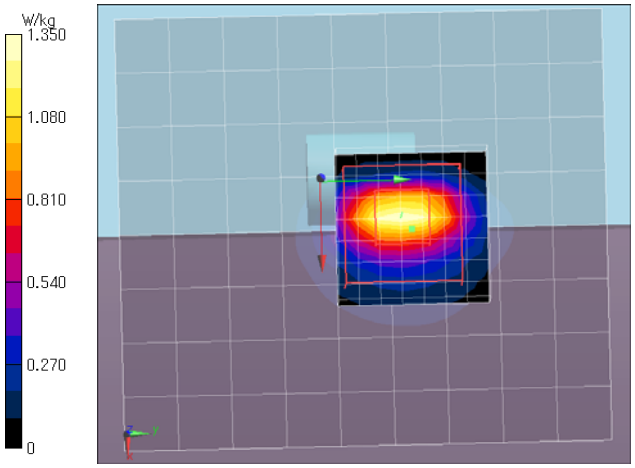
portable,near-body/b56-1,ant=main,frt&d=0mm,11a(6m),m5500/

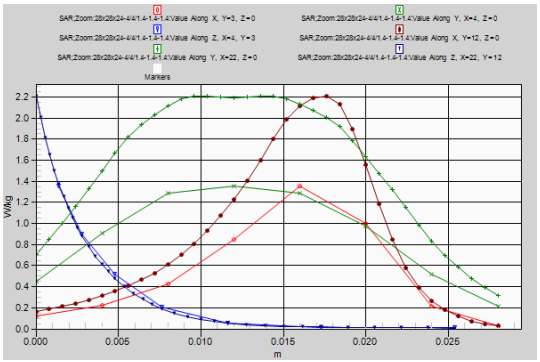
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.14 W/kg

Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.26 W/kg

Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.37 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 15.949 V/m; Power Drift = 0.13 dB, Maximum value of SAR (measured) = 1.35 W/kg
Peak SAR (extrapolated) = 2.212 mW/g
SAR(1 g) = 0.542 mW/g; SAR(10 g) = 0.154 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.3(start)/23.3(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

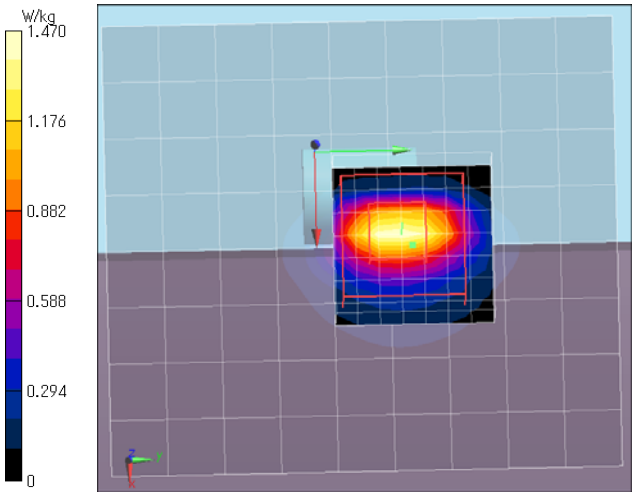
Step 1b-2: 5580MHz (116ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

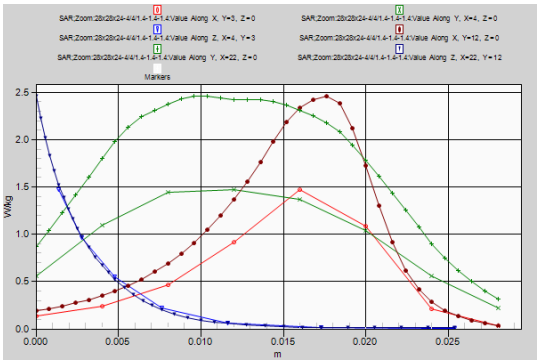
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5580 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5580 MHz; σ = 5.961 S/m; ε_r = 46.72; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.61, 3.61, 3.61); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b56-2,ant=main,frt&d=0mm,11a(6m),m5580/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.27 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.36 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.48 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 16.508 V/m; Power Drift = 0.14 dB, Maximum value of SAR (measured) = 1.47 W/kg
Peak SAR (extrapolated) = 2.464 mW/g
SAR(1 g) = 0.584 mW/g; SAR(10 g) = 0.165 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.3(start)/23.3(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

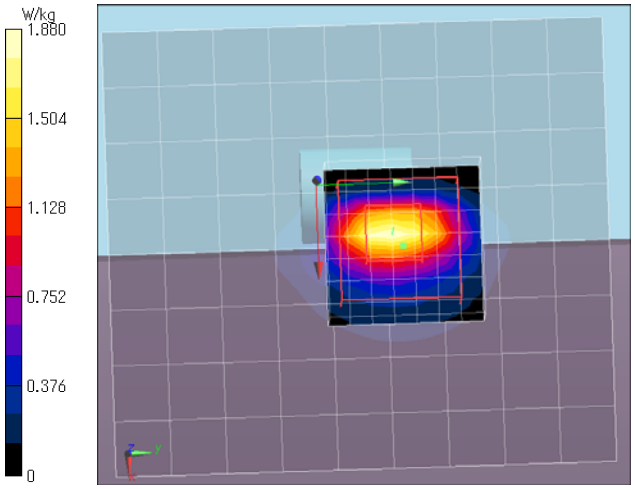
Step 1b-3: 5620MHz (124ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

