

Test Date: 2016. 06. 08 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 13 Temperature : 23 Humidity : 25%

Liquid Temperature : 21.7					Depth of Liquid: > 15cm				
Test Mode: 5GHz									
Test Position: Body	Antenna Position	Separation Distance (cm)	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Scale Factor	Scale SAR (W/kg)	Limit (W/kg)
			Channel	MHz					
802.11a (UNII Band II-2C)									
Front	Fixed	0.5	120	5600	18.24	0.623	1.19	0.74	1.6
Back	Fixed	0.5	120	5600	18.24	0.327	1.19	0.39	1.6
Top	Fixed	0.5	120	5600	18.24	0.363	1.19	0.43	1.6
Right	Fixed	0.5	120	5600	18.24	0.111	1.19	0.13	1.6
802.11a (UNII Band III)									
Front	Fixed	0.5	165	5825	17.98	0.508	1.00	0.51	1.6
Back	Fixed	0.5	165	5825	17.98	0.237	1.00	0.24	1.6
Top	Fixed	0.5	165	5825	17.98	0.190	1.00	0.19	1.6
Right	Fixed	0.5	165	5825	17.98	0.069	1.00	0.07	1.6

Remark: The worst SAR was measured at 5 mm distance.

Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P23 Wi-Fi 802.11a CH 120 5600MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5600 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.894$ S/m; $\epsilon_r = 46.75$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (8x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.978 W/kg

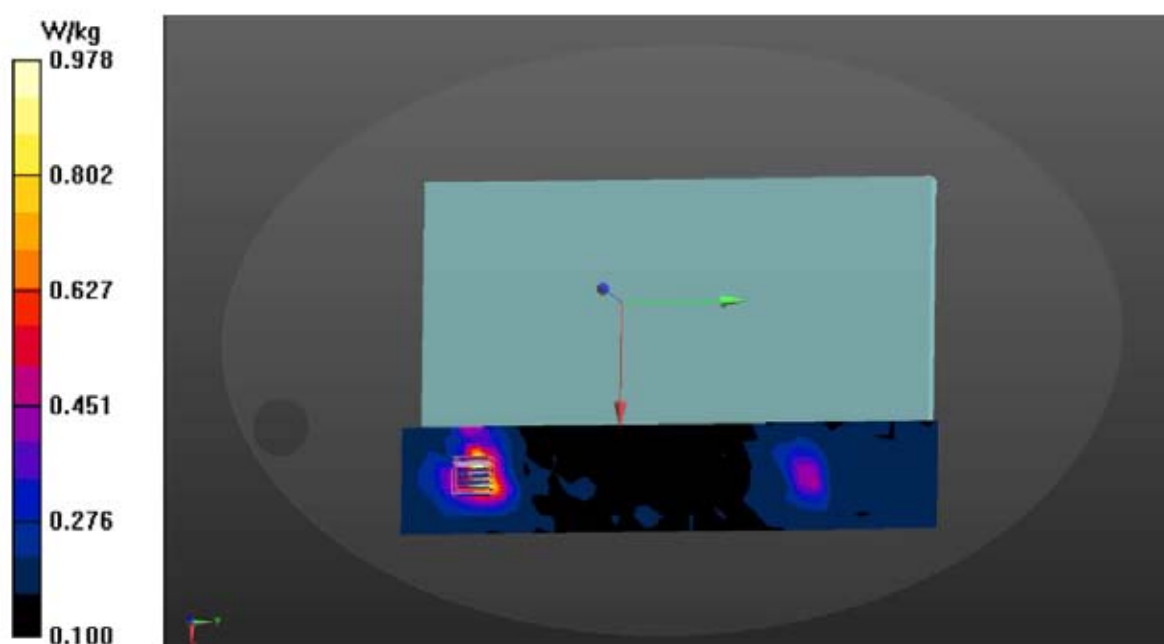
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.791 V/m; Power Drift = 1.37 dB

Peak SAR (extrapolated) = 1.63 W/kg

SAR(1 g) = 0.623 W/kg; SAR(10 g) = 0.372 W/kg

Maximum value of SAR (measured) = 0.987 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P24 Wi-Fi 802.11a CH 120 5600MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5600 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.894$ S/m; $\epsilon_r = 46.75$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.416 W/kg

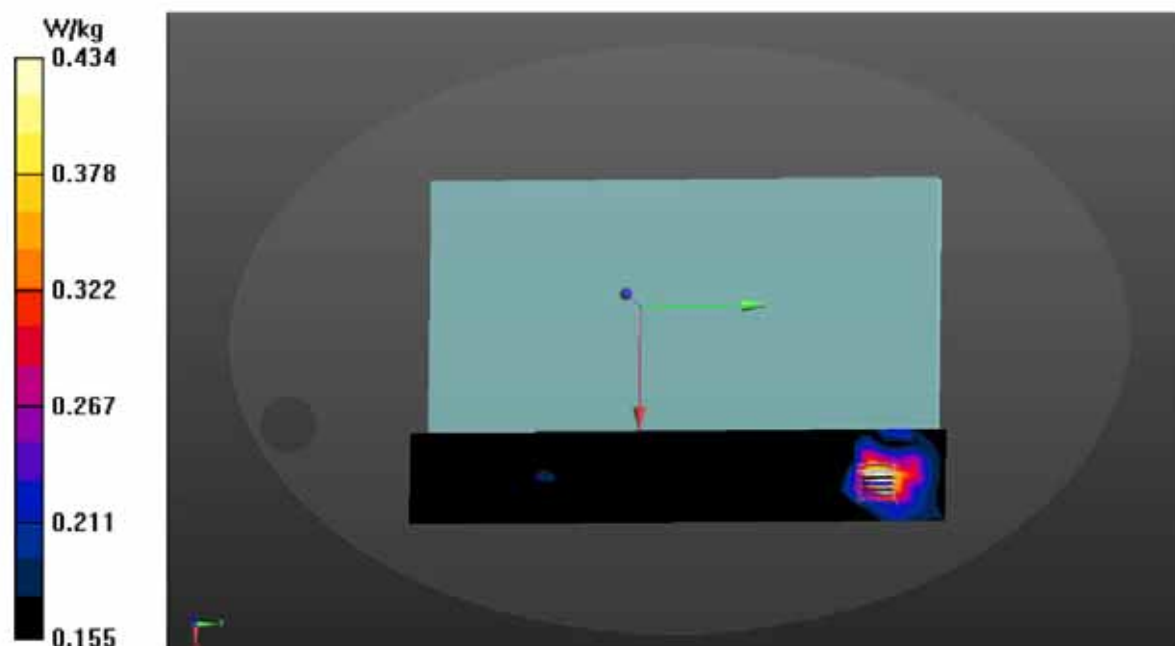
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.700 V/m; Power Drift = 0.82 dB

Peak SAR (extrapolated) = 0.711 W/kg

SAR(1 g) = 0.327 W/kg; SAR(10 g) = 0.248 W/kg

Maximum value of SAR (measured) = 0.434 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P25 Wi-Fi 802.11a CH 120 5600MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5600 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.894$ S/m; $\epsilon_r = 46.75$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (8x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.640 W/kg

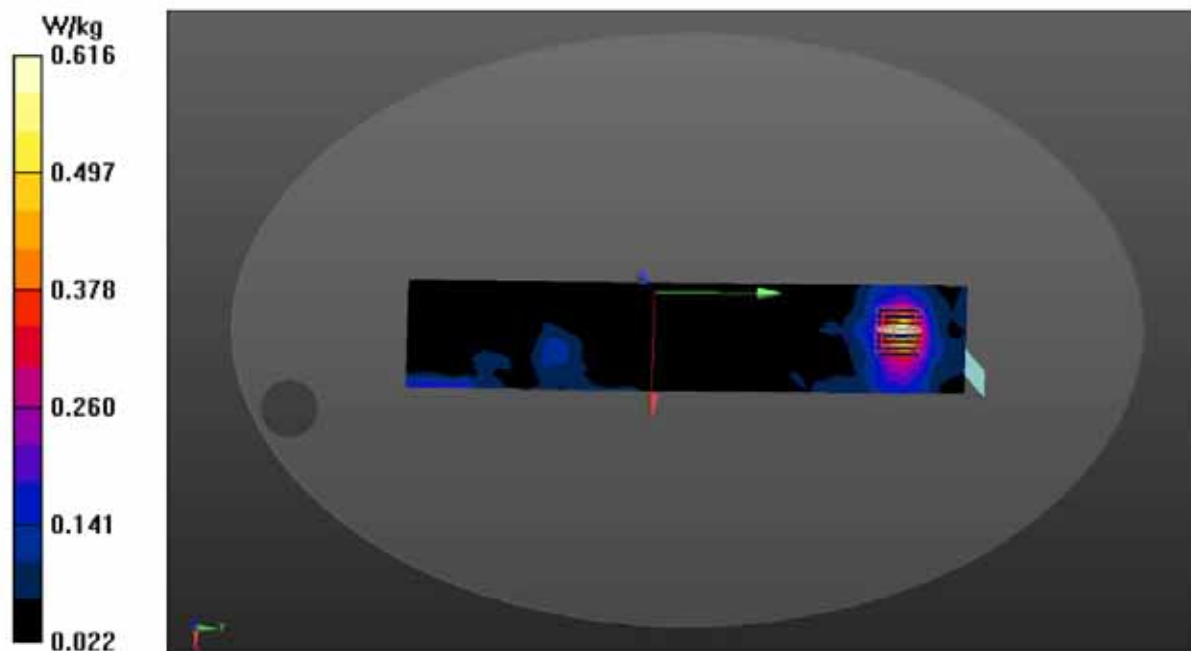
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 6.295 V/m; Power Drift = -1.87 dB

Peak SAR (extrapolated) = 1.15 W/kg

SAR(1 g) = 0.363 W/kg; SAR(10 g) = 0.169 W/kg

Maximum value of SAR (measured) = 0.616 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P26 Wi-Fi 802.11a CH 120 5600MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5600 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5600$ MHz; $\sigma = 5.894$ S/m; $\epsilon_r = 46.75$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

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

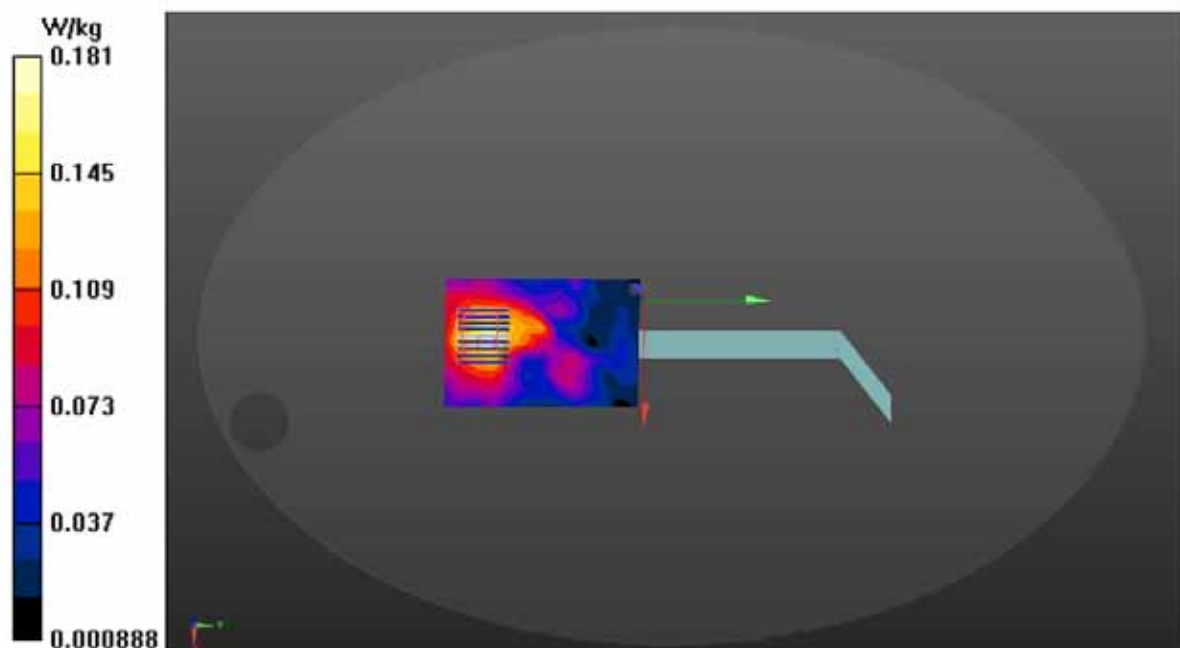
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.381 V/m; Power Drift = 1.67 dB

Peak SAR (extrapolated) = 0.337 W/kg

SAR(1 g) = 0.111 W/kg; SAR(10 g) = 0.065 W/kg

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



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P27 Wi-Fi 802.11a CH 165 5825MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5825$ MHz; $\sigma = 6.214$ S/m; $\epsilon_r = 46.341$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.765 W/kg

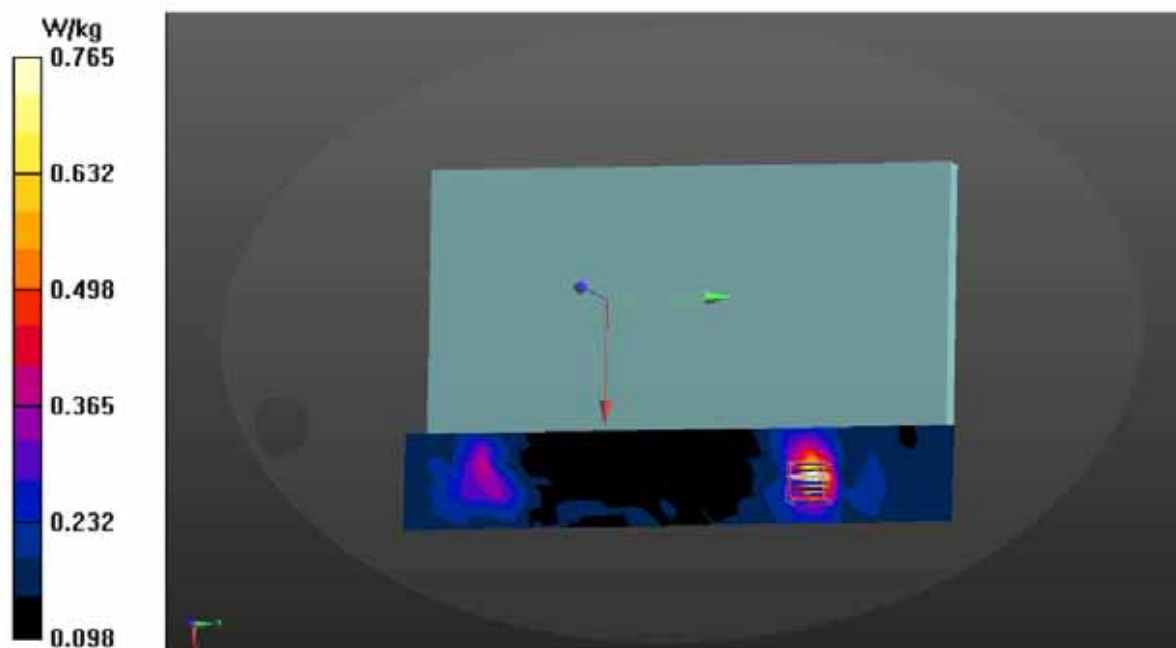
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.140 V/m; Power Drift = 0.28 dB

Peak SAR (extrapolated) = 1.44 W/kg

SAR(1 g) = 0.508 W/kg; SAR(10 g) = 0.315 W/kg

Maximum value of SAR (measured) = 0.788 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P28 Wi-Fi 802.11a CH 165 5825MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5825$ MHz; $\sigma = 6.214$ S/m; $\epsilon_r = 46.341$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (8x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.273 W/kg

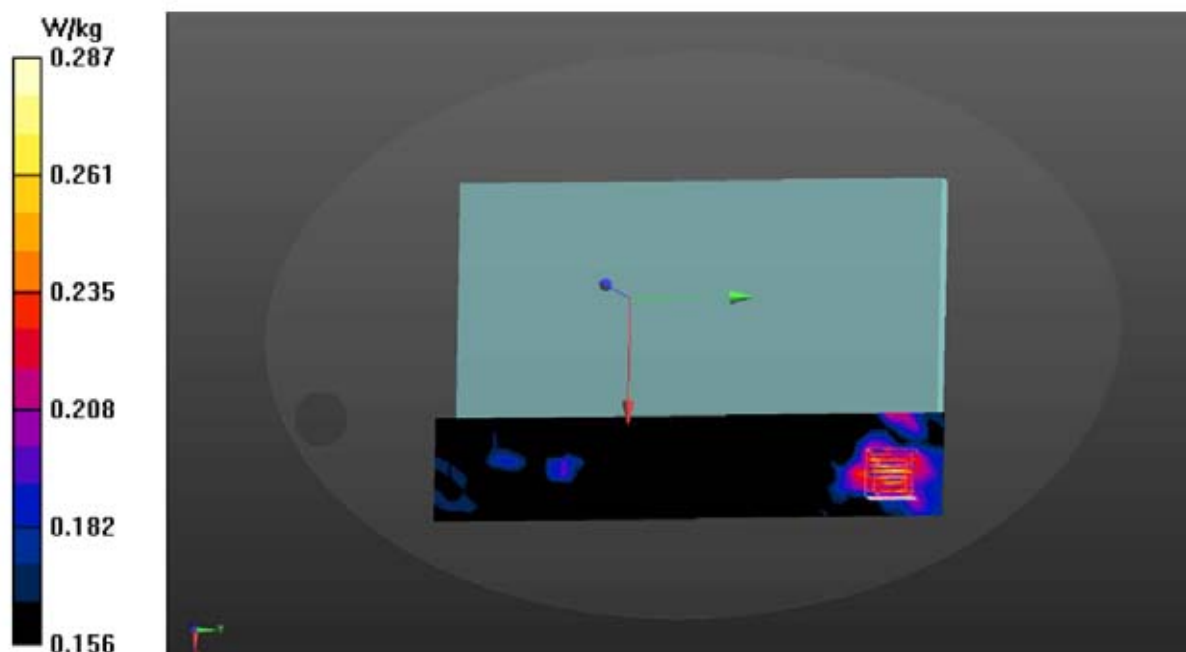
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.327 V/m; Power Drift = 1.91 dB

Peak SAR (extrapolated) = 0.383 W/kg

SAR(1 g) = 0.237 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 0.287 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P29 Wi-Fi 802.11a CH 165 5825MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5825$ MHz; $\sigma = 6.214$ S/m; $\epsilon_r = 46.341$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (8x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.292 W/kg

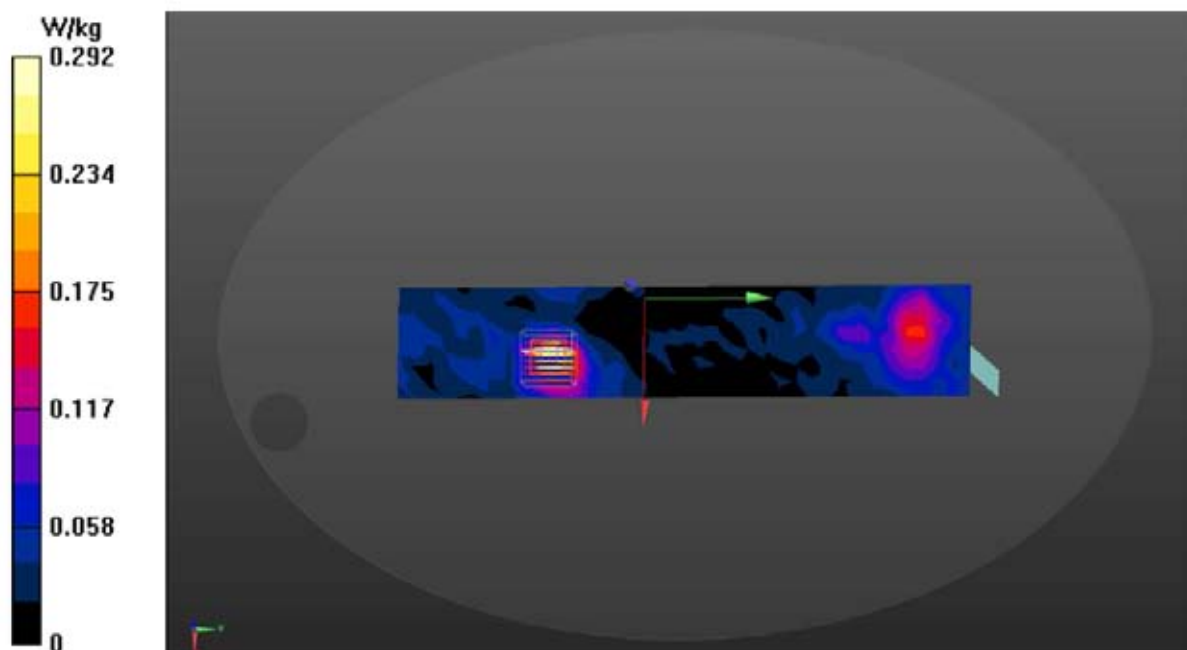
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.812 V/m; Power Drift = 1.90 dB