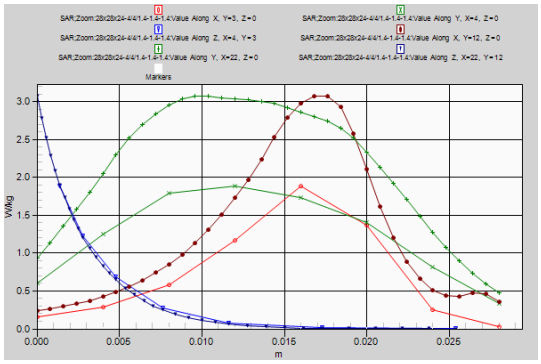
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5620 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5620 MHz; σ = 6.005 S/m; ε_r = 46.67; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.61, 3.61, 3.61); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b56-3,ant=main,frt&d=0mm,11a(6m),m5620/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.59 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.67 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.88 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 18.419 V/m; Power Drift = 0.20 dB, Maximum value of SAR (measured) = 1.88 W/kg
Peak SAR (extrapolated) = 3.076 mW/g
SAR(1 g) = 0.730 mW/g; SAR(10 g) = 0.201 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.3(start)/23.3(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

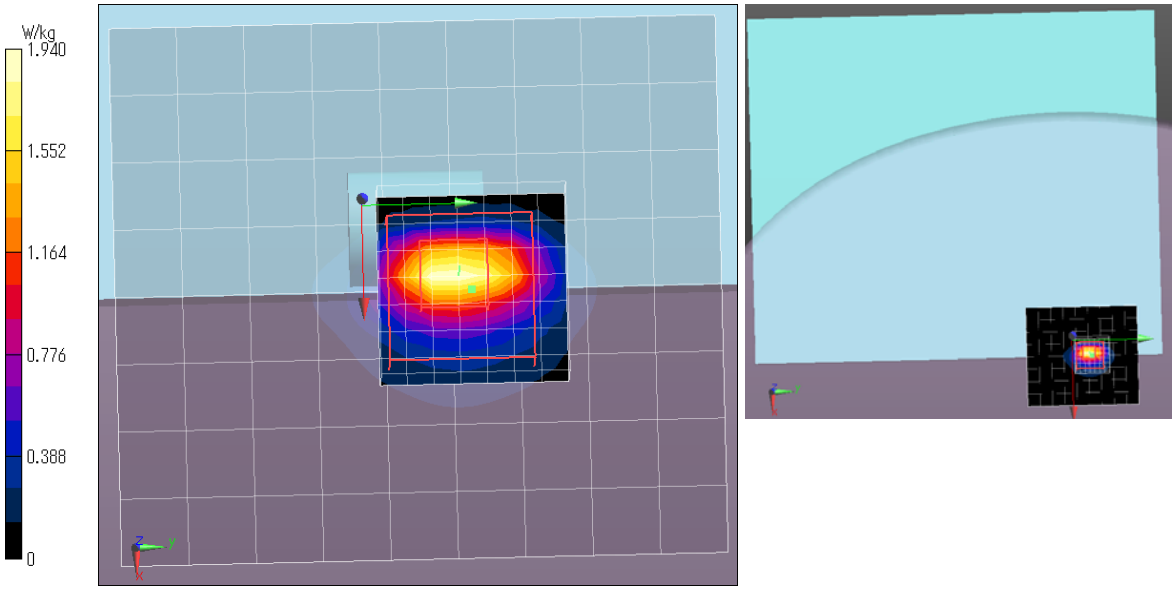
Step 1b-4: 5680MHz (136ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)
->Worst reported SAR(1g) of the Main antenna in 5500-5700MHz (W56) band

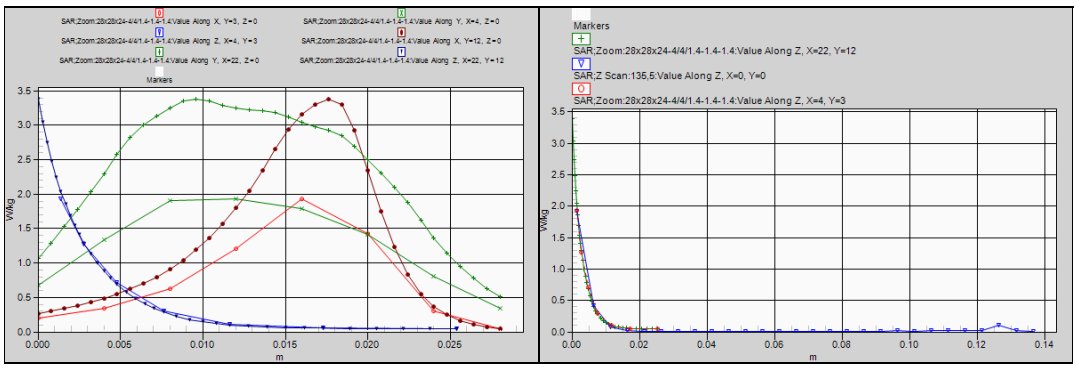
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5680 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5680 MHz; σ = 6.072 S/m; ε_r = 46.43; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.61, 3.61, 3.61); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body/b56-4,ant=main,frt&d=0mm,11a(6m),m5680/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.65 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.74 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.92 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 18.669 V/m; Power Drift = 0.06 dB, Maximum value of SAR (measured) = 1.94 W/kg
Peak SAR (extrapolated) = 3.386 mW/g
SAR(1 g) = 0.776 mW/g; SAR(10 g) = 0.241 mW/g





Remarks: *. Date tested: 2013/04/01; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 130mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 40 ± 5 %RH,
*.liquid temperature: 23.3(start)/23.3(end)/23.4(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

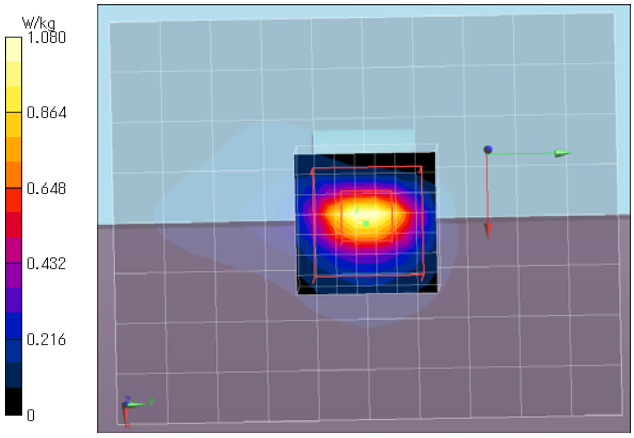
Step 1b-5: 5520MHz (104ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

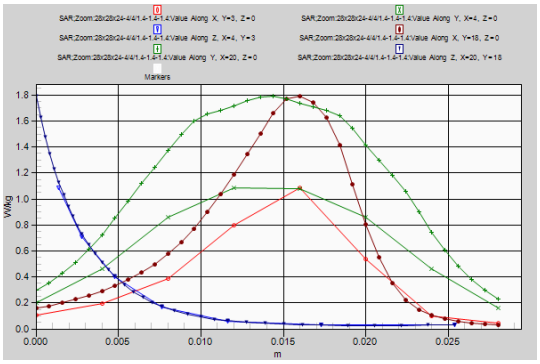
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5520 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5520 MHz; σ = 5.875 S/m; ε_r = 47.17; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.7, 3.7, 3.7); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w56-2(ant-Sub),13.0402/b56-6,ant=sub,frt&d=0mm,11a(6m),m5520/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.12 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.14 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.09 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 15.431 V/m; Power Drift = -0.05 dB, Maximum value of SAR (measured) = 1.08 W/kg
Peak SAR (extrapolated) = 1.794 mW/g
SAR(1 g) = 0.425 mW/g; SAR(10 g) = 0.125 mW/g





Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.5(start)/23.6(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

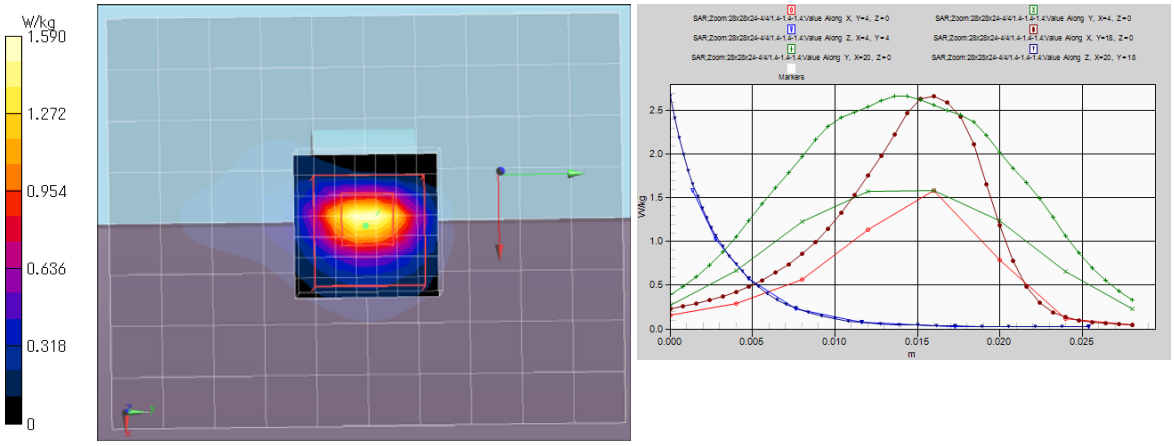
Step 1b-6: 5580MHz (146ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5580 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5580 MHz; σ = 5.96 S/m; ε_r = 47.00 ; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.61, 3.61, 3.61); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w56-2(ant-Sub),13.0402/b56-7,ant=sub,frt&d=0mm,11a(6m),m5580/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.63 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.71 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.58 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 18.542 V/m; Power Drift = 0.07 dB, Maximum value of SAR (measured) = 1.59 W/kg
Peak SAR (extrapolated) = 2.671 mW/g
SAR(1 g) = 0.611 mW/g; SAR(10 g) = 0.174 mW/g



Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.6(start)/23.6(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