Peak SAR (extrapolated) = 1.23 W/kg

SAR(1 g) = 0.190 W/kg; SAR(10 g) = 0.103 W/kg

Maximum value of SAR (measured) = 0.323 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P30 Wi-Fi 802.11a CH 165 5825MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11a (0); Frequency: 5825 MHz; Duty Cycle: 1:1.05

Medium parameters used: $f = 5825$ MHz; $\sigma = 6.214$ S/m; $\epsilon_r = 46.341$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.0966 W/kg

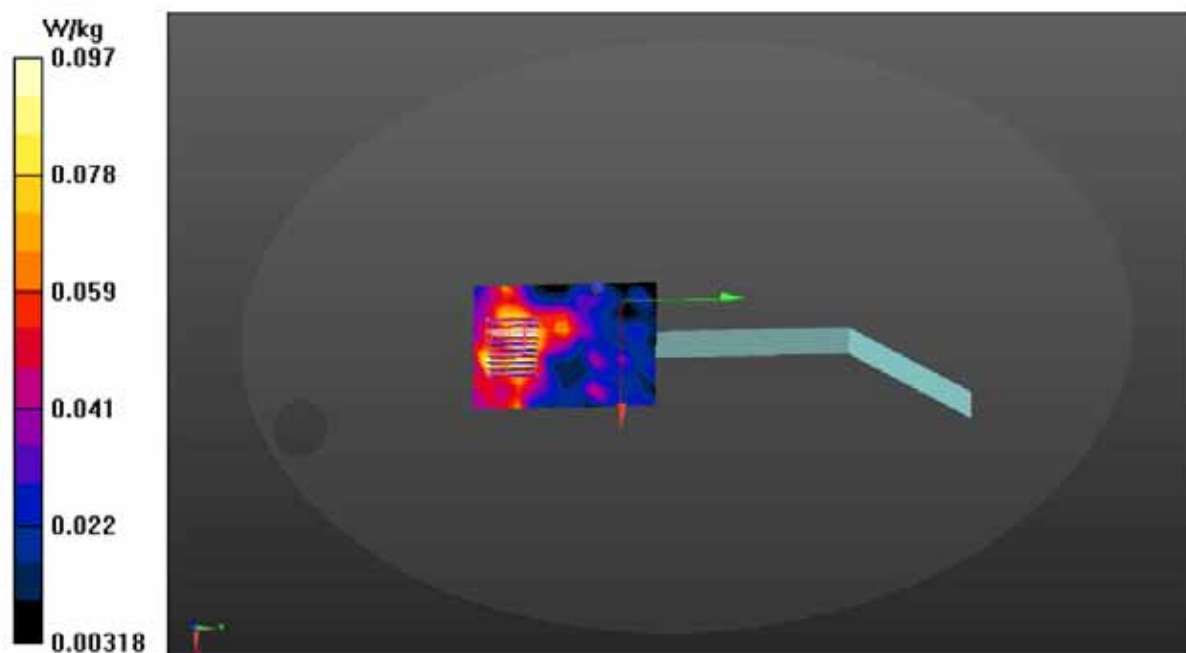
Zoom Scan (10x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.455 V/m; Power Drift = 0.43 dB

Peak SAR (extrapolated) = 0.174 W/kg

SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.047 W/kg

Maximum value of SAR (measured) = 0.108 W/kg



Test Date: 2016. 06. 04 Temperature : 23 Humidity : 25%

Test Date: 2016. 06. 06 Temperature : 23 Humidity : 25%

Test Date: 2016. 06. 15 Temperature : 23 Humidity : 25%

Liquid Temperature : 21.7					Depth of Liquid: > 15cm				
Test Mode: 5GHz									
Test Position: Body	Antenna Position	Separation Distance (cm)	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Scale Factor	Scale SAR	Limit (W/kg)
			Channel	MHz					
802.11ac-VHT20 (UNII Band I)									
Front	Fixed	0.5	48	5240	18.61	0.544	1.09	0.60	1.6
Back	Fixed	0.5	48	5240	18.61	0.322	1.09	0.35	1.6
Top	Fixed	0.5	48	5240	18.61	0.405	1.09	0.44	1.6
Right	Fixed	0.5	48	5240	18.61	0.136	1.09	0.15	1.6
Back With Case	Fixed	0	48	5240	18.61	0.175	1.09	0.19	1.6
802.11ac-VHT20 (UNII Band II-2A)									
Front	Fixed	0.5	52	5260	18.46	0.612	1.01	0.62	1.6
Back	Fixed	0.5	52	5260	18.46	0.311	1.01	0.31	1.6
Top	Fixed	0.5	52	5260	18.46	0.446	1.01	0.45	1.6
Right	Fixed	0.5	52	5260	18.46	0.133	1.01	0.13	1.6

Remark: The worst SAR was measured at 5 mm distance.

Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P15 Wi-Fi 802.11ac-VHT20 CH 48 5240MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5240 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.394$ S/m; $\epsilon_r = 47.514$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.764 W/kg

Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.197 V/m; Power Drift = 0.69 dB

Peak SAR (extrapolated) = 1.34 W/kg

SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.312 W/kg

Maximum value of SAR (measured) = 0.865 W/kg

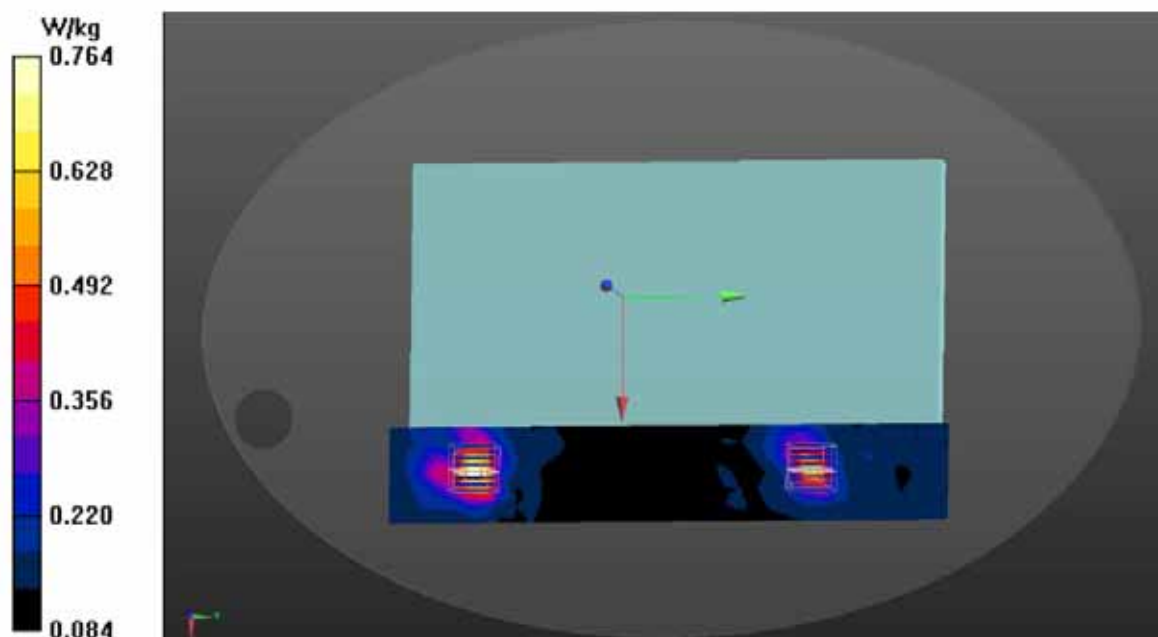
Zoom Scan (8x8x9)/Cube 1: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.197 V/m; Power Drift = 0.69 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.454 W/kg; SAR(10 g) = 0.270 W/kg

Maximum value of SAR (measured) = 0.689 W/kg



Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P16 Wi-Fi 802.11ac-VHT20 CH 48 5240MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5240 MHz;Duty Cycle:1:1

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.394$ S/m; $\epsilon_r = 47.514$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.437 W/kg

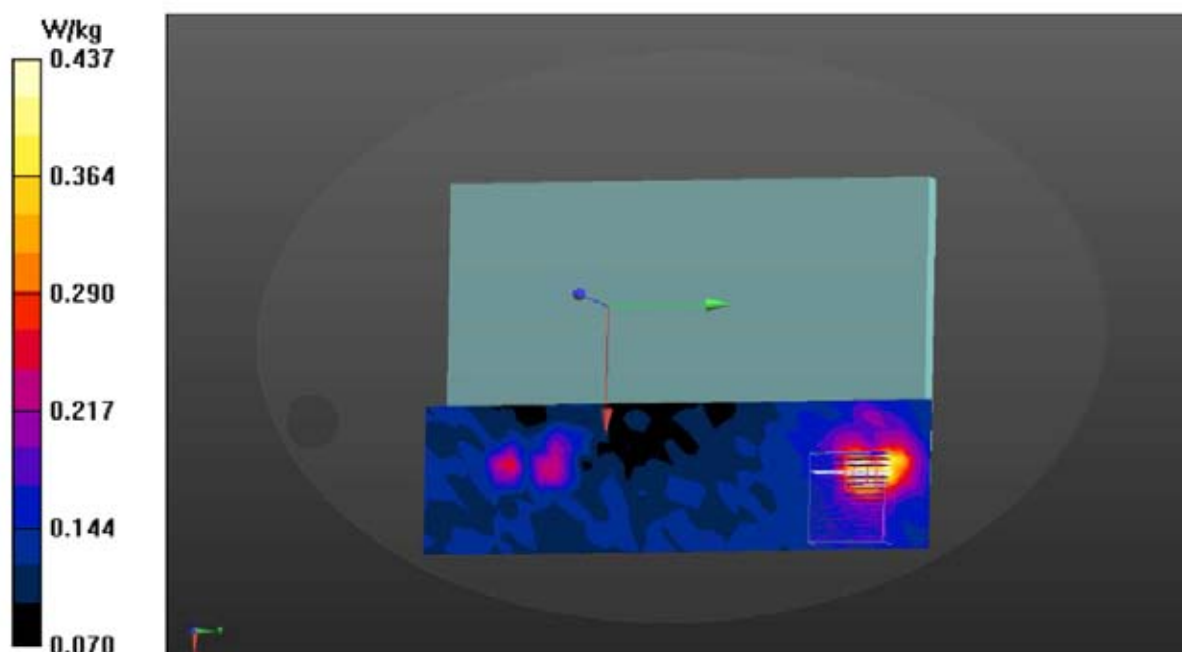
Zoom Scan (16x14x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.769 V/m; Power Drift = 0.32 dB

Peak SAR (extrapolated) = 0.657 W/kg

SAR(1 g) = 0.322 W/kg; SAR(10 g) = 0.232 W/kg

Maximum value of SAR (measured) = 0.441 W/kg



Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P17 Wi-Fi 802.11ac-VHT20 CH 48 5240MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5240 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.394$ S/m; $\epsilon_r = 47.514$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.568 W/kg

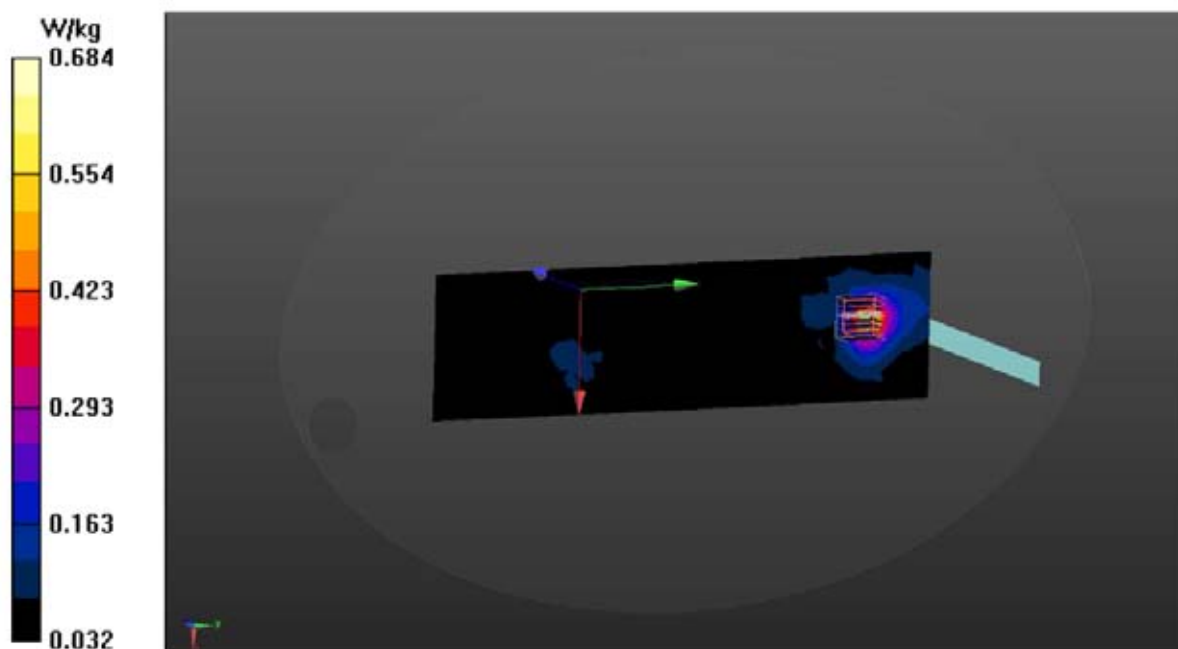
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.743 V/m; Power Drift = 1.71 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.405 W/kg; SAR(10 g) = 0.190 W/kg

Maximum value of SAR (measured) = 0.684 W/kg



Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P18 Wi-Fi 802.11ac-VHT20 CH 48 5240MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5240 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.394$ S/m; $\epsilon_r = 47.514$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x15x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.205 W/kg

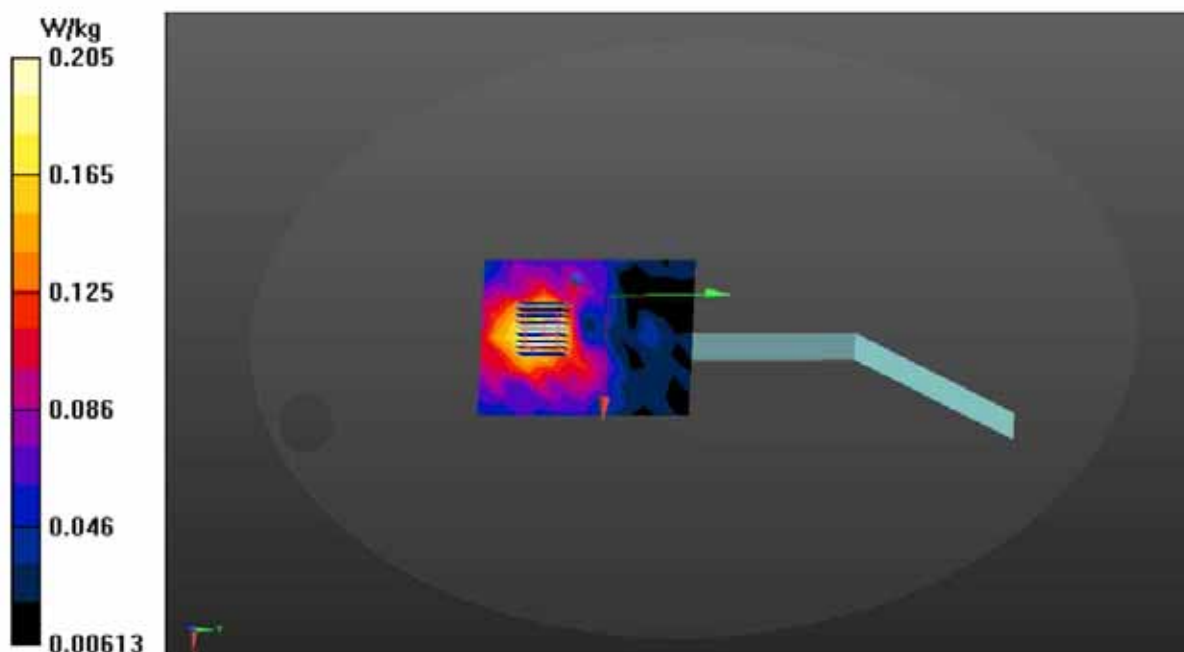
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.258 V/m; Power Drift = 1.17 dB

Peak SAR (extrapolated) = 0.430 W/kg

SAR(1 g) = 0.136 W/kg; SAR(10 g) = 0.073 W/kg

Maximum value of SAR (measured) = 0.222 W/kg



Date: 6/15/2016

Test Laboratory: Audix_SAR Lab

P63 Wi-Fi 802.11ac-VHT20 CH 48 5240MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5240 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5240$ MHz; $\sigma = 5.41$ S/m; $\epsilon_r = 47.432$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.220 W/kg

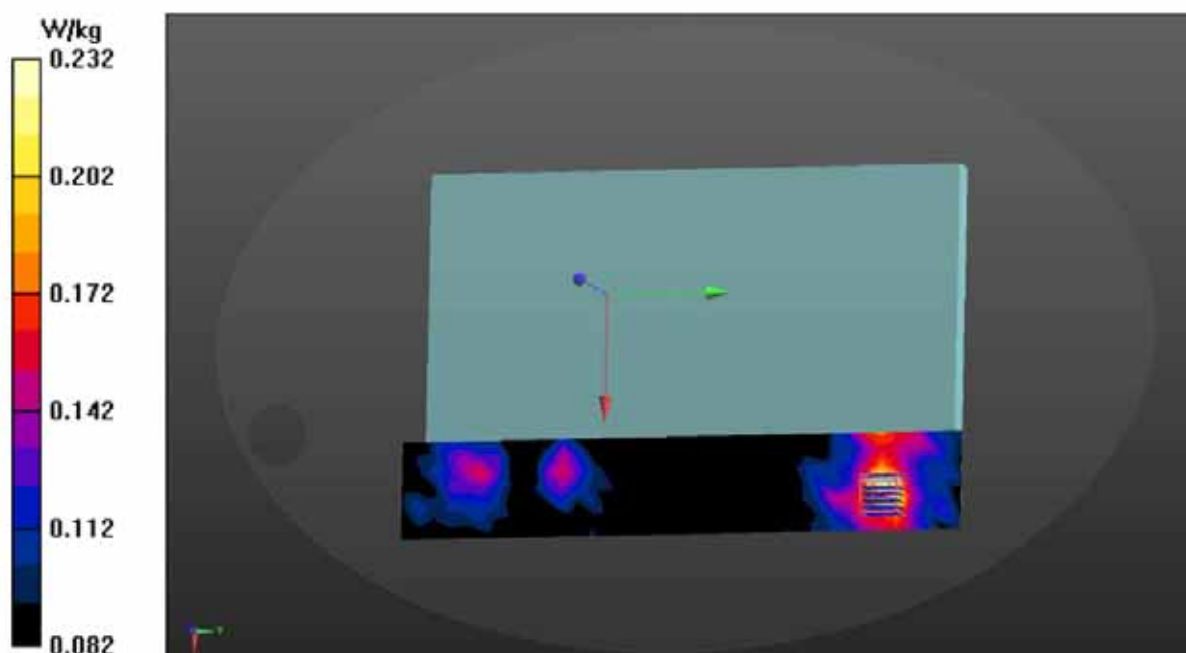
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 2.975 V/m; Power Drift = 1.71 dB