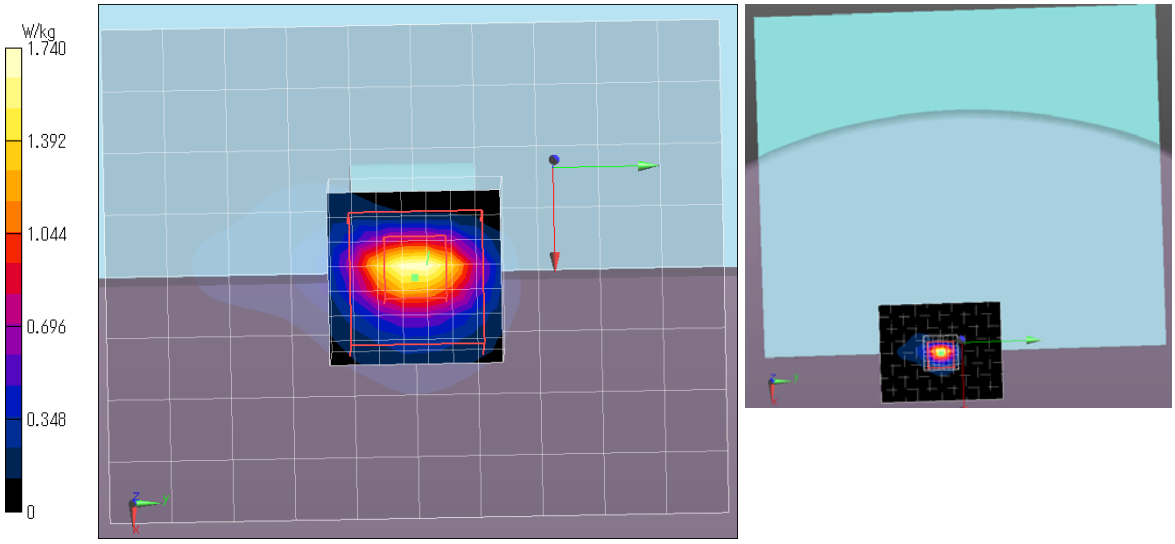
Step 1b-7: 5620MHz (124ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)
->Worst reported SAR(1g) of the Sub antenna in 5500-5700MHz (W56) band

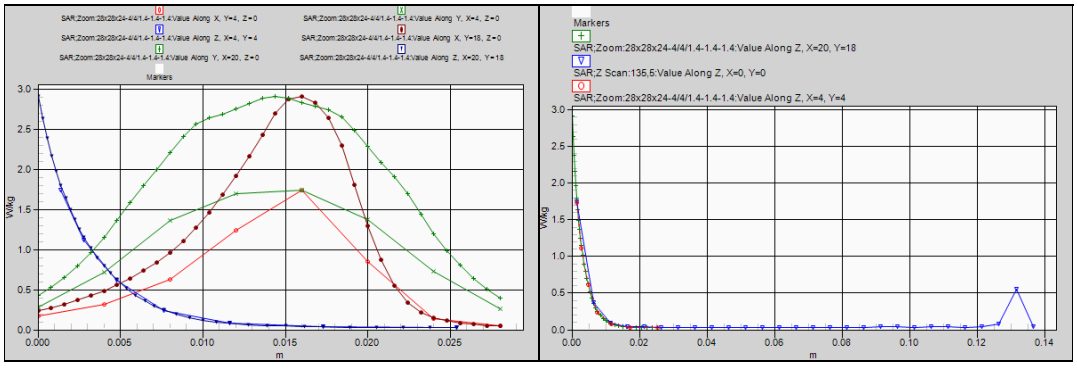
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5620 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5620 MHz; σ = 6.034 S/m; ε_r = 47.02; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.61, 3.61, 3.61); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w56-2(ant-Sub),13.0402/b56-8,ant=sub,frt&d=0mm,11a(6m),m5620/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.79 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.88 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.74 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 19.278 V/m; Power Drift = -0.02 dB, Maximum value of SAR (measured) = 1.74 W/kg
Peak SAR (extrapolated) = 2.911 mW/g
SAR(1 g) = 0.664 mW/g; SAR(10 g) = 0.189 mW/g





Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.6(start)/23.7(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-3: Measurement data (5500-5700 MHz, W56 band) / Body liquid (cont'd)
Step 1b: Change the channels (cont'd)

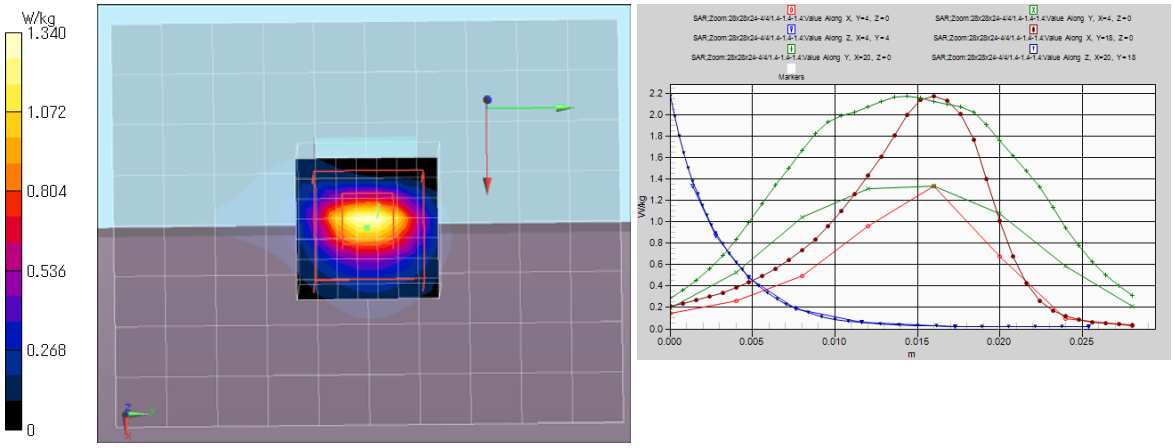
Step 1b-8: 5700MHz (140ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5700 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5700 MHz; σ = 6.095 S/m; ε_r = 46.88; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w56-2(ant-Sub),13.0402/b56-5,ant=sub,frt&d=0mm,11a(6m),m5700/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.35 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.43 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.34 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 17.082 V/m; Power Drift = -0.11 dB, Maximum value of SAR (measured) = 1.34 W/kg
Peak SAR (extrapolated) = 2.182 mW/g
SAR(1 g) = 0.513 mW/g; SAR(10 g) = 0.146 mW/g



Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.6(start)/23.5(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-4: Measurement data (5745-5825 MHz, W58 band) / Body liquid

Step 1c: Change the channels

Step 1c-1: 5745MHz (149ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35

Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5745 MHz; Crest Factor: 1.0

Medium: MSL5800; Medium parameters used: f = 5745 MHz; σ = 6.187 S/m; ε_r = 46.92; ρ = 1000 kg/m^3

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

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

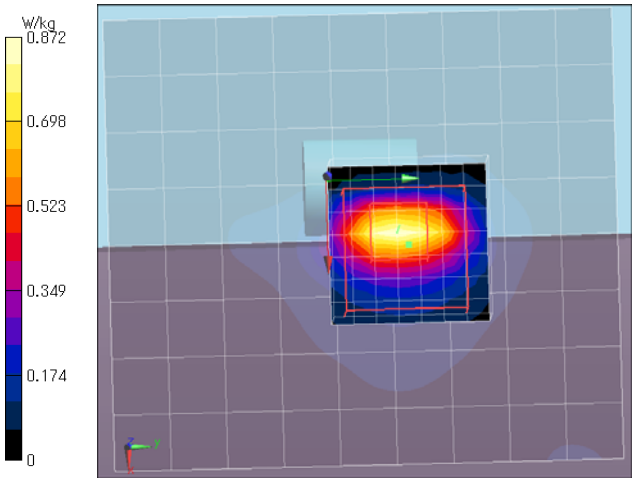
portable,near-body,w58/b58-5,ant=main,frt&d=0mm,11a(6m),m5745/

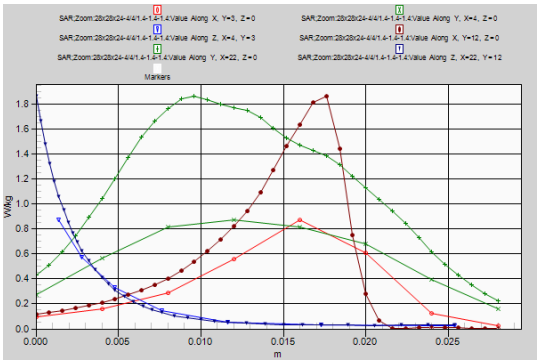
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.847 W/kg

Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 0.925 W/kg

Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 0.875 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 13.017 V/m; Power Drift = -0.03 dB, Maximum value of SAR (measured) = 0.872 W/kg
Peak SAR (extrapolated) = 1.868 mW/g
SAR(1 g) = 0.357 mW/g; SAR(10 g) = 0.115 mW/g





Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.8(start)/23.7(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-4: Measurement data (5745-5825 MHz, W58 band) / Body liquid (cont'd)
Step 1c: Change the channels (cont'd)

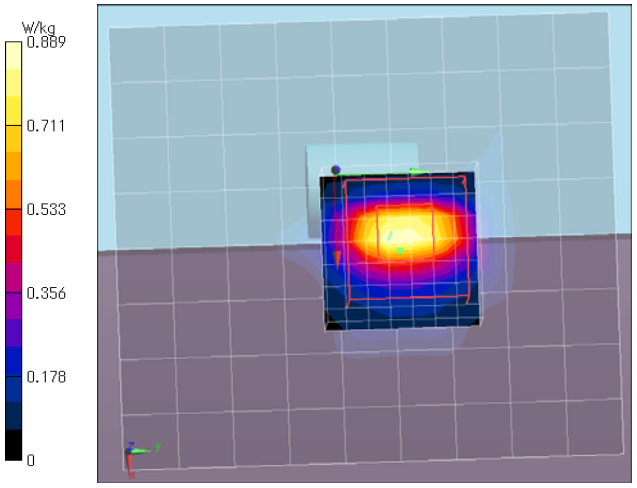
Step 1c-2: 5785MHz (157ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)