Peak SAR (extrapolated) = 0.367 W/kg

SAR(1 g) = 0.175 W/kg; SAR(10 g) = 0.136 W/kg

Maximum value of SAR (measured) = 0.232 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P22 Wi-Fi 802.11ac-VHT20 CH 52 5260MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5260 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.419$ S/m; $\epsilon_r = 47.452$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.953 W/kg

Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.217 V/m; Power Drift = 1.12 dB

Peak SAR (extrapolated) = 1.59 W/kg

SAR(1 g) = 0.612 W/kg; SAR(10 g) = 0.335 W/kg

Maximum value of SAR (measured) = 0.964 W/kg

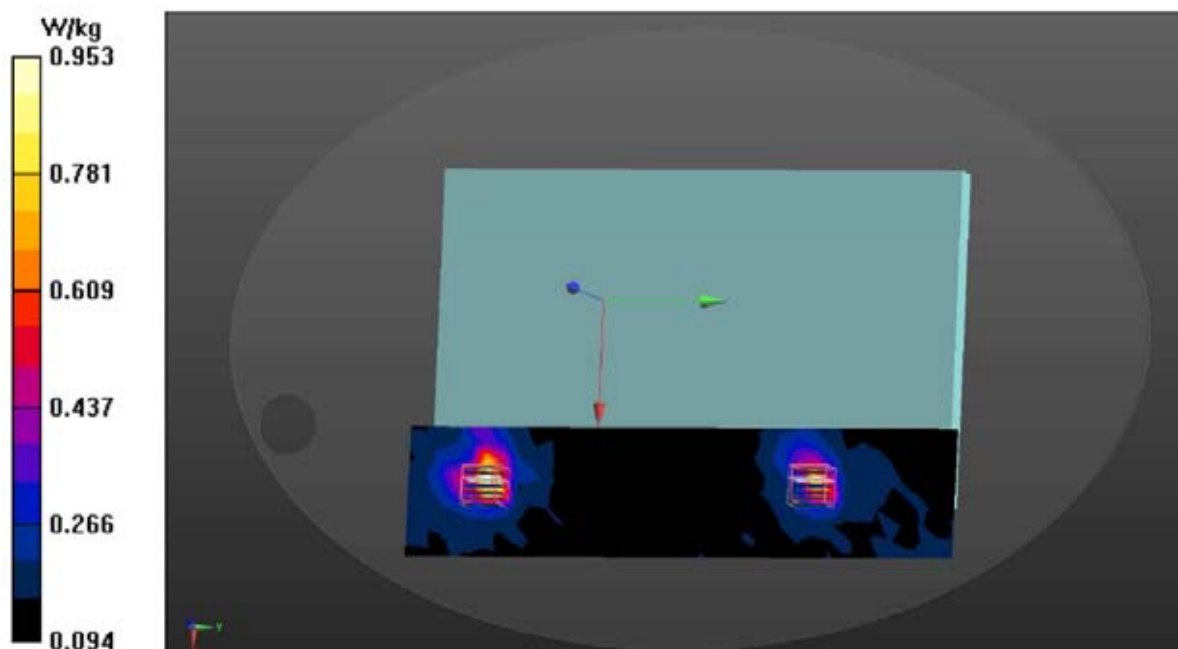
Zoom Scan (7x7x9)/Cube 1: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.217 V/m; Power Drift = 1.12 dB

Peak SAR (extrapolated) = 1.43 W/kg

SAR(1 g) = 0.511 W/kg; SAR(10 g) = 0.293 W/kg

Maximum value of SAR (measured) = 0.808 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P21 Wi-Fi 802.11ac-VHT20 CH 52 5260MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5260 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.419$ S/m; $\epsilon_r = 47.452$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (10x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.425 W/kg

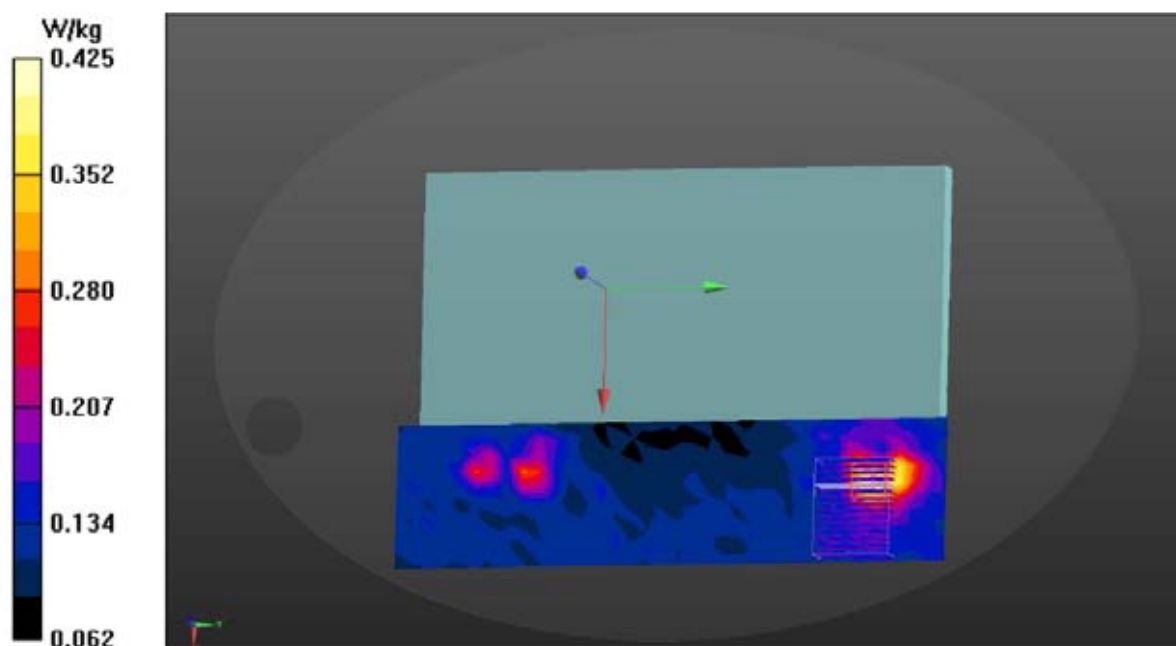
Zoom Scan (16x13x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.639 V/m; Power Drift = 0.56 dB

Peak SAR (extrapolated) = 0.766 W/kg

SAR(1 g) = 0.311 W/kg; SAR(10 g) = 0.218 W/kg

Maximum value of SAR (measured) = 0.428 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P20 Wi-Fi 802.11ac-VHT20 CH 52 5260MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5260 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.419$ S/m; $\epsilon_r = 47.452$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (8x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.695 W/kg

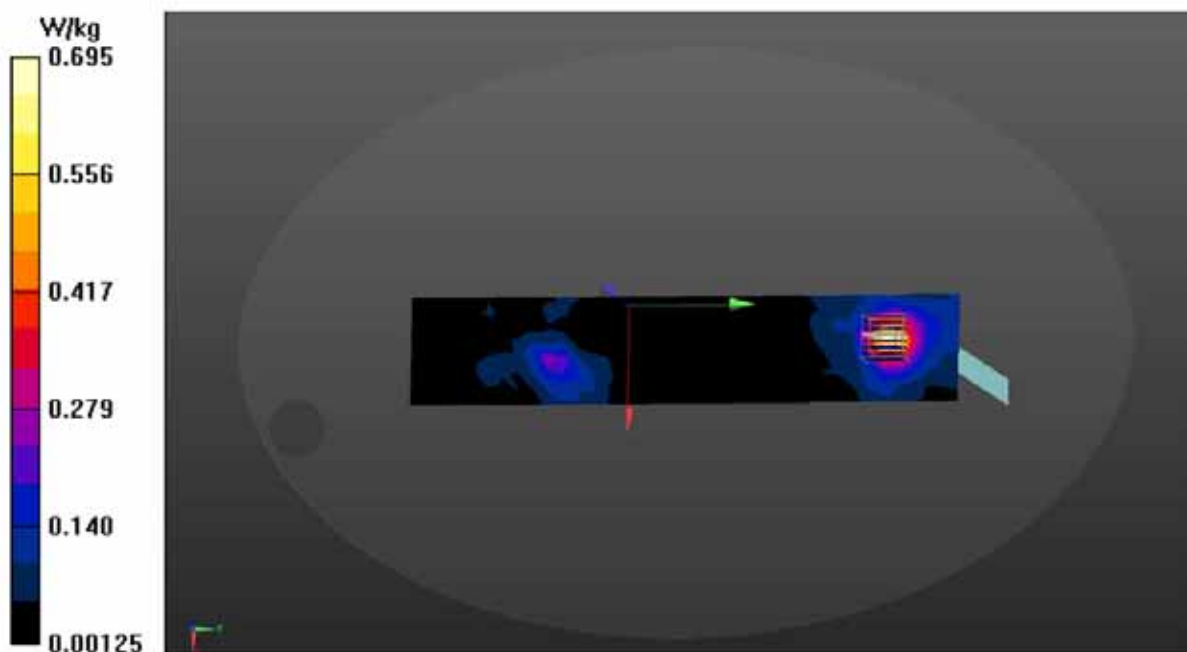
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.271 V/m; Power Drift = 7.61 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.446 W/kg; SAR(10 g) = 0.195 W/kg

Maximum value of SAR (measured) = 0.779 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P19 Wi-Fi 802.11ac-VHT20 CH 52 5260MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_20 (0); Frequency: 5260 MHz; Duty Cycle: 1:1.47

Medium parameters used: $f = 5260$ MHz; $\sigma = 5.419$ S/m; $\epsilon_r = 47.452$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.207 W/kg

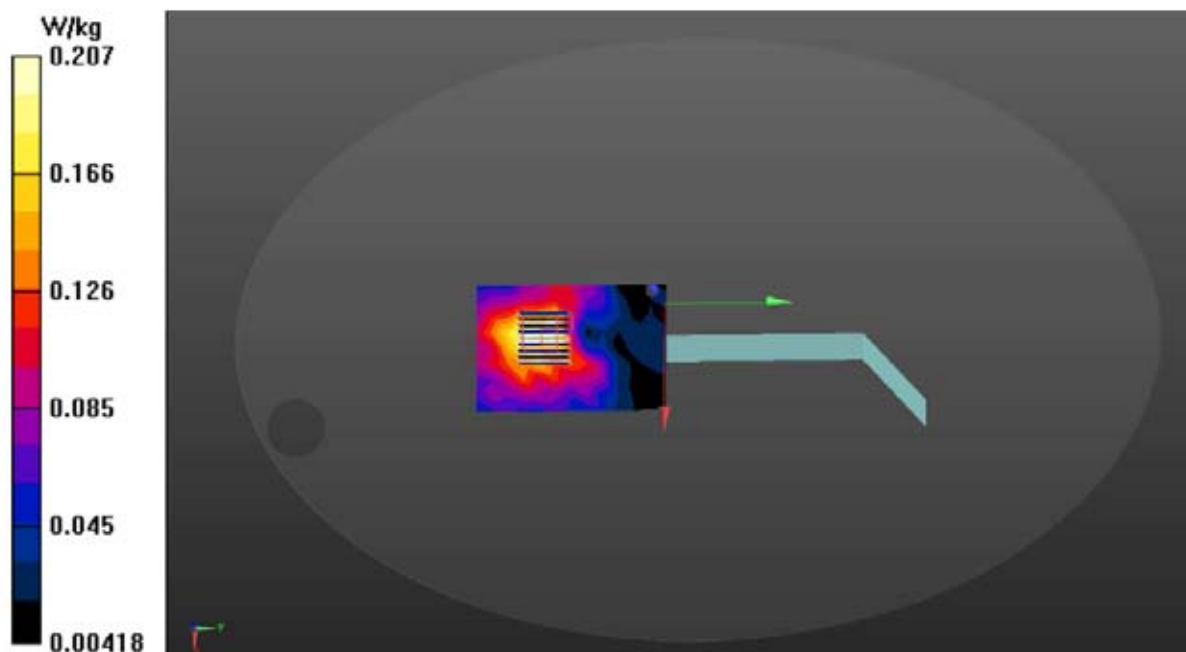
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.617 V/m; Power Drift = -1.47 dB

Peak SAR (extrapolated) = 0.445 W/kg

SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.064 W/kg

Maximum value of SAR (measured) = 0.222 W/kg



Test Date: 2016. 06. 04 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 07 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 08 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 14 Temperature : 23 Humidity : 25%

Liquid Temperature : 21.7					Depth of Liquid: > 15cm				
Test Mode: 5GHz									
Test Position: Body	Antenna Position	Separation Distance (cm)	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Scale Factor	Scale SAR	Limit (W/kg)
			Channel	MHz					
802.11ac-VHT40 (UNII Band I)									
Front	Fixed	0.5	46	5230	19.29	0.441	1.05	0.46	1.6
Back	Fixed	0.5	46	5230	19.29	0.243	1.05	0.26	1.6
Top	Fixed	0.5	46	5230	19.29	0.392	1.05	0.41	1.6
Right	Fixed	0.5	46	5230	19.29	0.160	1.05	0.17	1.6
802.11ac-VHT40 (UNII Band II-2A)									
Front	Fixed	0.5	54	5270	19.02	0.429	1.12	0.48	1.6
Back	Fixed	0.5	54	5270	19.02	0.233	1.12	0.26	1.6
Top	Fixed	0.5	54	5270	19.02	0.444	1.12	0.50	1.6
Right	Fixed	0.5	54	5270	19.02	0.148	1.12	0.17	1.6
802.11ac-VHT40 (UNII Band II-2C)									
Front	Fixed	0.5	118	5590	19.12	0.495	1.09	0.54	1.6
Back	Fixed	0.5	118	5590	19.12	0.302	1.09	0.33	1.6
Top	Fixed	0.5	118	5590	19.12	0.347	1.09	0.38	1.6
Right	Fixed	0.5	118	5590	19.12	0.177	1.09	0.19	1.6
802.11ac-VHT40 (UNII Band III)									
Front	Fixed	0.5	159	5795	18.79	0.453	1.05	0.48	1.6
Back	Fixed	0.5	159	5795	18.79	0.219	1.05	0.23	1.6
Top	Fixed	0.5	159	5795	18.79	0.225	1.05	0.24	1.6
Right	Fixed	0.5	159	5795	18.79	0.058	1.05	0.06	1.6

Remark: The worst SAR was measured at 5 mm distance.

Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P31 Wi-Fi 802.11ac-VHT40 CH 46 5230MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5230 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.383$ S/m; $\epsilon_r = 47.536$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

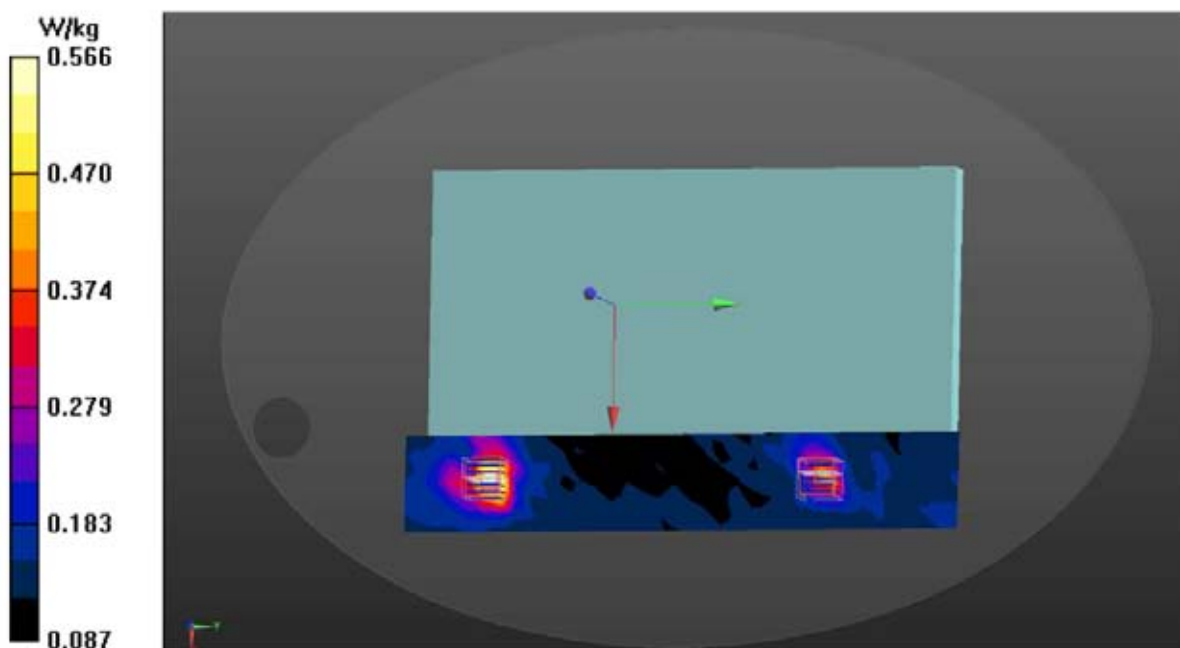
DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm
Maximum value of SAR (measured) = 0.566 W/kg

Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm
Reference Value = 4.618 V/m; Power Drift = 1.33 dB
Peak SAR (extrapolated) = 1.06 W/kg
SAR(1 g) = 0.441 W/kg; SAR(10 g) = 0.275 W/kg
Maximum value of SAR (measured) = 0.652 W/kg

Zoom Scan (7x7x9)/Cube 1: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm
Reference Value = 4.618 V/m; Power Drift = 1.33 dB
Peak SAR (extrapolated) = 0.982 W/kg
SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.223 W/kg
Maximum value of SAR (measured) = 0.461 W/kg



Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P32 Wi-Fi 802.11ac-VHT40 CH 46 5230MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5230 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.383$ S/m; $\epsilon_r = 47.536$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.305 W/kg

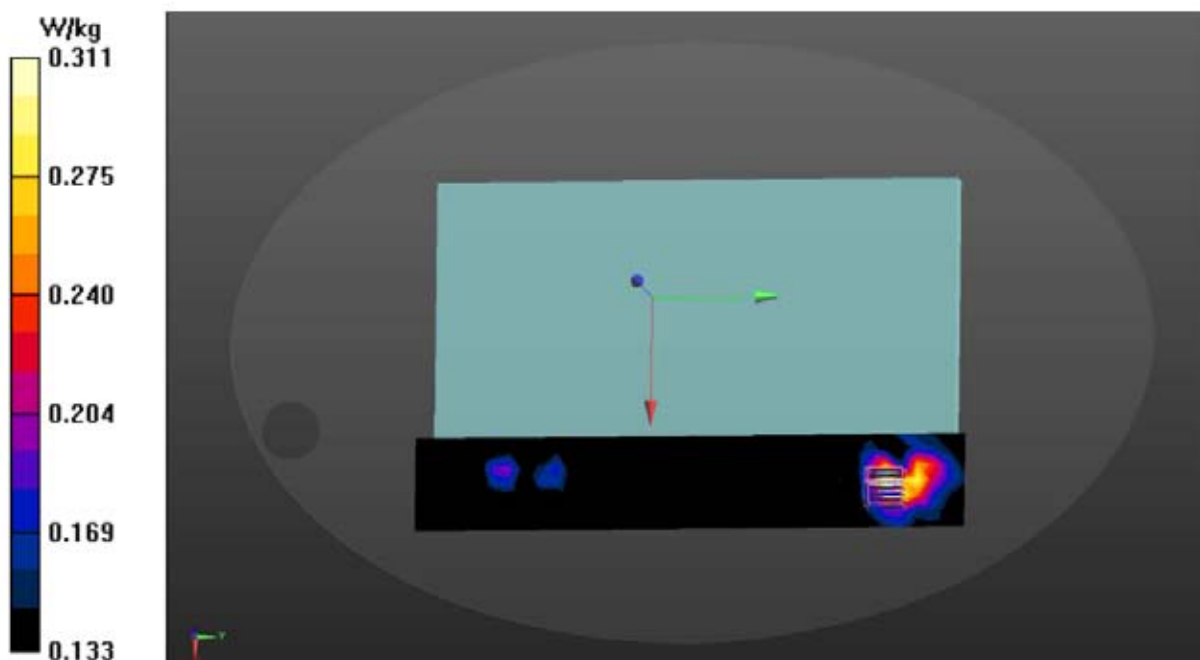
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.987 V/m; Power Drift = 1.43 dB

Peak SAR (extrapolated) = 0.532 W/kg

SAR(1 g) = 0.243 W/kg; SAR(10 g) = 0.190 W/kg

Maximum value of SAR (measured) = 0.311 W/kg



Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P33 Wi-Fi 802.11ac-VHT40 CH 46 5230MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5230 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.383$ S/m; $\epsilon_r = 47.536$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.542 W/kg

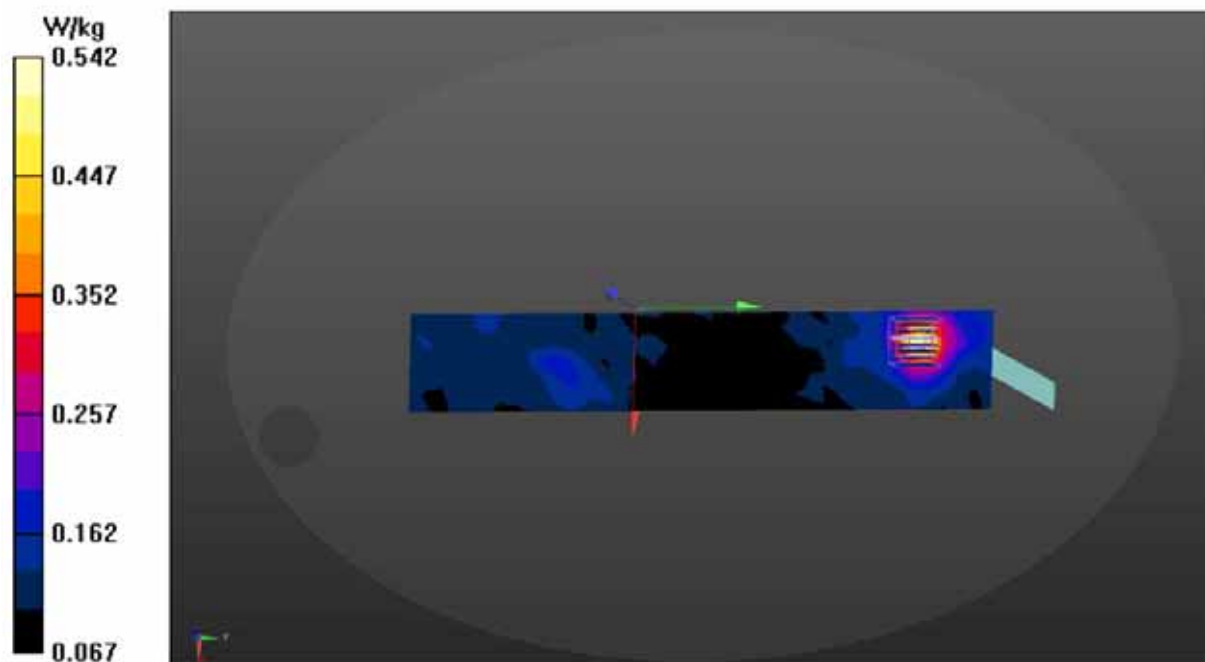
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.800 V/m; Power Drift = 1.05 dB

Peak SAR (extrapolated) = 0.987 W/kg

SAR(1 g) = 0.392 W/kg; SAR(10 g) = 0.230 W/kg

Maximum value of SAR (measured) = 0.585 W/kg



Date: 6/4/2016

Test Laboratory: Audix_SAR Lab

P34 Wi-Fi 802.11ac-VHT40 CH 46 5230MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5230 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.383$ S/m; $\epsilon_r = 47.536$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.200 W/kg

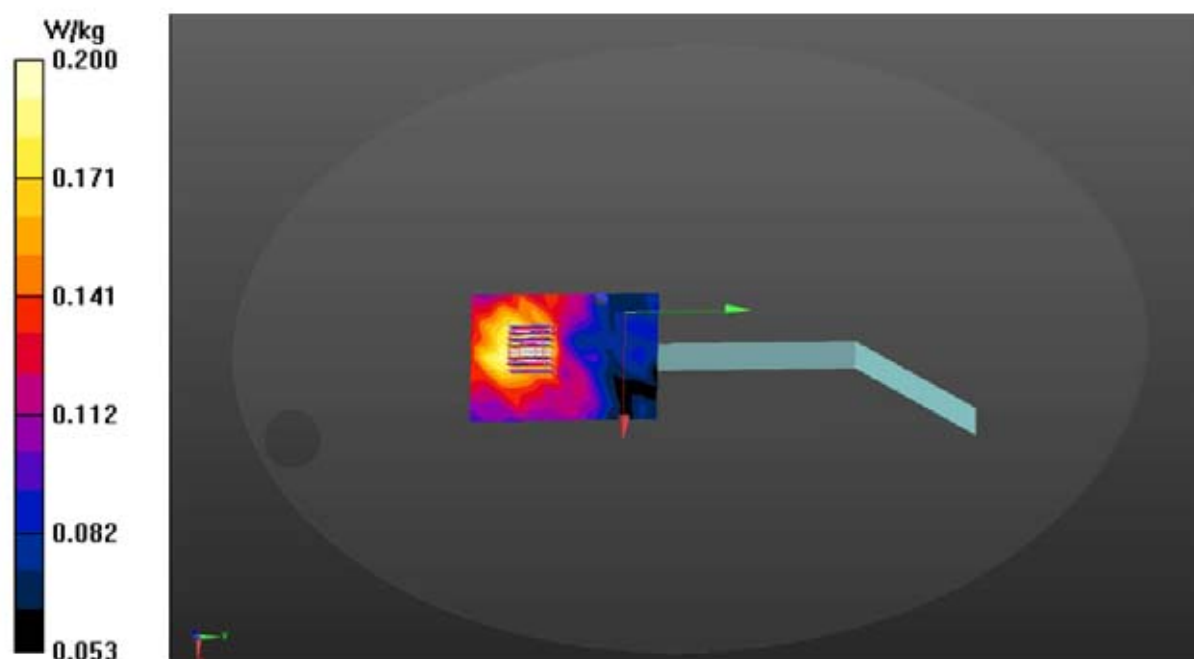
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.248 V/m; Power Drift = 1.67 dB

Peak SAR (extrapolated) = 0.339 W/kg

SAR(1 g) = 0.160 W/kg; SAR(10 g) = 0.124 W/kg

Maximum value of SAR (measured) = 0.211 W/kg



Date: 6/7/2016

Test Laboratory: Audix_SAR Lab

P35 Wi-Fi 802.11ac-VHT40 CH 54 5270MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5270 MHz;Duty Cycle:1:1

Medium parameters used: $f = 5270$ MHz; $\sigma = 5.435$ S/m; $\epsilon_r = 47.419$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.594 W/kg

Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 5.195 V/m; Power Drift = 0.68 dB

Peak SAR (extrapolated) = 1.11 W/kg

SAR(1 g) = 0.429 W/kg; SAR(10 g) = 0.281 W/kg

Maximum value of SAR (measured) = 0.632 W/kg

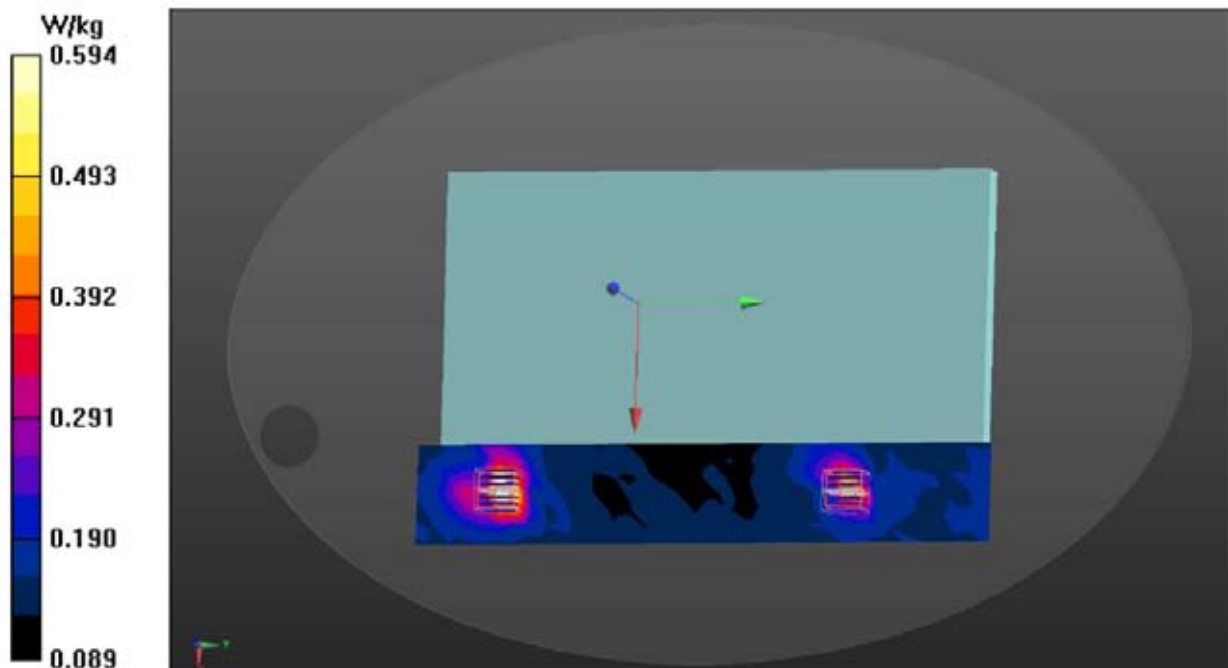
Zoom Scan (7x7x9)/Cube 1: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 5.195 V/m; Power Drift = 0.68 dB

Peak SAR (extrapolated) = 0.946 W/kg

SAR(1 g) = 0.357 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.504 W/kg



Date: 6/7/2016

Test Laboratory: Audix_SAR Lab

P36 Wi-Fi 802.11ac-VHT40 CH 54 5270MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5270 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5270$ MHz; $\sigma = 5.435$ S/m; $\epsilon_r = 47.419$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.312 W/kg

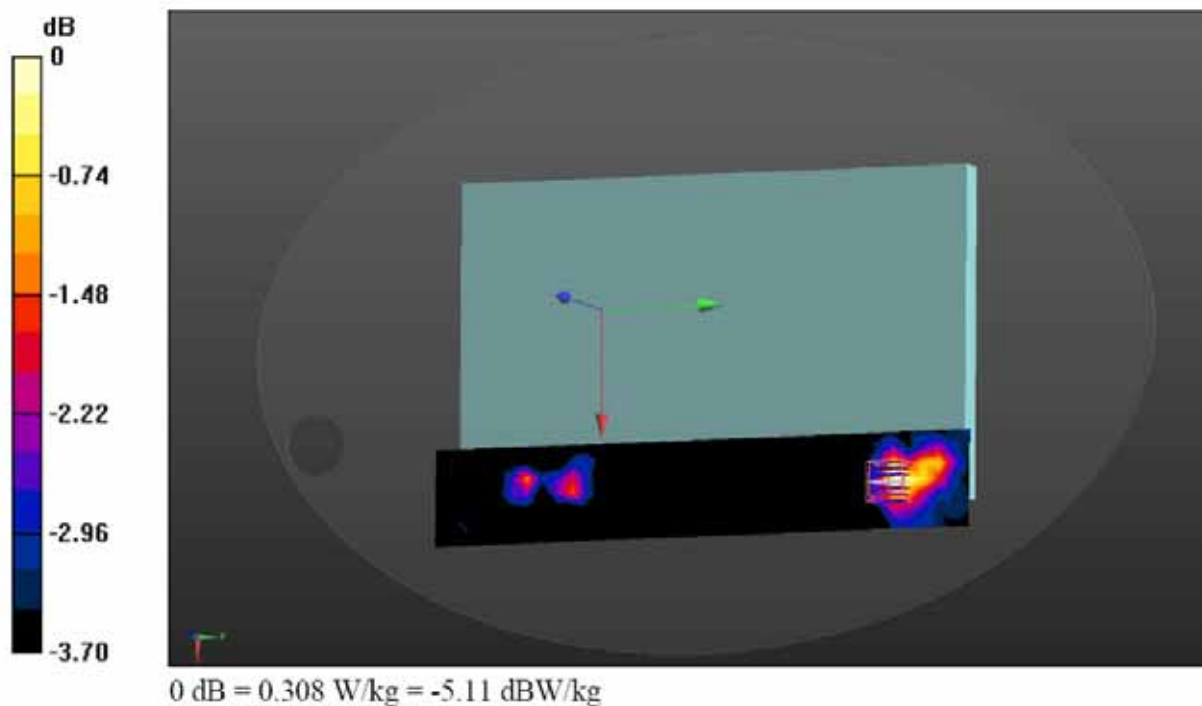
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.960 V/m; Power Drift = 1.89 dB

Peak SAR (extrapolated) = 0.439 W/kg

SAR(1 g) = 0.233 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.308 W/kg



Date: 6/7/2016

Test Laboratory: Audix_SAR Lab

P37 Wi-Fi 802.11ac-VHT40 CH 54 5270MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5270 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5270$ MHz; $\sigma = 5.435$ S/m; $\epsilon_r = 47.419$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.641 W/kg

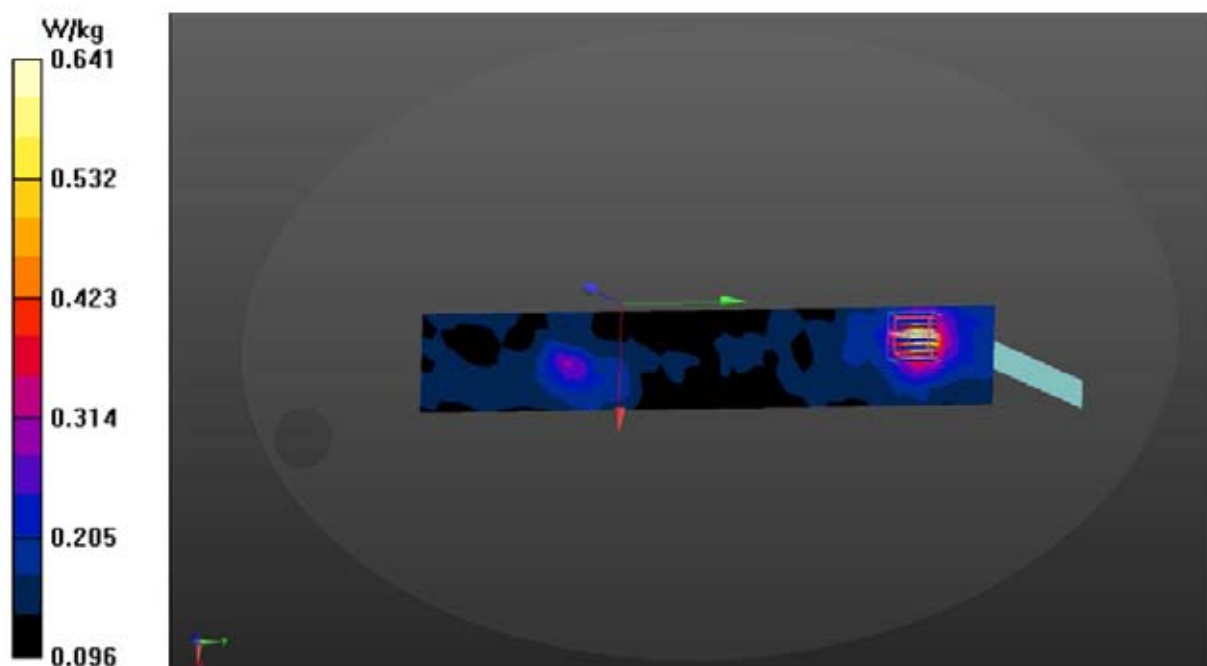
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.697 V/m; Power Drift = 1.36 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.444 W/kg; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 0.664 W/kg



Date/e: 6/7/2016

Test Laboratory: Audix_SAR Lab

P38 Wi-Fi 802.11ac-VHT40 CH 54 5270MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5230 MHz;Duty Cycle:1:1.82

Medium parameters used: $f = 5230$ MHz; $\sigma = 5.383$ S/m; $\epsilon_r = 47.536$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.201 W/kg

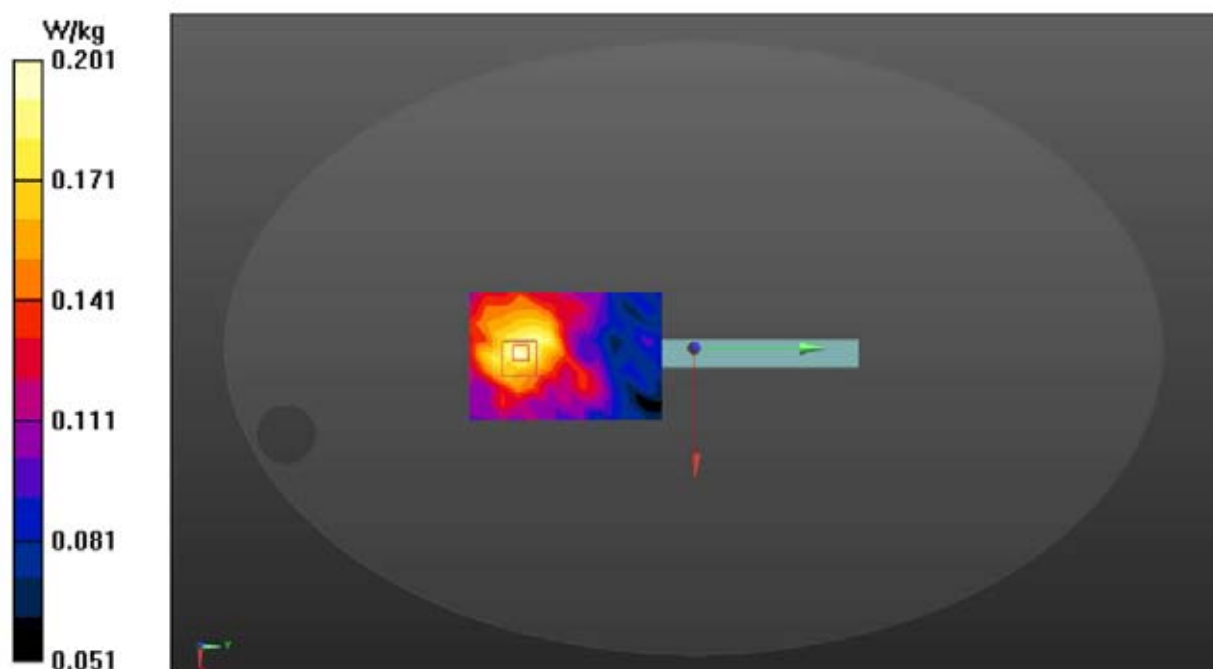
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.619 V/m; Power Drift = 0.42 dB

Peak SAR (extrapolated) = 0.316 W/kg

SAR(1 g) = 0.148 W/kg; SAR(10 g) = 0.121 W/kg

Maximum value of SAR (measured) = 0.196 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P39 Wi-Fi 802.11ac-VHT40 CH 118 5590MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5590 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5590$ MHz; $\sigma = 5.875$ S/m; $\epsilon_r = 46.784$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.735 W/kg