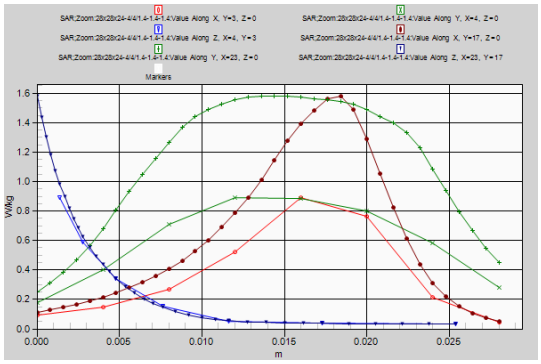
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5785 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5785 MHz; σ = 6.199 S/m; ε_r = 46.73; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w58/b58-6,ant=main,frt&d=0mm,11a(6m),m5785/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.885 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.08 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 0.877 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 12.721 V/m; Power Drift = 0.09 dB, Maximum value of SAR (measured) = 0.889 W/kg
Peak SAR (extrapolated) = 1.583 mW/g
SAR(1 g) = 0.380 mW/g; SAR(10 g) = 0.126 mW/g





Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.7(start)/23.8(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-4: Measurement data (5745-5825 MHz, W58 band) / Body liquid (cont'd)
Step 1c: Change the channels (cont'd)

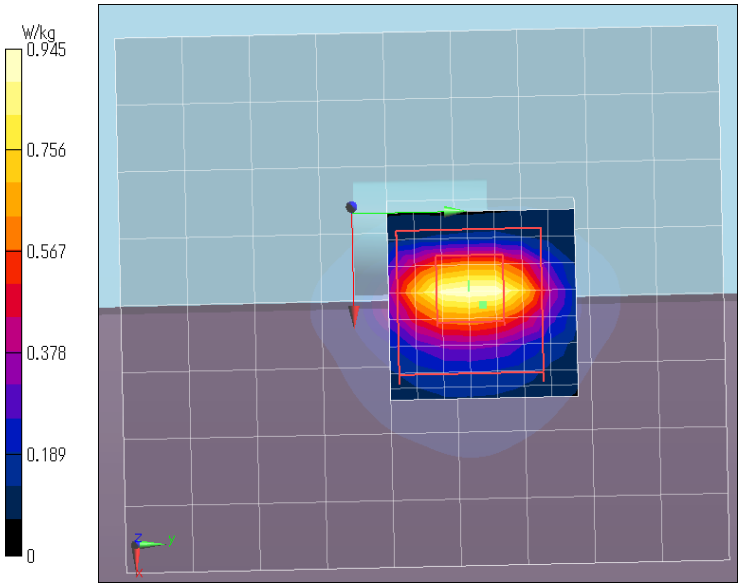
Step 1c-3: 5825MHz (165ch) / Main antenna, Front (Patient side) and touch, 11a (6Mbps)
->Worst reported SAR(1g) of the Main antenna in 5745-5825MHz (W58) band

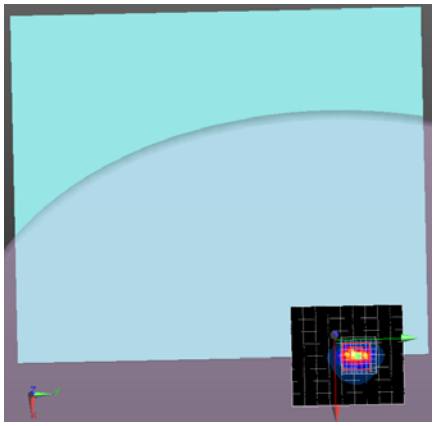
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5825 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5825 MHz; σ = 6.3 S/m; ε_r = 46.60; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

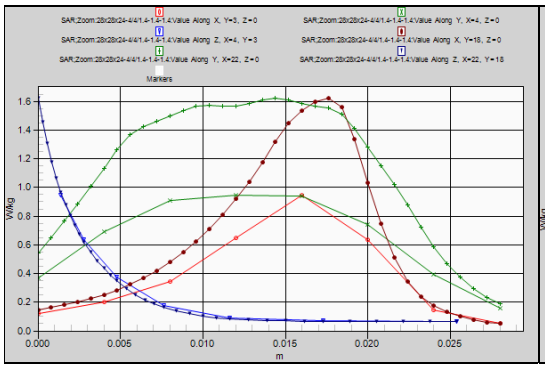
DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

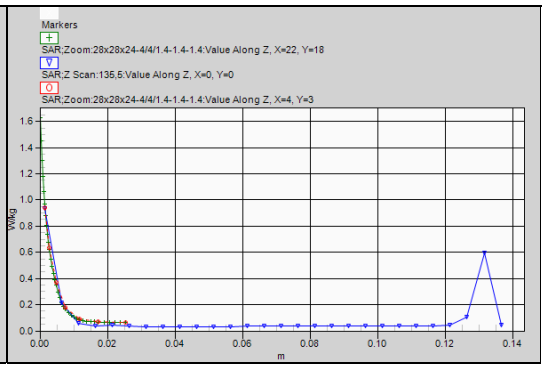
portable,near-body,w58/b58-4,ant=main,frt&d=0mm,11a(6m),m5825/
Area Scan:80x90,10 (9x10x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.910 W/kg
Area Scan:80x90,10 (81x91x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.03 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 0.938 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 13.641 V/m; Power Drift = -0.20 dB, Maximum value of SAR (measured) = 0.945 W/kg
Peak SAR (extrapolated) = 1.625 mW/g
SAR(1 g) = 0.404 mW/g; SAR(10 g) = 0.153 mW/g









Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.8(start)/23.8(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-4: Measurement data (5745-5825 MHz, W58 band) / Body liquid (cont'd)
Step 1c: Change the channels (cont'd)