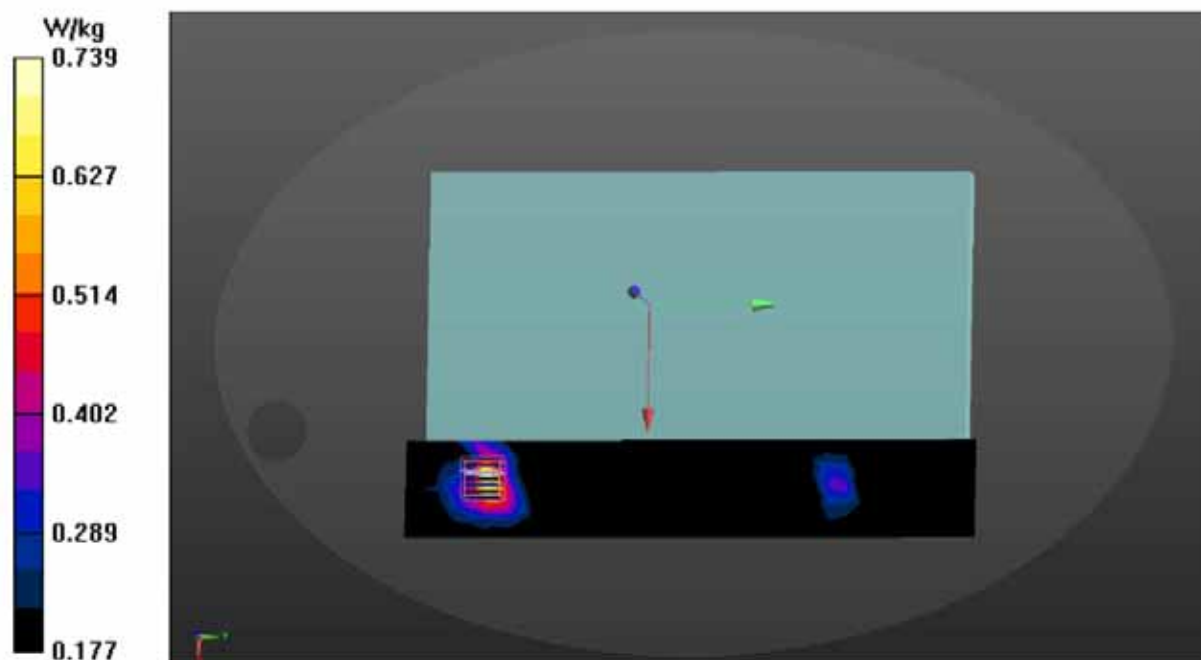
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.493 V/m; Power Drift = 1.62 dB

Peak SAR (extrapolated) = 1.33 W/kg

SAR(1 g) = 0.495 W/kg; SAR(10 g) = 0.324 W/kg

Maximum value of SAR (measured) = 0.739 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P40 Wi-Fi 802.11ac-VHT40 CH 118 5590MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5590 MHz;Duty Cycle:1:1.82

Medium parameters used: $f = 5590$ MHz; $\sigma = 5.875$ S/m; $\epsilon_r = 46.784$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.351 W/kg

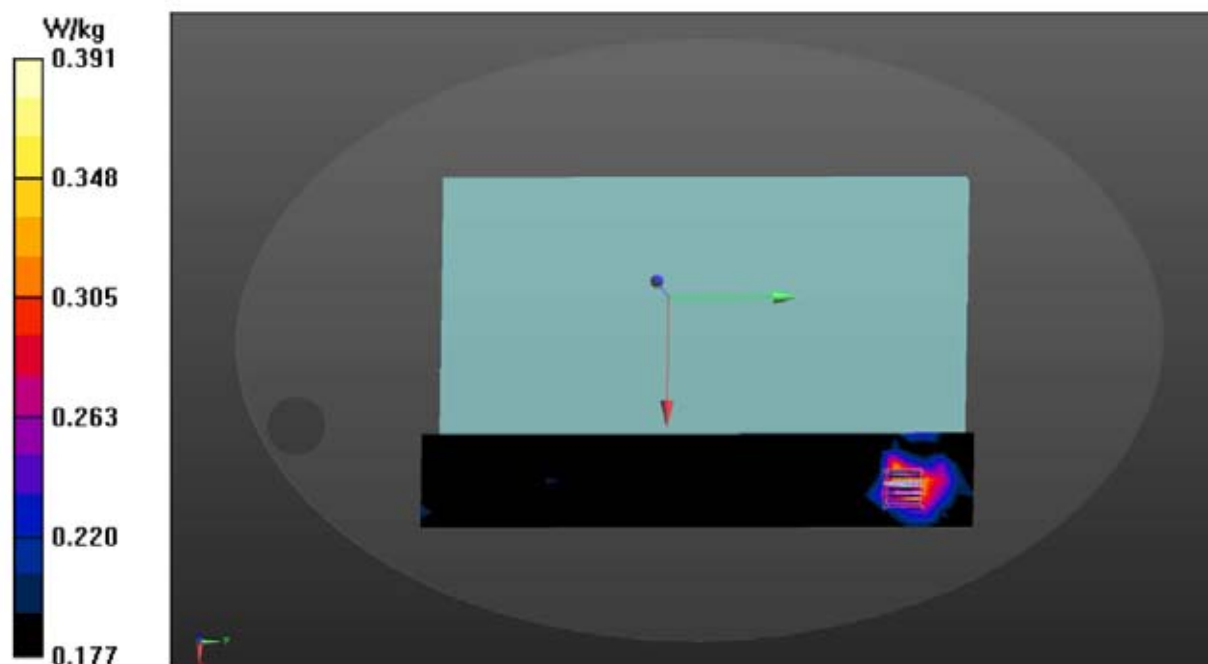
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.544 V/m; Power Drift = 1.68 dB

Peak SAR (extrapolated) = 0.721 W/kg

SAR(1 g) = 0.302 W/kg; SAR(10 g) = 0.251 W/kg

Maximum value of SAR (measured) = 0.391 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P41 Wi-Fi 802.11ac-VHT40 CH 118 5590MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5590 MHz;Duty Cycle:1:1.82

Medium parameters used: $f = 5590$ MHz; $\sigma = 5.875$ S/m; $\epsilon_r = 46.784$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.460 W/kg

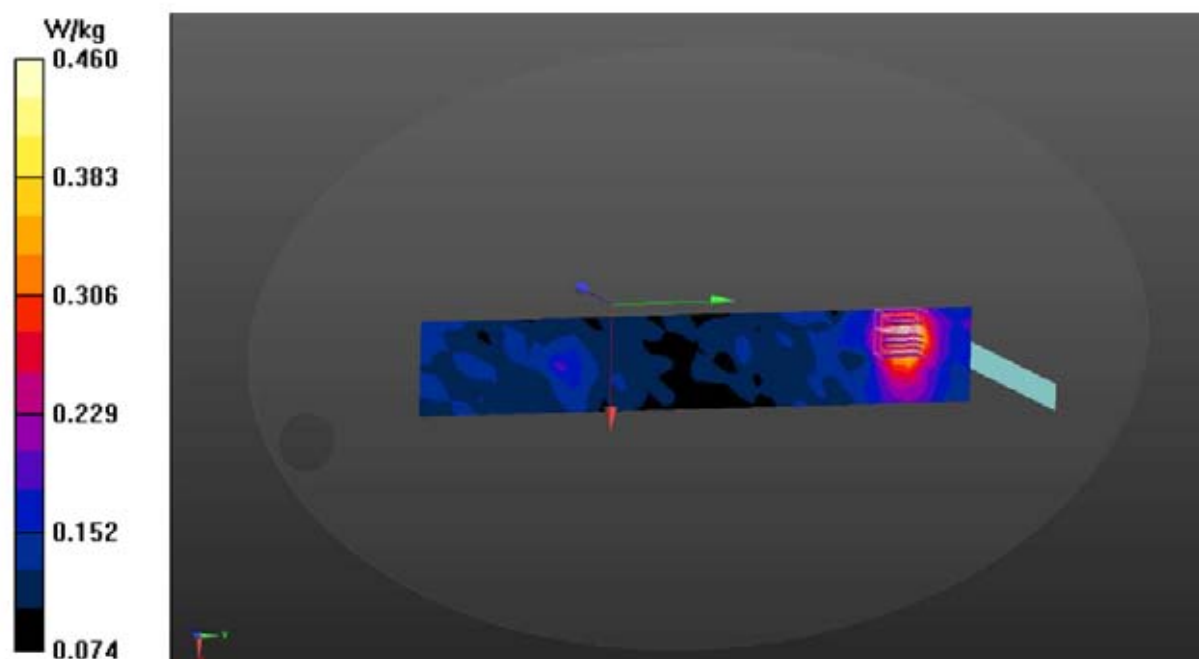
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.836 V/m; Power Drift = 0.68 dB

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.347 W/kg; SAR(10 g) = 0.262 W/kg

Maximum value of SAR (measured) = 0.486 W/kg



Date: 6/8/2016

Test Laboratory: Audix_SAR Lab

P42 Wi-Fi 802.11ac-VHT40 CH 118 5590MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5590 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5590$ MHz; $\sigma = 5.875$ S/m; $\epsilon_r = 46.784$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.192 W/kg

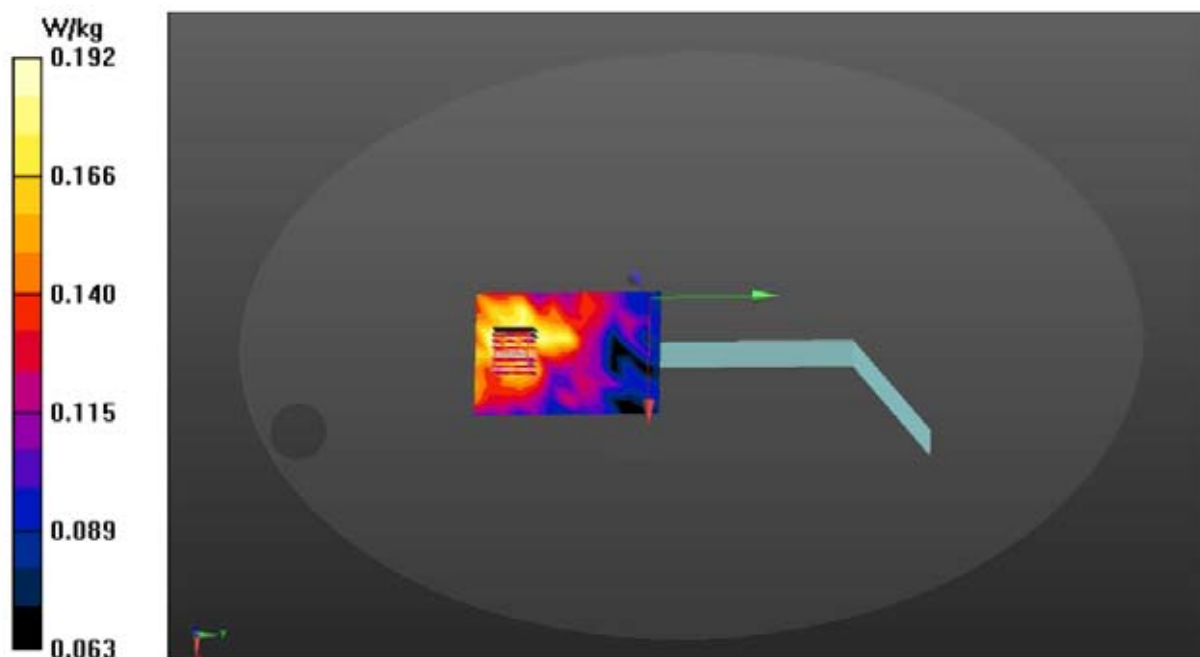
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.686 V/m; Power Drift = -1.89 dB

Peak SAR (extrapolated) = 0.261 W/kg

SAR(1 g) = 0.177 W/kg; SAR(10 g) = 0.149 W/kg

Maximum value of SAR (measured) = 0.215 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P43 Wi-Fi 802.11ac-VHT40 CH 159 5795MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5795 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5795$ MHz; $\sigma = 6.183$ S/m; $\epsilon_r = 46.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.603 W/kg

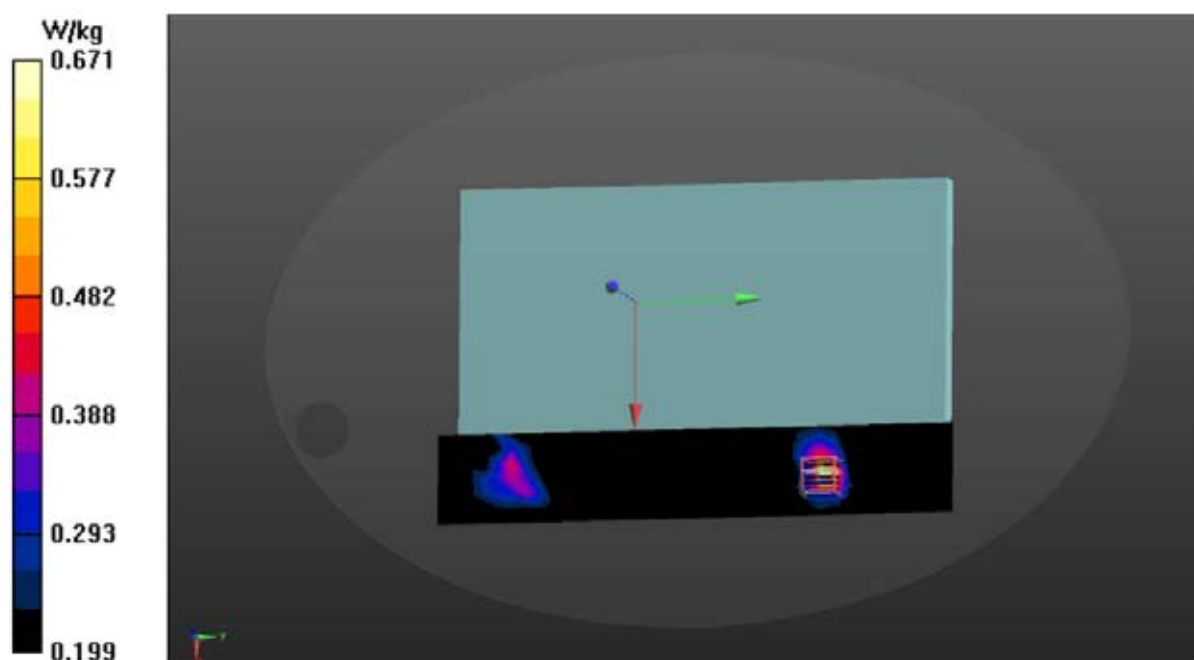
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 5.050 V/m; Power Drift = 1.26 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.453 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 0.671 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P44 Wi-Fi 802.11ac-VHT40 CH 159 5795MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5795 MHz;Duty Cycle:1:1.82

Medium parameters used: $f = 5795$ MHz; $\sigma = 6.183$ S/m; $\epsilon_r = 46.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.239 W/kg

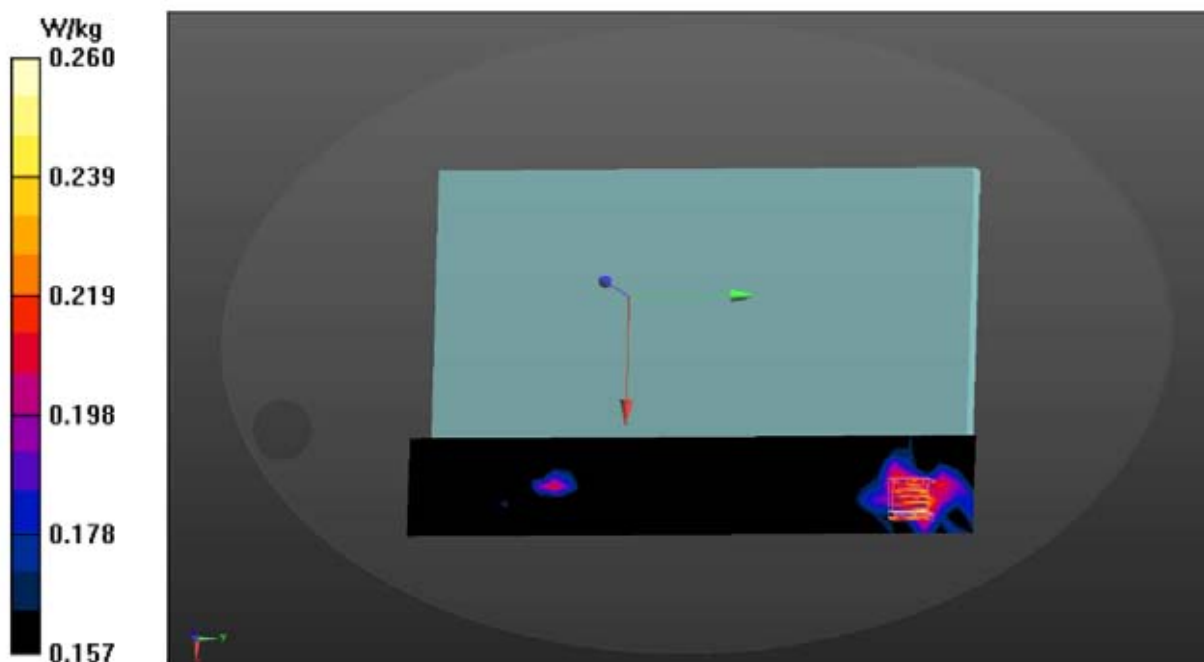
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.890 V/m; Power Drift = 0.54 dB

Peak SAR (extrapolated) = 0.303 W/kg

SAR(1 g) = 0.219 W/kg; SAR(10 g) = 0.208 W/kg

Maximum value of SAR (measured) = 0.260 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P45 Wi-Fi 802.11ac-VHT40 CH 159 5795MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5795 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5795$ MHz; $\sigma = 6.183$ S/m; $\epsilon_r = 46.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS2 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.370 W/kg

Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.712 V/m; Power Drift = 1.10 dB

Peak SAR (extrapolated) = 0.745 W/kg

SAR(1 g) = 0.203 W/kg; SAR(10 g) = 0.108 W/kg

Maximum value of SAR (measured) = 0.350 W/kg

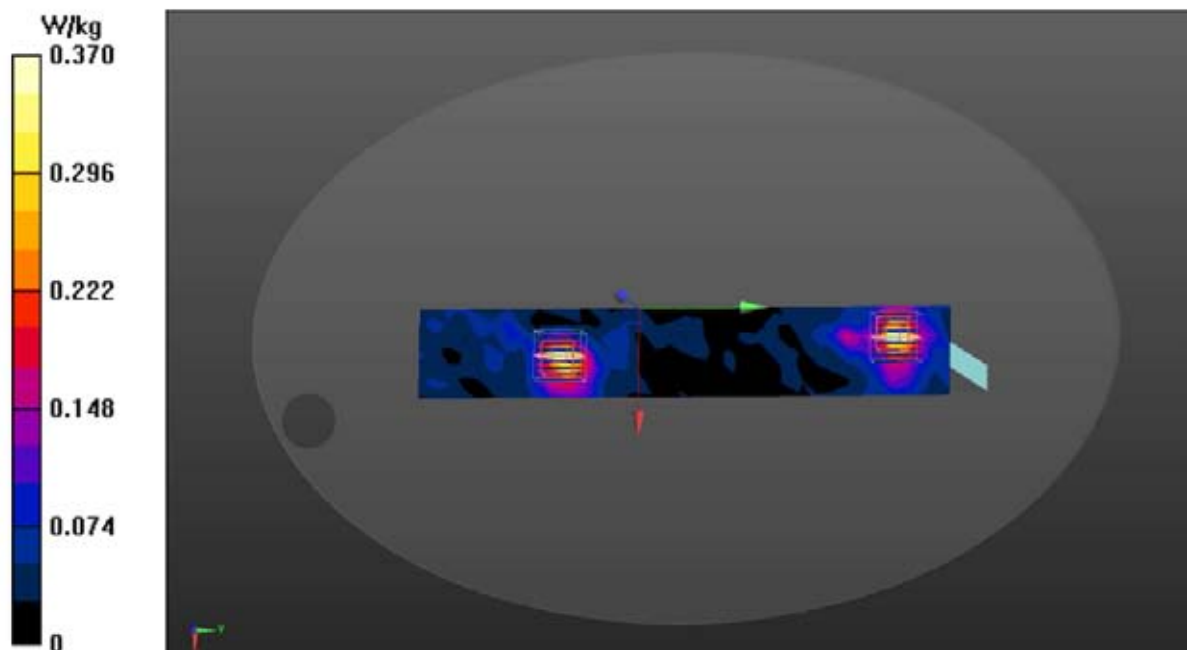
Zoom Scan (9x9x9)/Cube 1: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.712 V/m; Power Drift = 1.10 dB

Peak SAR (extrapolated) = 0.809 W/kg

SAR(1 g) = 0.225 W/kg; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 0.378 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P46 Wi-Fi 802.11ac-VHT40 CH 159 5795MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_40 (0); Frequency: 5795 MHz; Duty Cycle: 1:1.82

Medium parameters used: $f = 5795$ MHz; $\sigma = 6.183$ S/m; $\epsilon_r = 46.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.0882 W/kg

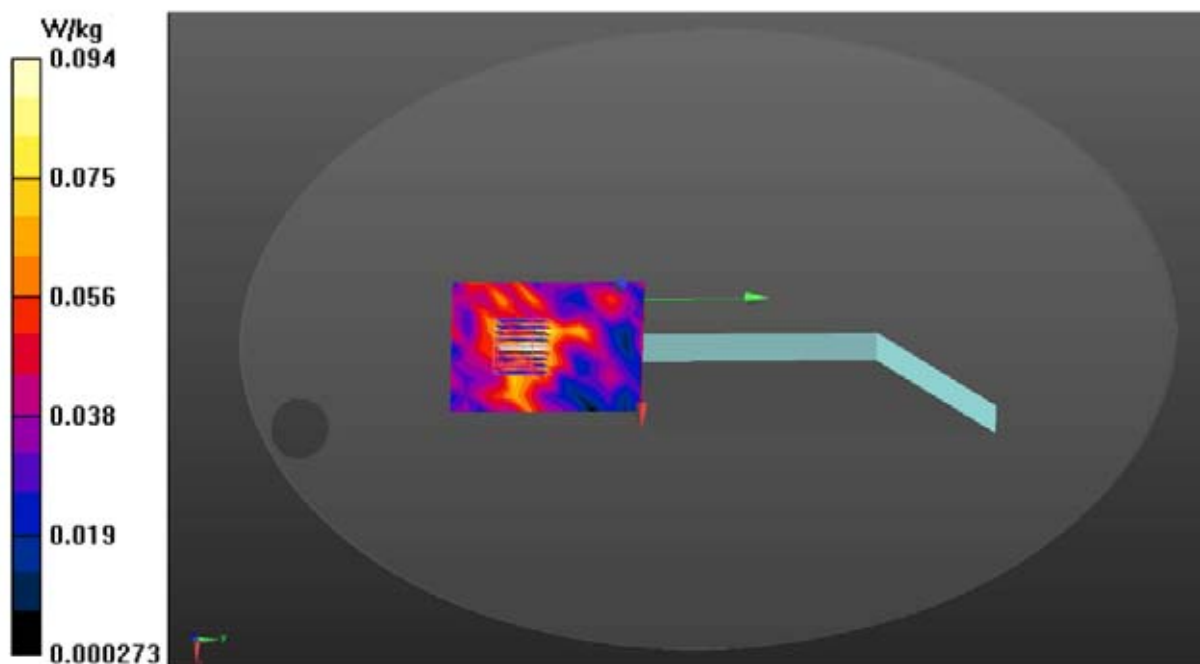
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 0.5930 V/m; Power Drift = 1.61 dB

Peak SAR (extrapolated) = 0.163 W/kg

SAR(1 g) = 0.058 W/kg; SAR(10 g) = 0.039 W/kg

Maximum value of SAR (measured) = 0.0937 W/kg



Test Date: 2016. 06. 06 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 07 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 13 Temperature : 23 Humidity : 25%
 Test Date: 2016. 06. 14 Temperature : 23 Humidity : 25%

Liquid Temperature : 21.7					Depth of Liquid: > 15cm				
Test Mode: 5GHz									
Test Position: Body	Antenna Position	Separation Distance (cm)	Frequency		Conducted power (dBm)	SAR 1g (W/kg)	Scale Factor	Scale SAR	Limit (W/kg)
			Channel	MHz					
802.11ac-VHT80 (UNII Band I)									
Front	Fixed	0.5	42	5210	12.74	0.189	1.06	0.20	1.6
Back	Fixed	0.5	42	5210	12.74	0.159	1.06	0.17	1.6
Top	Fixed	0.5	42	5210	12.74	0.087	1.06	0.09	1.6
Right	Fixed	0.5	42	5210	12.74	0.099	1.06	0.11	1.6
802.11ac-VHT80 (UNII Band II-2A)									
Front	Fixed	0.5	58	5290	14.26	0.246	1.06	0.26	1.6
Back	Fixed	0.5	58	5290	14.26	0.167	1.06	0.18	1.6
Top	Fixed	0.5	58	5290	14.26	0.104	1.06	0.11	1.6
Right	Fixed	0.5	58	5290	14.26	0.145	1.06	0.15	1.6
802.11ac-VHT80 (UNII Band II-2C)									
Front	Fixed	0.5	122	5610	18.56	0.549	1.11	0.61	1.6
Back	Fixed	0.5	122	5610	18.56	0.285	1.11	0.32	1.6
Top	Fixed	0.5	122	5610	18.56	0.284	1.11	0.31	1.6
Right	Fixed	0.5	122	5610	18.56	0.103	1.11	0.11	1.6
802.11ac-VHT80 (UNII Band III)									
Front	Fixed	0.5	155	5775	16.28	0.306	1.05	0.32	1.6
Back	Fixed	0.5	155	5775	16.28	0.218	1.05	0.23	1.6
Top	Fixed	0.5	155	5775	16.28	0.117	1.05	0.12	1.6
Right	Fixed	0.5	155	5775	16.28	0.043	1.05	0.05	1.6

Remark: The worst SAR was measured at 5 mm distance.

Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P47 Wi-Fi 802.11ac-VHT80 CH 42 5210MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5210 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5210 \text{ MHz}$; $\sigma = 5.358 \text{ S/m}$; $\epsilon_r = 47.578$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.235 W/kg

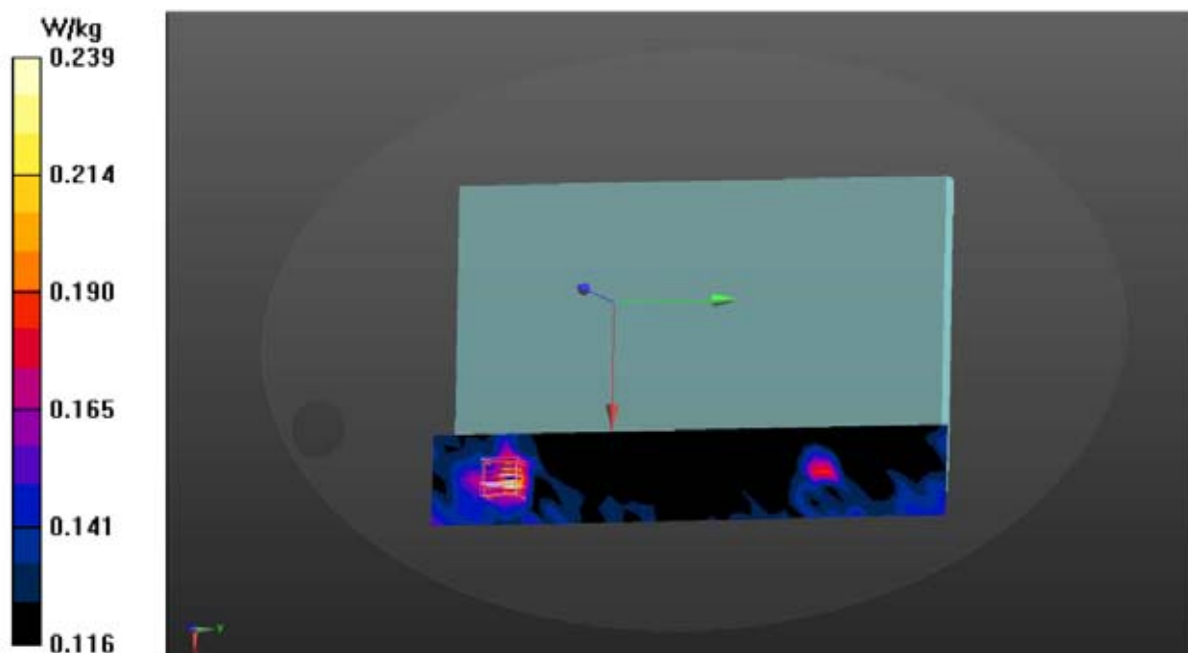
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=2.5\text{mm}$

Reference Value = 4.257 V/m; Power Drift = 0.92 dB

Peak SAR (extrapolated) = 0.290 W/kg

SAR(1 g) = 0.189 W/kg; SAR(10 g) = 0.170 W/kg

Maximum value of SAR (measured) = 0.239 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P48 Wi-Fi 802.11ac-VHT80 CH 42 5210MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5210 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5210$ MHz; $\sigma = 5.358$ S/m; $\epsilon_r = 47.578$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.163 W/kg

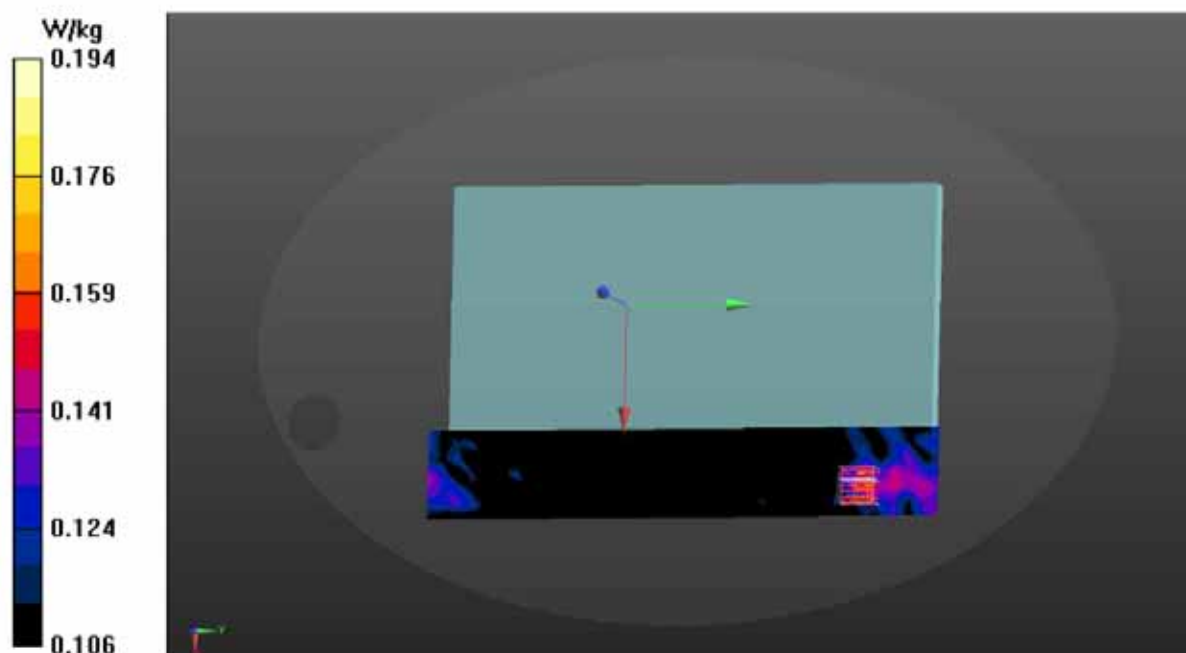
Zoom Scan (7x7x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 2.815 V/m; Power Drift = 1.61 dB

Peak SAR (extrapolated) = 0.195 W/kg

SAR(1 g) = 0.159 W/kg; SAR(10 g) = 0.147 W/kg

Maximum value of SAR (measured) = 0.194 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P49 Wi-Fi 802.11ac-VHT80 CH 42 5210MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5210 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5210$ MHz; $\sigma = 5.358$ S/m; $\epsilon_r = 47.578$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.124 W/kg

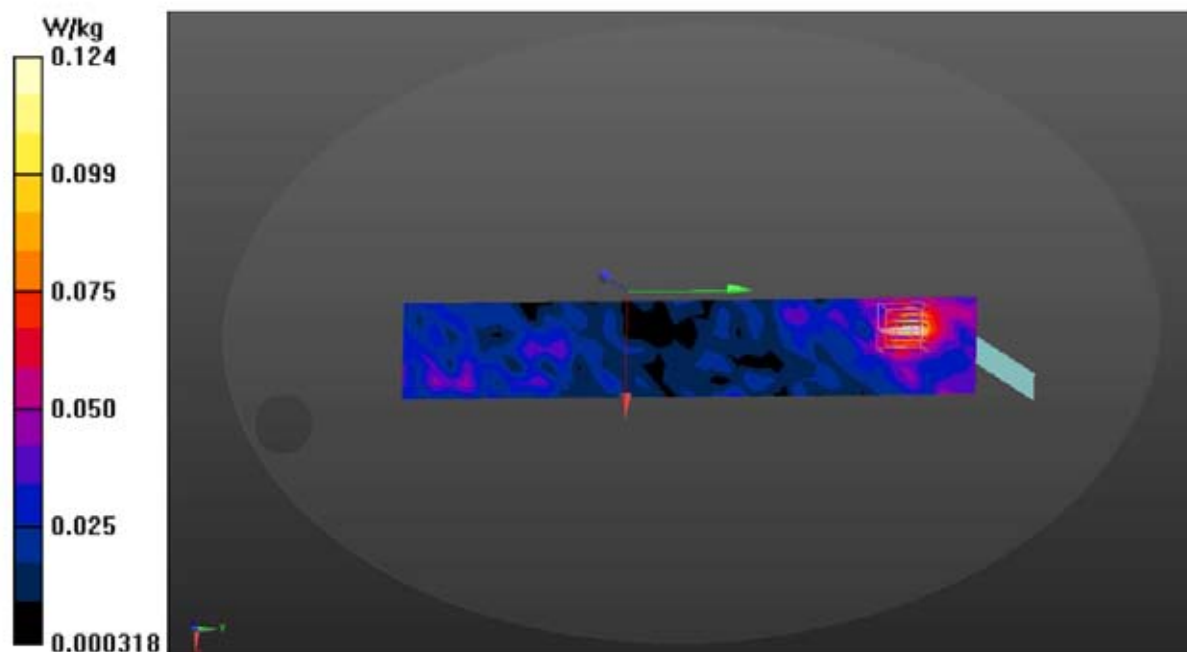
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.860 V/m; Power Drift = 0.44 dB

Peak SAR (extrapolated) = 0.242 W/kg

SAR(1 g) = 0.087 W/kg; SAR(10 g) = 0.062 W/kg

Maximum value of SAR (measured) = 0.137 W/kg



Date: 6/6/2016

Test Laboratory: Audix_SAR Lab

P50 Wi-Fi 802.11ac-VHT80 CH 42 5210MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5210 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5210$ MHz; $\sigma = 5.358$ S/m; $\epsilon_r = 47.578$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.54, 4.54, 4.54); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.111 W/kg

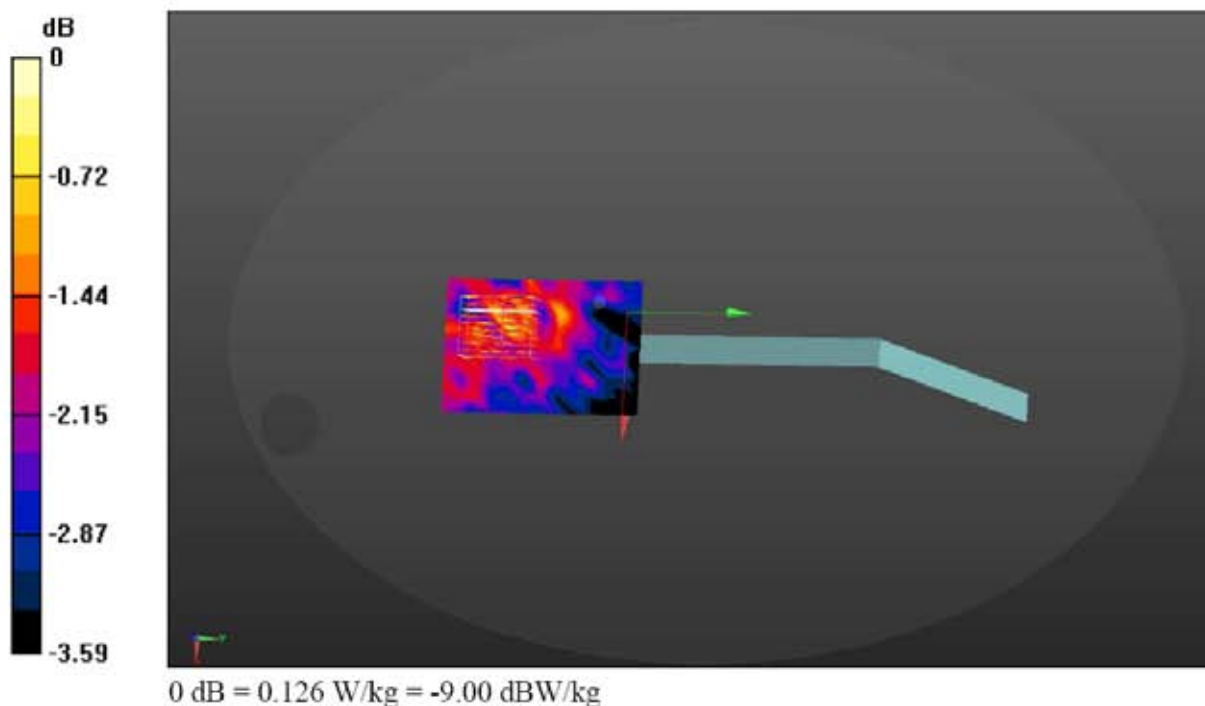
Zoom Scan (10x12x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.464 V/m; Power Drift = 0.70 dB

Peak SAR (extrapolated) = 0.126 W/kg

SAR(1 g) = 0.099 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.126 W/kg



Date: 6/7/2016

Test Laboratory: Audix_SAR Lab

P51 Wi-Fi 802.11ac-VHT80 CH 58 5290MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5290 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 47.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.300 W/kg

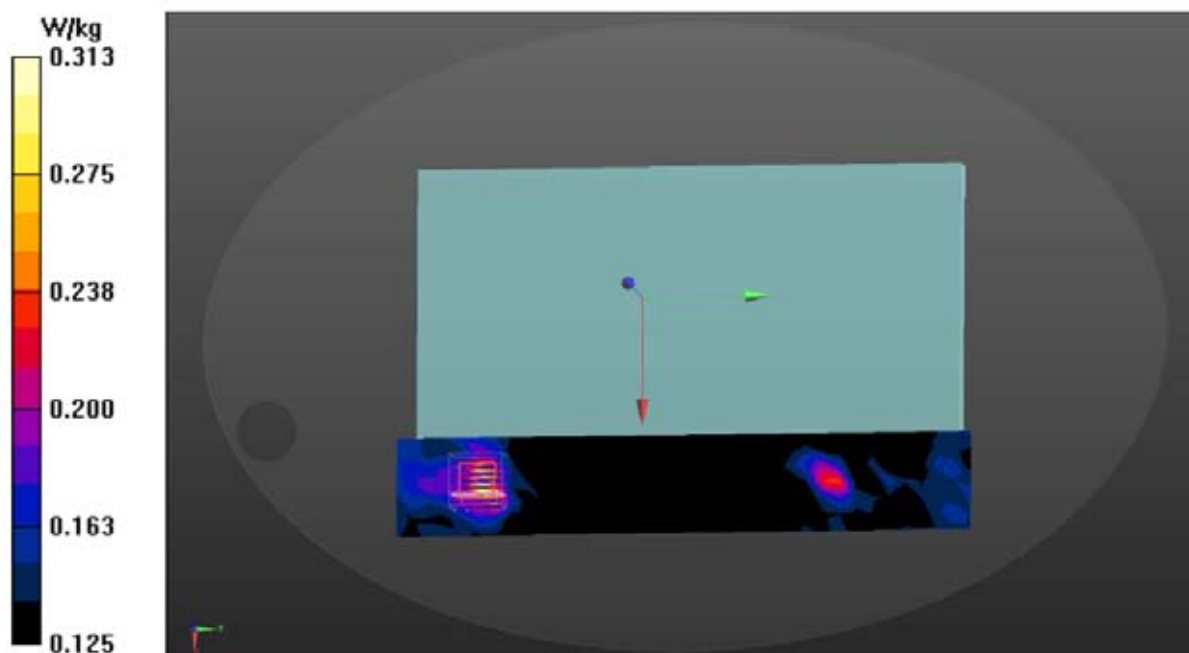
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.203 V/m; Power Drift = 1.97 dB