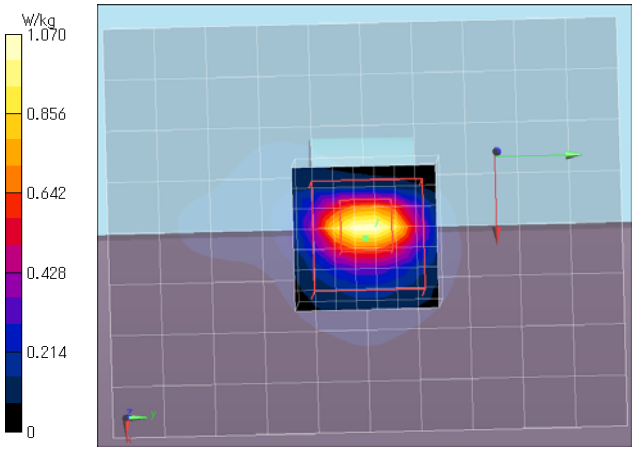
Step 1c-4: 5745MHz (149ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

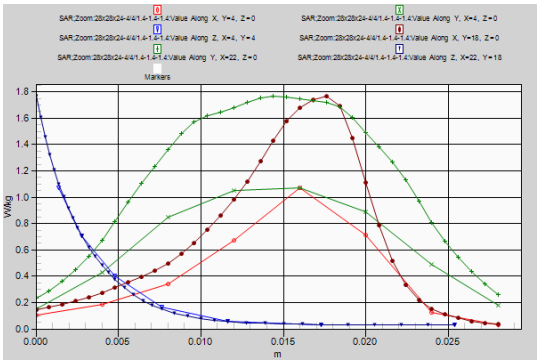
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5745 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5745 MHz; σ = 6.187 S/m; ε_r = 46.92; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w58/b58-2,ant=sub,frt&d=0mm,11a(6m),m5745/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.12 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.19 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.09 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 14.641 V/m; Power Drift = 0.06 dB, Maximum value of SAR (measured) = 1.07 W/kg
Peak SAR (extrapolated) = 1.770 mW/g
SAR(1 g) = 0.419 mW/g; SAR(10 g) = 0.125 mW/g





Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.7(start)/23.7(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-4: Measurement data (5745-5825 MHz, W58 band) / Body liquid (cont'd)
Step 1c: Change the channels (cont'd)

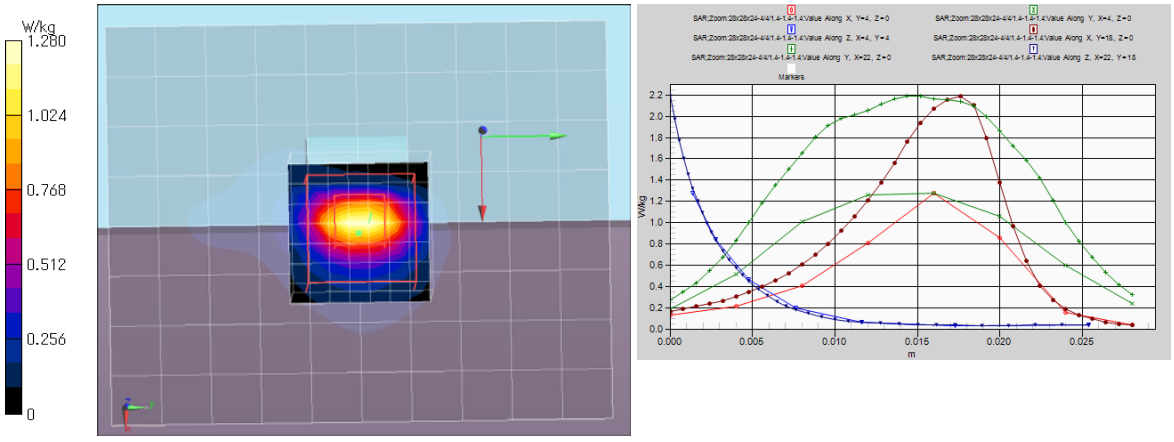
Step 1c-5: 5785MHz (157ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)

EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5785 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5785 MHz; σ = 6.199 S/m; ε_r = 46.73; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w58/b58-3,ant=sub,frt&d=0mm,11a(6m),m5785/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.31 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.41 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.28 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 15.826 V/m; Power Drift = 0.07 dB, Maximum value of SAR (measured) = 1.28 W/kg
Peak SAR (extrapolated) = 2.193 mW/g
SAR(1 g) = 0.501 mW/g; SAR(10 g) = 0.150 mW/g



Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.7(start)/23.8(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)

Appendix 2-4: Measurement data (5745-5825 MHz, W58 band) / Body liquid (cont'd)
Step 1c: Change the channels (cont'd)