Peak SAR (extrapolated) = 0.493 W/kg

SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.200 W/kg

Maximum value of SAR (measured) = 0.313 W/kg



Date: 6/7/2016

Test Laboratory: Audix_SAR Lab

P52 Wi-Fi 802.11ac-VHT80 CH 58 5290MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5290 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 47.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.189 W/kg

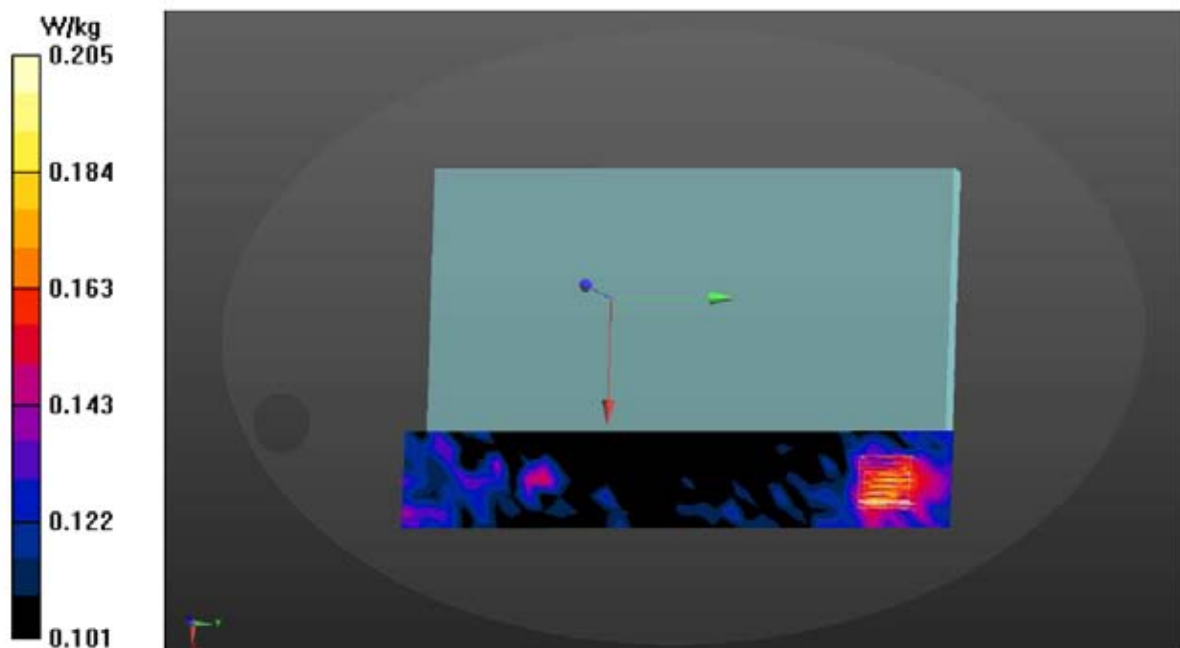
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.785 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 0.209 W/kg

SAR(1 g) = 0.167 W/kg; SAR(10 g) = 0.160 W/kg

Maximum value of SAR (measured) = 0.205 W/kg



Date: 6/7/2016

Test Laboratory: Audix_SAR Lab

P53 Wi-Fi 802.11ac-VHT80 CH 58 5290MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5290 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 47.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.183 W/kg

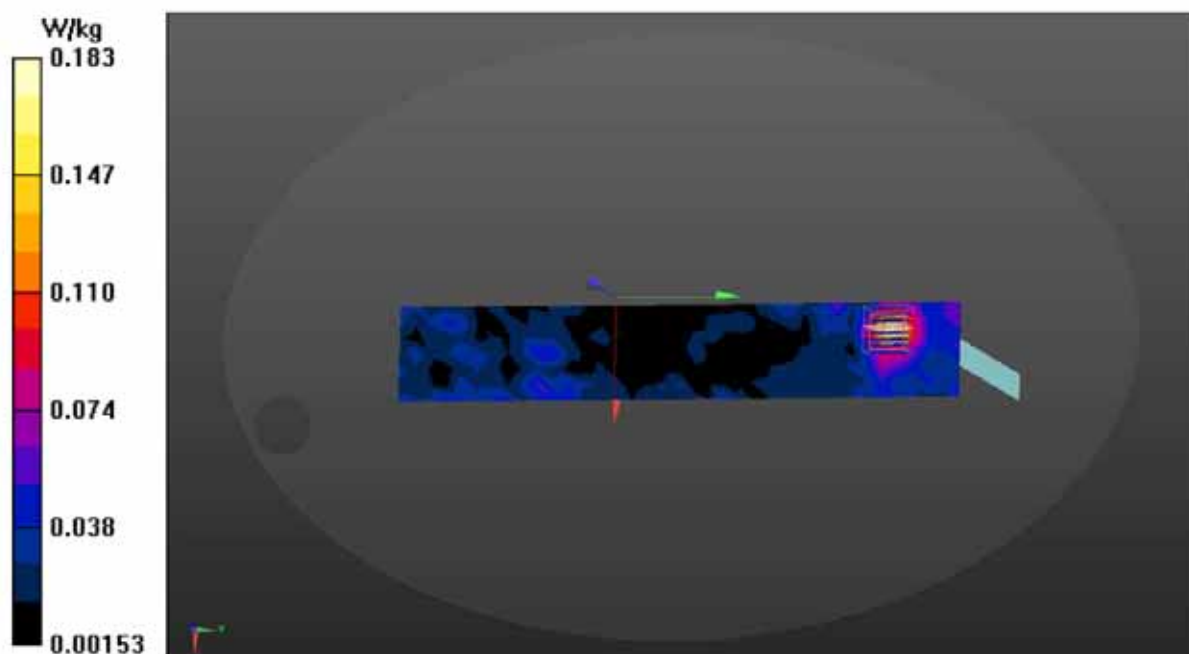
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 2.127 V/m; Power Drift = -0.92 dB

Peak SAR (extrapolated) = 0.287 W/kg

SAR(1 g) = 0.104 W/kg; SAR(10 g) = 0.056 W/kg

Maximum value of SAR (measured) = 0.168 W/kg



Date/: 6/7/2016

Test Laboratory: Audix_SAR Lab

P54 Wi-Fi 802.11ac-VHT80 CH 58 5290MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5290 MHz;Duty Cycle:1:2.22

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 47.377$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.36, 4.36, 4.36); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.150 W/kg

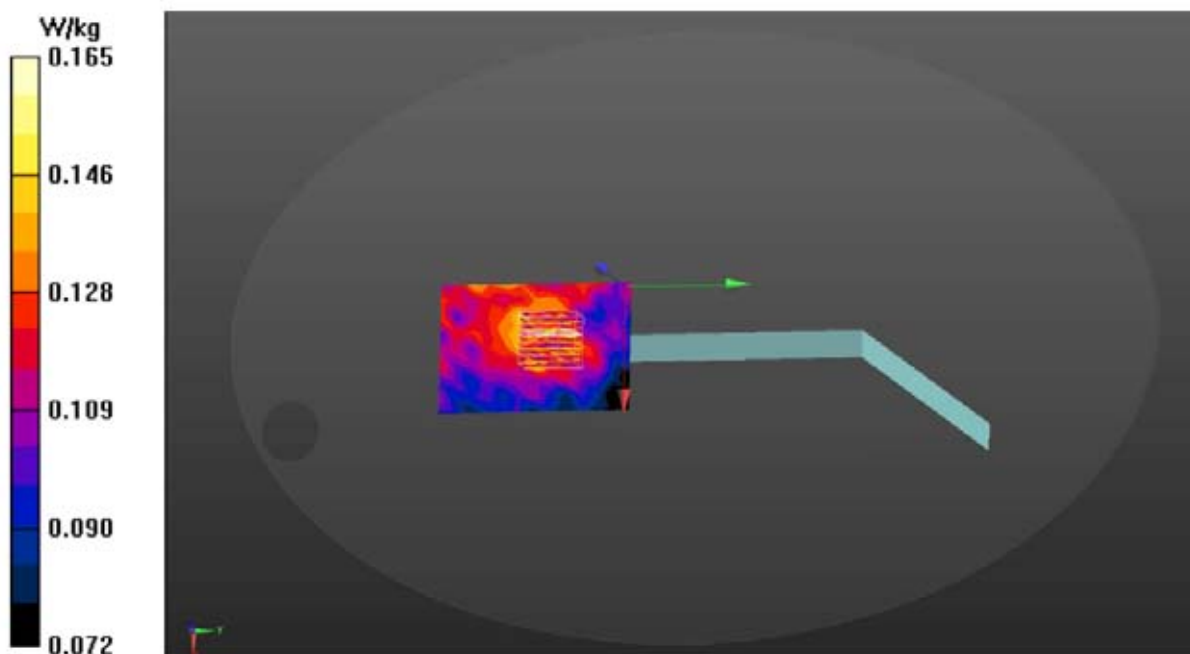
Zoom Scan (9x10x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.830 V/m; Power Drift = -1.36 dB

Peak SAR (extrapolated) = 0.192 W/kg

SAR(1 g) = 0.145 W/kg; SAR(10 g) = 0.128 W/kg

Maximum value of SAR (measured) = 0.165 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P55 Wi-Fi 802.11ac-VHT80 CH 122 5610MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5610 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5610$ MHz; $\sigma = 5.909$ S/m; $\epsilon_r = 46.734$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.849 W/kg

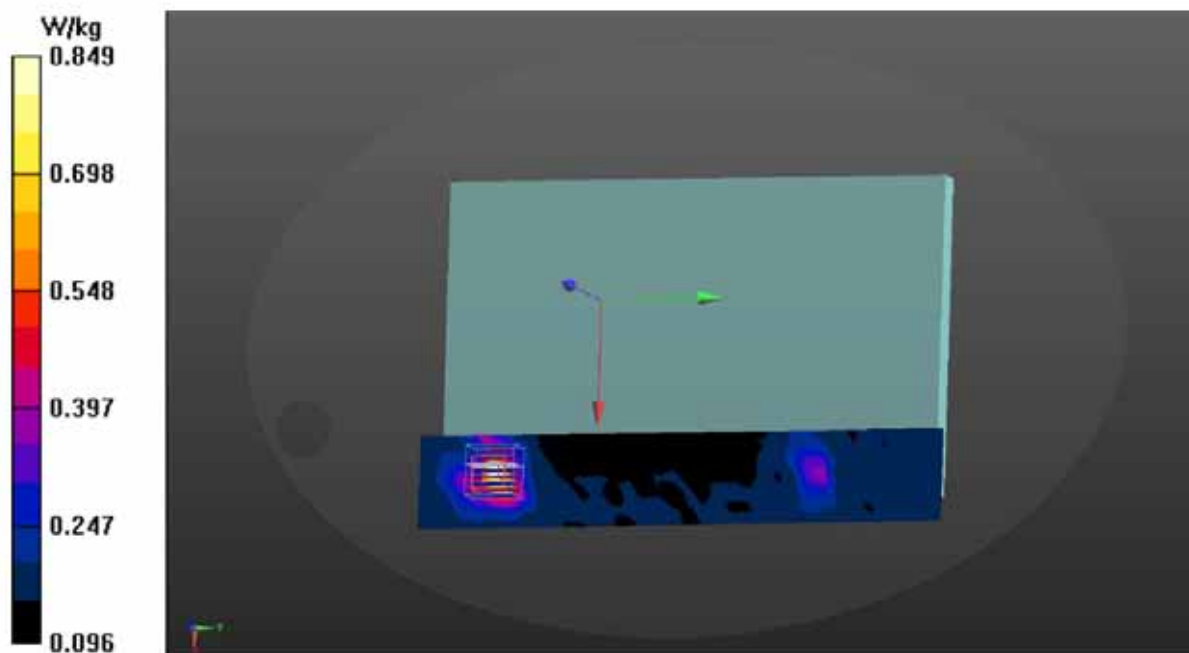
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 4.886 V/m; Power Drift = -0.21 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.549 W/kg; SAR(10 g) = 0.347 W/kg

Maximum value of SAR (measured) = 0.852 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P56 Wi-Fi 802.11ac-VHT80 CH 122 5610MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5610 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5610$ MHz; $\sigma = 5.909$ S/m; $\epsilon_r = 46.734$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.343 W/kg

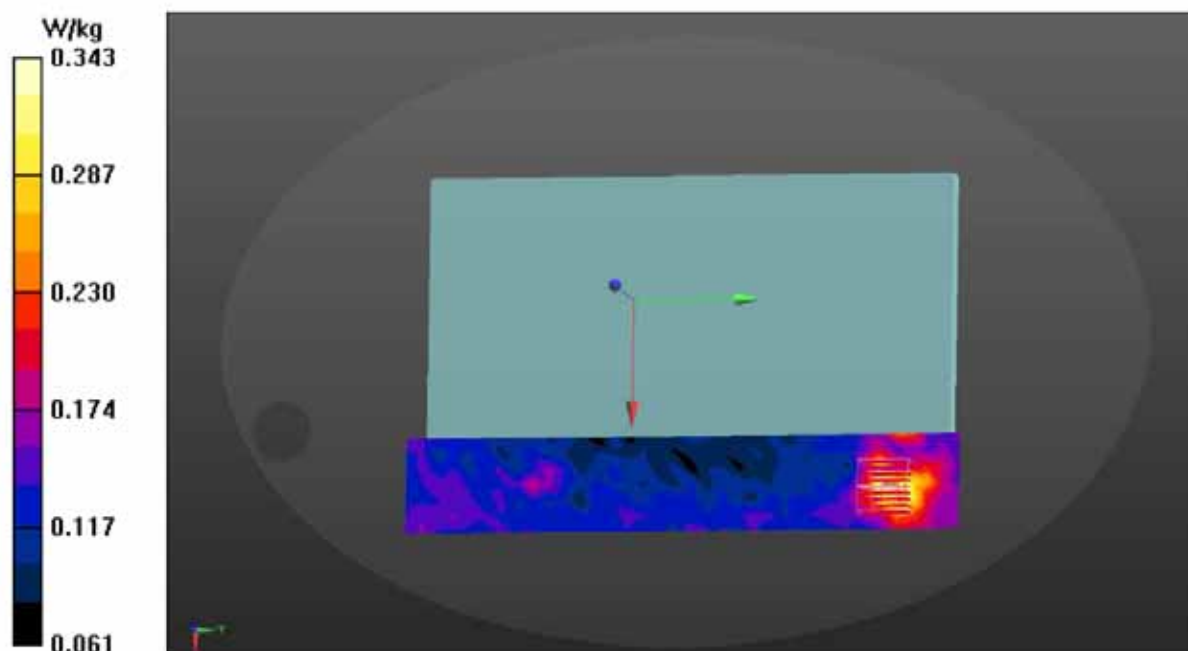
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.529 V/m; Power Drift = 1.56 dB

Peak SAR (extrapolated) = 0.618 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.232 W/kg

Maximum value of SAR (measured) = 0.369 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P57 Wi-Fi 802.11ac-VHT80 CH 122 5610MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5610 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5610$ MHz; $\sigma = 5.909$ S/m; $\epsilon_r = 46.734$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.486 W/kg

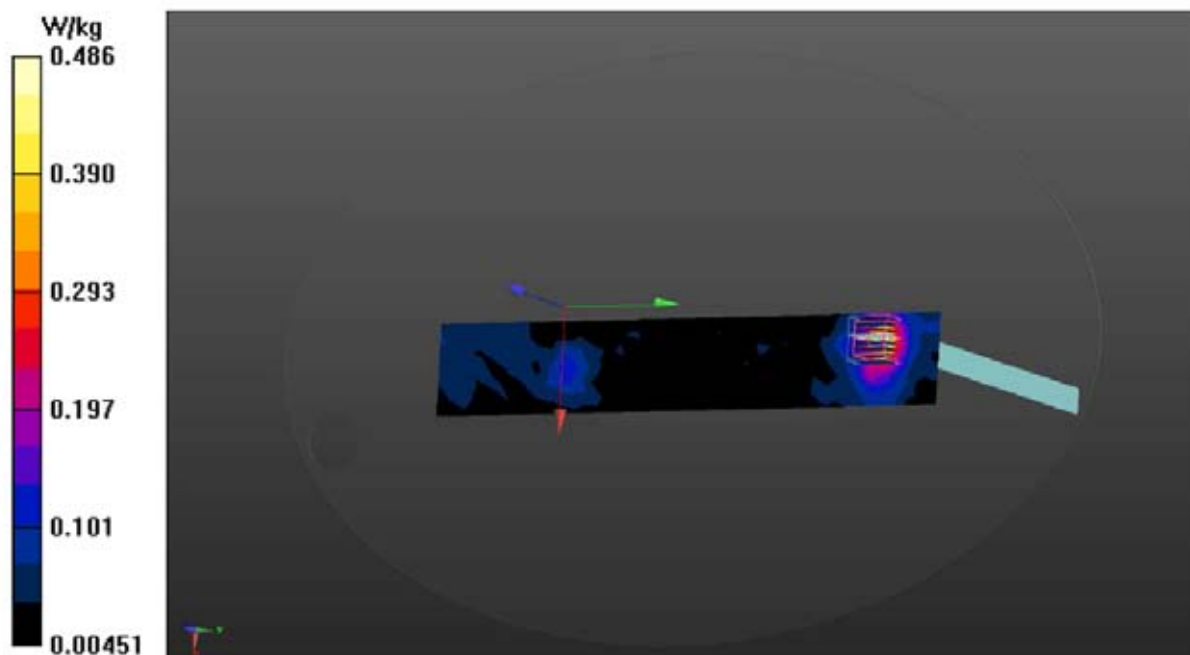
Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.417 V/m; Power Drift = 1.62 dB

Peak SAR (extrapolated) = 0.925 W/kg

SAR(1 g) = 0.284 W/kg; SAR(10 g) = 0.135 W/kg

Maximum value of SAR (measured) = 0.473 W/kg



Date: 6/13/2016

Test Laboratory: Audix_SAR Lab

P58 Wi-Fi 802.11ac-VHT80 CH 122 5610MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5610 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5610$ MHz; $\sigma = 5.909$ S/m; $\epsilon_r = 46.734$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(3.79, 3.79, 3.79); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.151 W/kg