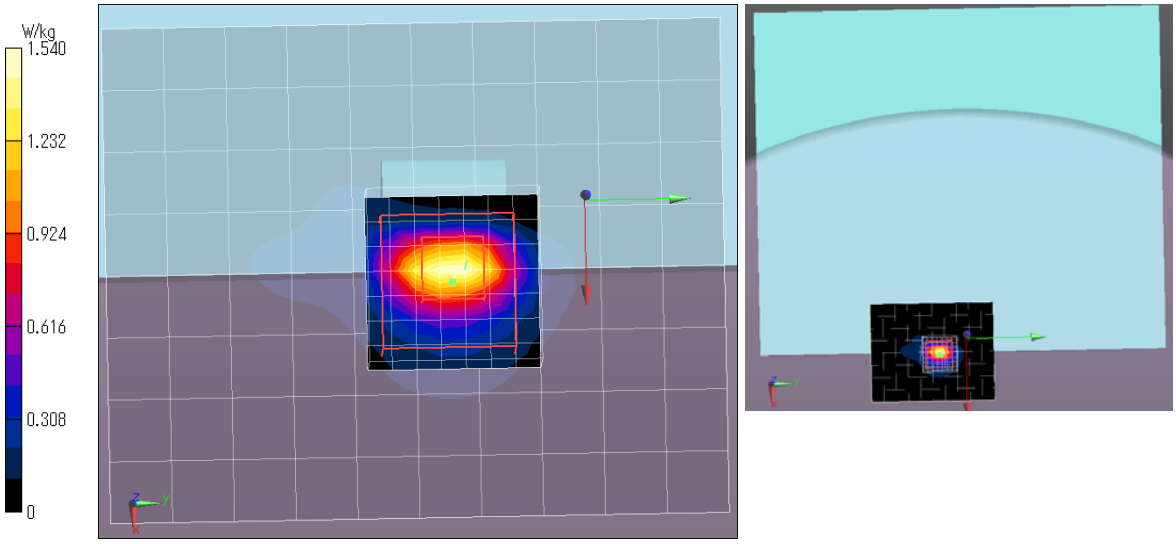
Step 1c-6: 5825MHz (165ch) / Sub antenna, Front (Patient side) and touch, 11a (6Mbps)
->Worst reported SAR(1g) of the Sub antenna in 5745-5825MHz (W58) band

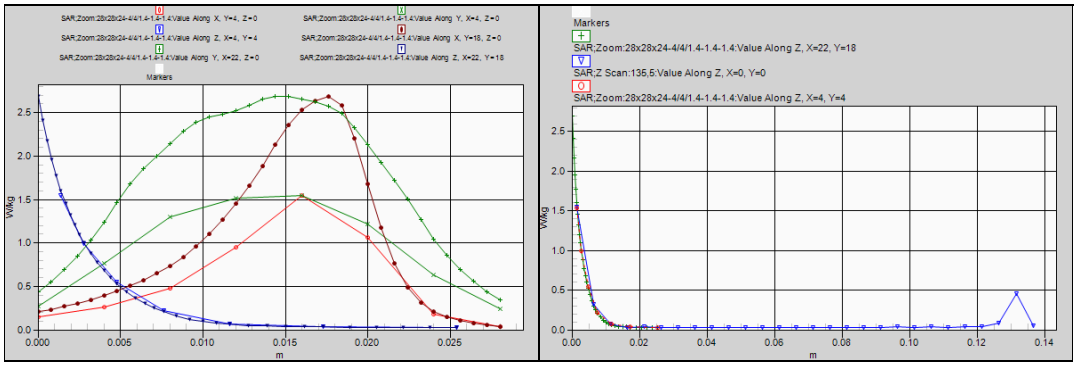
EUT: AeroDR SYSTEM; Type: AeroDR P-31; Serial: C1-35
Communication System: IEEE 802.11a(6Mbps, BPSK/OFDM); Frequency: 5825 MHz; Crest Factor: 1.0
Medium: MSL5800; Medium parameters used: f = 5825 MHz; σ = 6.3 S/m; ε_r = 46.60; ρ = 1000 kg/m^3
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration: -Probe: EX3DV4 - SN3679; ConvF(3.87, 3.87, 3.87); Calibrated: 2012/06/21;
-Sensor-Surface: 1.4mm (Mechanical Surface Detection), z = 1.0, 25.0, 136.0 -Electronics: DAE4 Sn626; Calibrated: 2013/03/11
-Phantom: ELI v4.0; Type: QDOVA001BA; Serial: 1059; Phantom section: Flat Section
-DASY52 52.8.2(969); SEMCAD X 14.6.6(6824)

portable,near-body,w58/b58-1,ant=sub,frt&d=0mm,11a(6m),m5825/
Area Scan:80x100,10 (9x11x1): Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 1.43 W/kg
Area Scan:80x100,10 (81x101x1): Interpolated grid: dx=1.000 mm, dy=1.000 mm; Maximum value of SAR (interpolated) = 1.91 W/kg
Z Scan:135,5 (1x1x28): Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 1.55 W/kg

Zoom:28x28x24-4/4/1.4-1.4-1.4 (8x8x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm;
Reference Value = 17.085 V/m; Power Drift = 0.13 dB, Maximum value of SAR (measured) = 1.54 W/kg
Peak SAR (extrapolated) = 2.691 mW/g
SAR(1 g) = 0.598 mW/g; SAR(10 g) = 0.173 mW/g





Remarks: *. Date tested: 2013/04/02; Tested by: Hiroshi Naka; Tested place:No.7 shielded room,
*.liquid depth: 131mm; Position: distance of EUT to phantom: 0mm (2mm to liquid); ambient: 24.5 ± 0.5deg.C. / 45 ± 5 %RH,
*.liquid temperature: 23.7(start)/23.7(end)/24.5(in check) deg.C.; *.White cubic: zoom scan area, Red cubic: big=SAR(10g)/small=SAR(1g)