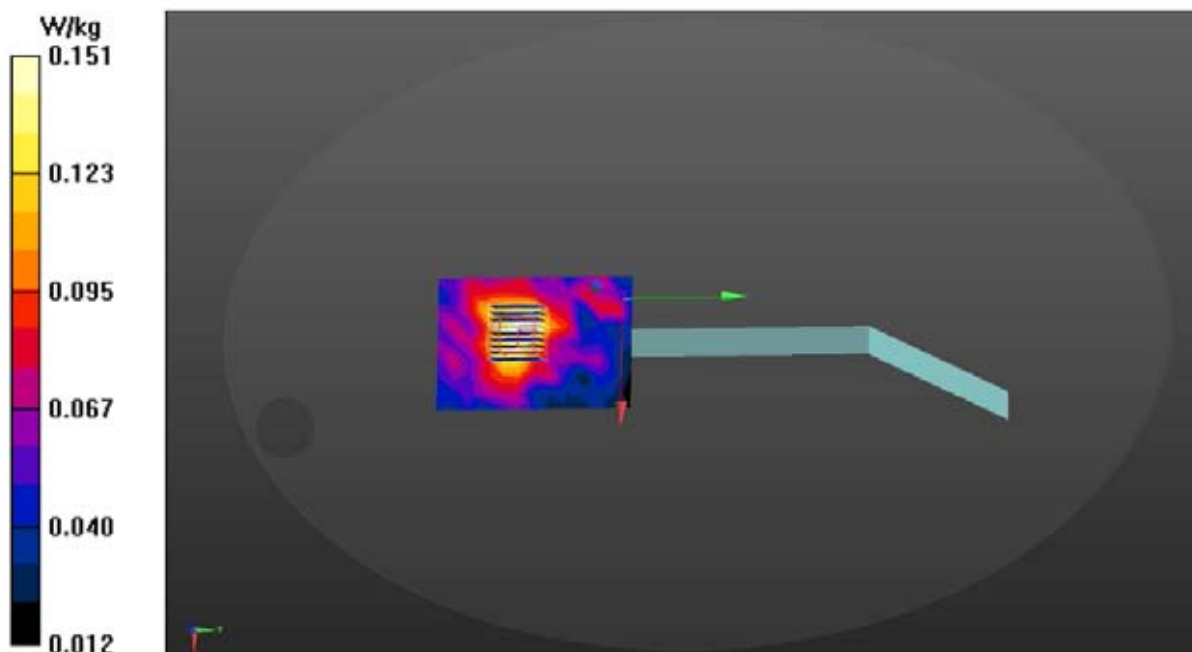
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.322 V/m; Power Drift = 0.24 dB

Peak SAR (extrapolated) = 0.342 W/kg

SAR(1 g) = 0.103 W/kg; SAR(10 g) = 0.060 W/kg

Maximum value of SAR (measured) = 0.170 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P59 Wi-Fi 802.11ac-VHT80 CH 155 5775MHz Front**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5775 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.152$ S/m; $\epsilon_r = 46.391$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.389 W/kg

Zoom Scan (8x8x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 5.067 V/m; Power Drift = 0.24 dB

Peak SAR (extrapolated) = 0.844 W/kg

SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.243 W/kg

Maximum value of SAR (measured) = 0.401 W/kg

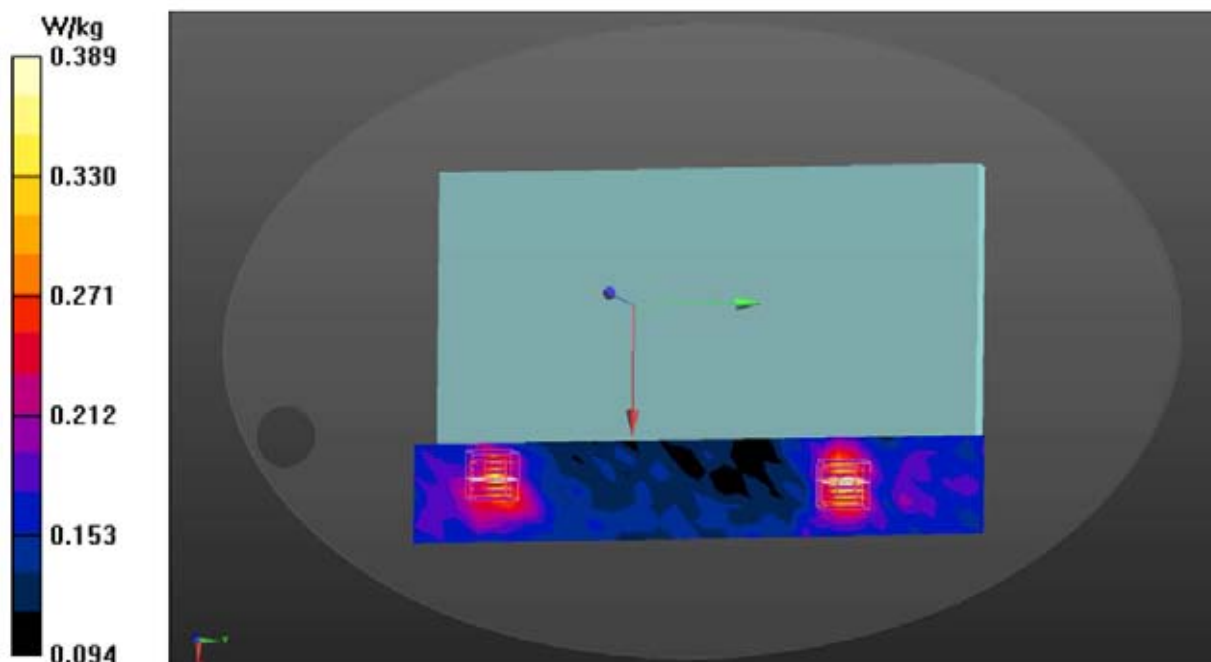
Zoom Scan (8x8x9)/Cube 1: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 5.067 V/m; Power Drift = 0.24 dB

Peak SAR (extrapolated) = 0.501 W/kg

SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.229 W/kg

Maximum value of SAR (measured) = 0.333 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P60 Wi-Fi 802.11ac-VHT80 CH 155 5775MHz Back**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5775 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.152$ S/m; $\epsilon_r = 46.391$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 25.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x36x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.215 W/kg

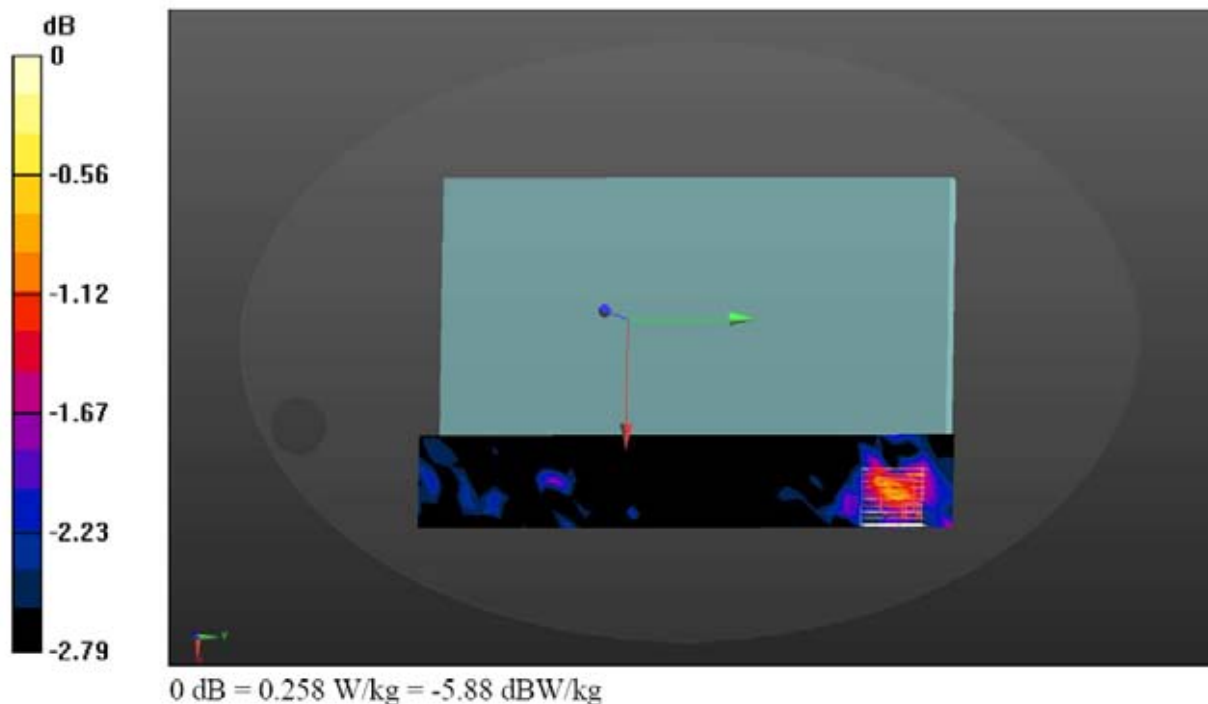
Zoom Scan (10x11x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 3.565 V/m; Power Drift = 1.70 dB

Peak SAR (extrapolated) = 0.258 W/kg

SAR(1 g) = 0.218 W/kg; SAR(10 g) = 0.198 W/kg

Maximum value of SAR (measured) = 0.258 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P61 Wi-Fi 802.11ac-VHT80 CH 155 5775MHz Top**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5775 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.152$ S/m; $\epsilon_r = 46.391$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x37x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.199 W/kg

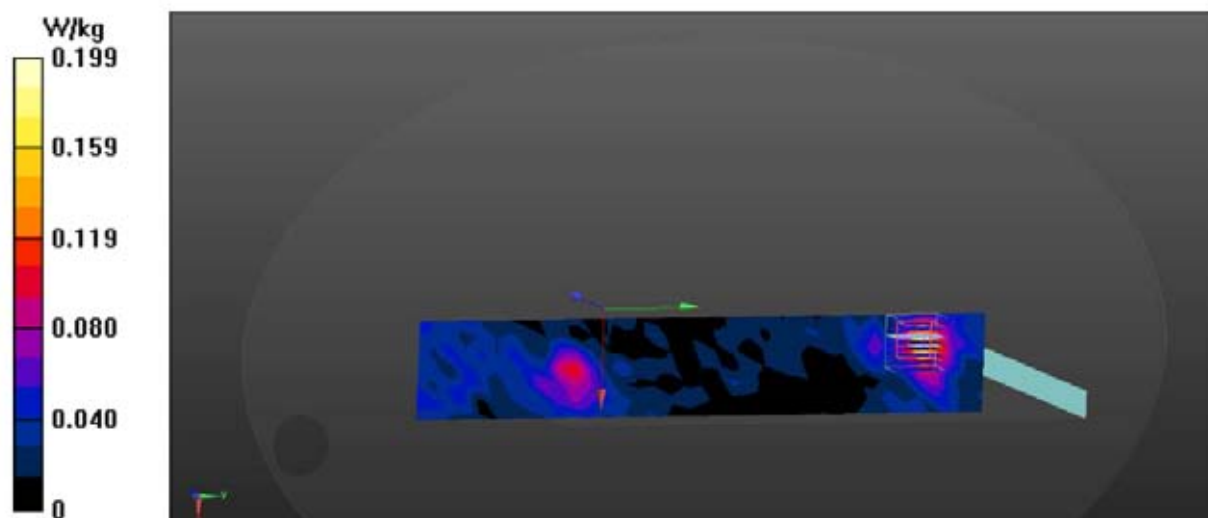
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.579 V/m; Power Drift = 1.84 dB

Peak SAR (extrapolated) = 0.344 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.069 W/kg

Maximum value of SAR (measured) = 0.191 W/kg



Date: 6/14/2016

Test Laboratory: Audix_SAR Lab

P62 Wi-Fi 802.11ac-VHT80 CH 155 5775MHz Right**DUT: TC12A-W**

Communication System: UID 0, WIFI 5G 802.11VHT_80 (0); Frequency: 5775 MHz; Duty Cycle: 1:2.22

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.152$ S/m; $\epsilon_r = 46.391$; $\rho = 1000$ kg/m³

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3855; ConvF(4.15, 4.15, 4.15); Calibrated: 9/29/2015;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = -19.0, 31.0$
- Electronics: DAE4 Sn1337; Calibrated: 9/24/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1170
- DASYS 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Measurement grid: $dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.0797 W/kg

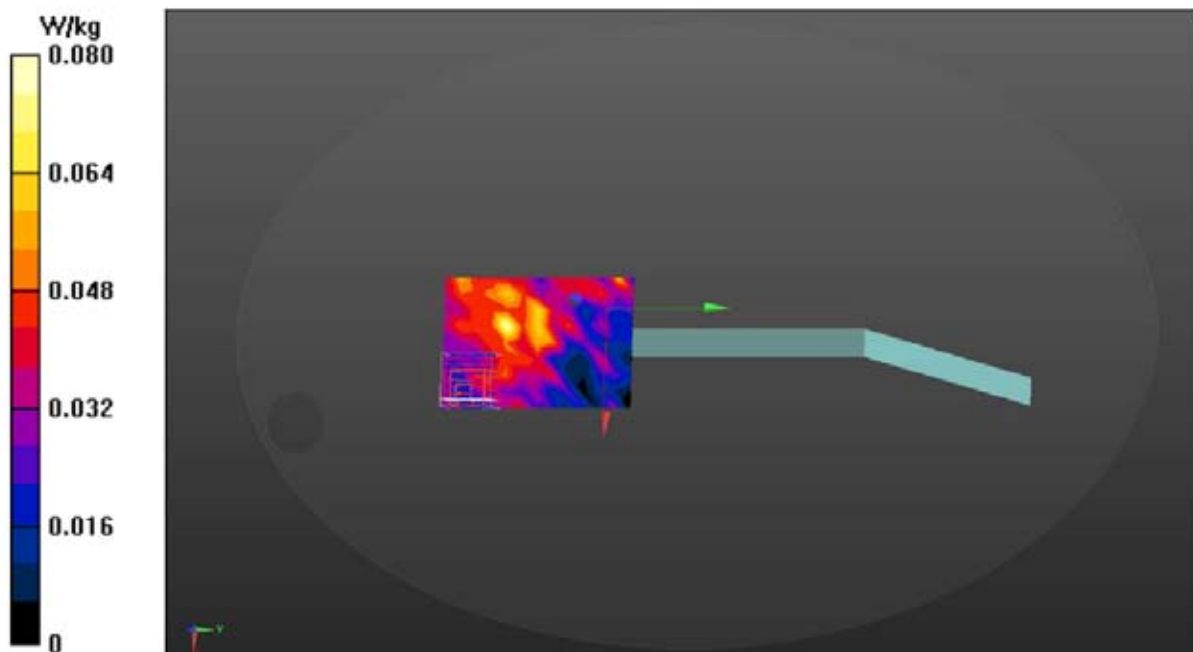
Zoom Scan (9x9x9)/Cube 0: Measurement grid: $dx=4$ mm, $dy=4$ mm, $dz=2.5$ mm

Reference Value = 1.263 V/m; Power Drift = -1.59 dB

Peak SAR (extrapolated) = 0.157 W/kg

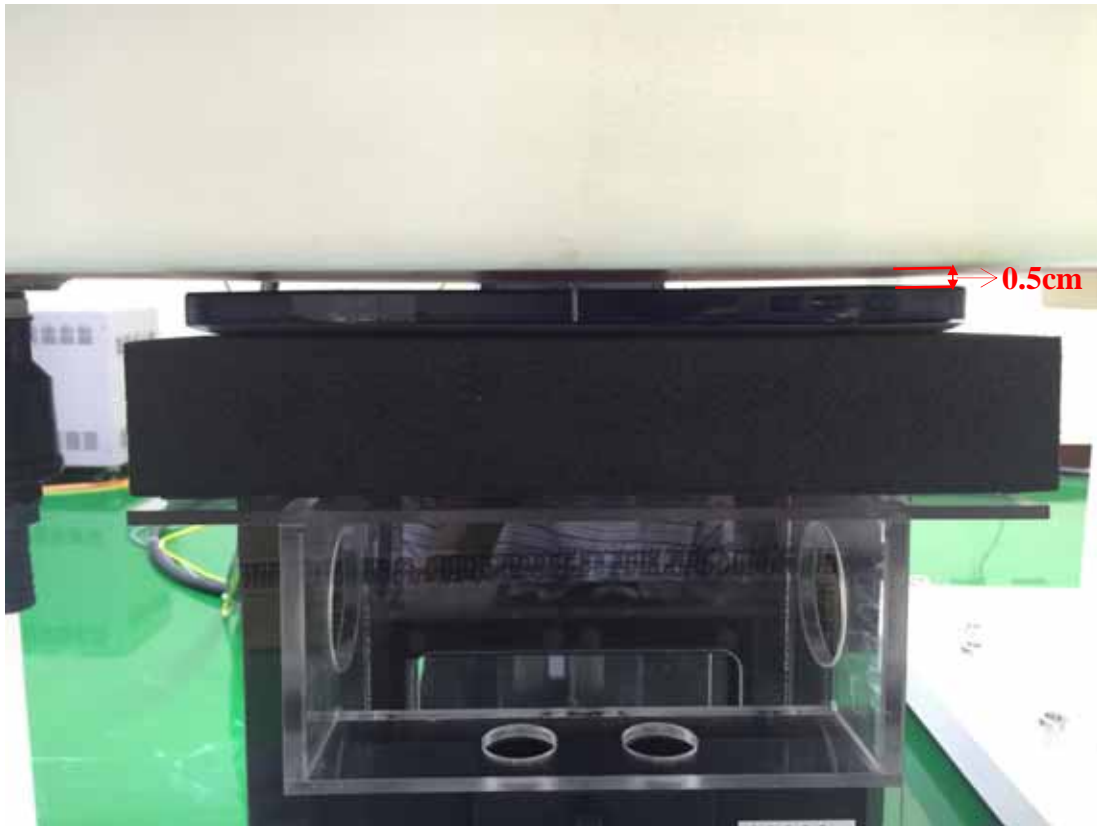
SAR(1 g) = 0.043 W/kg; SAR(10 g) = 0.025 W/kg

Maximum value of SAR (measured) = 0.0645 W/kg



7. PHOTOGRAPHS OF MEASUREMENT

Test Position: Front



Test Position: Back



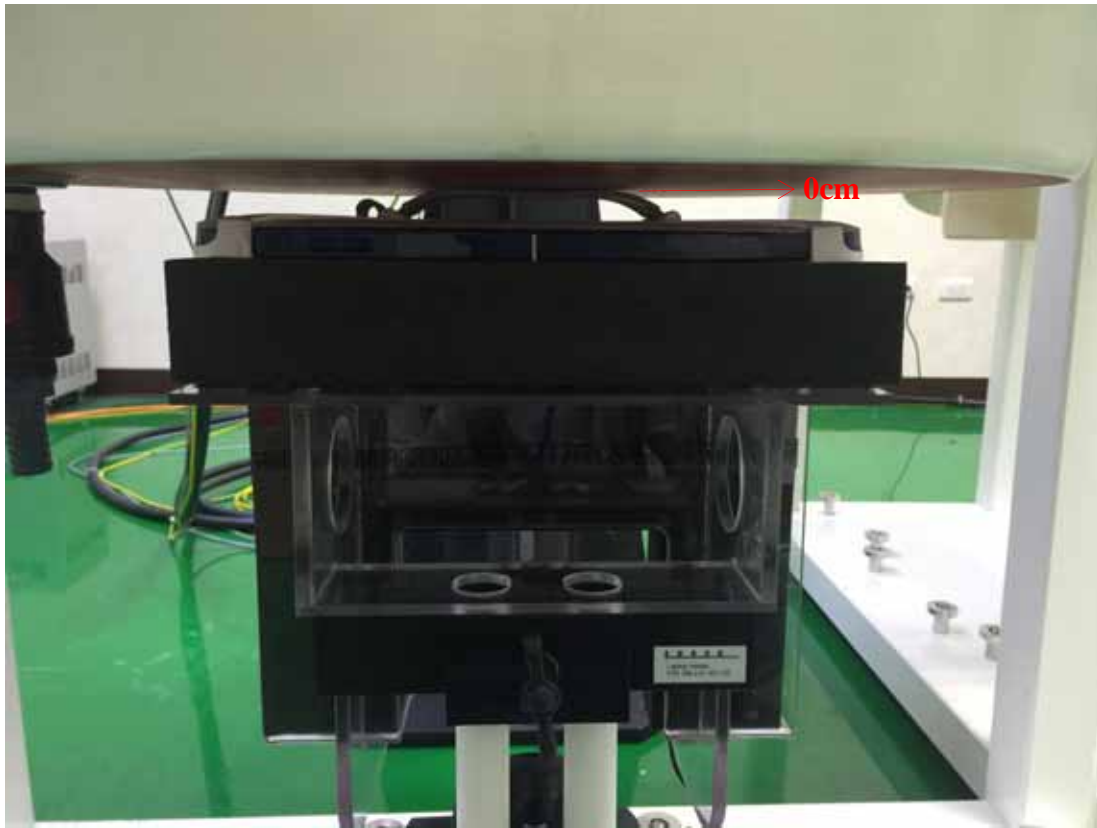
Test Position: Top



Test Position: Right



Test Position: Back With Case



Depth of the Liquid in the Phantom-Zoom In

