

Test Laboratory: UL CCS SAR Lab D

5GHz_Body

Communication System: 802.11abgn; Frequency: 5200 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5200$ MHz; $\sigma = 5.47$ mho/m; $\epsilon_r = 48.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

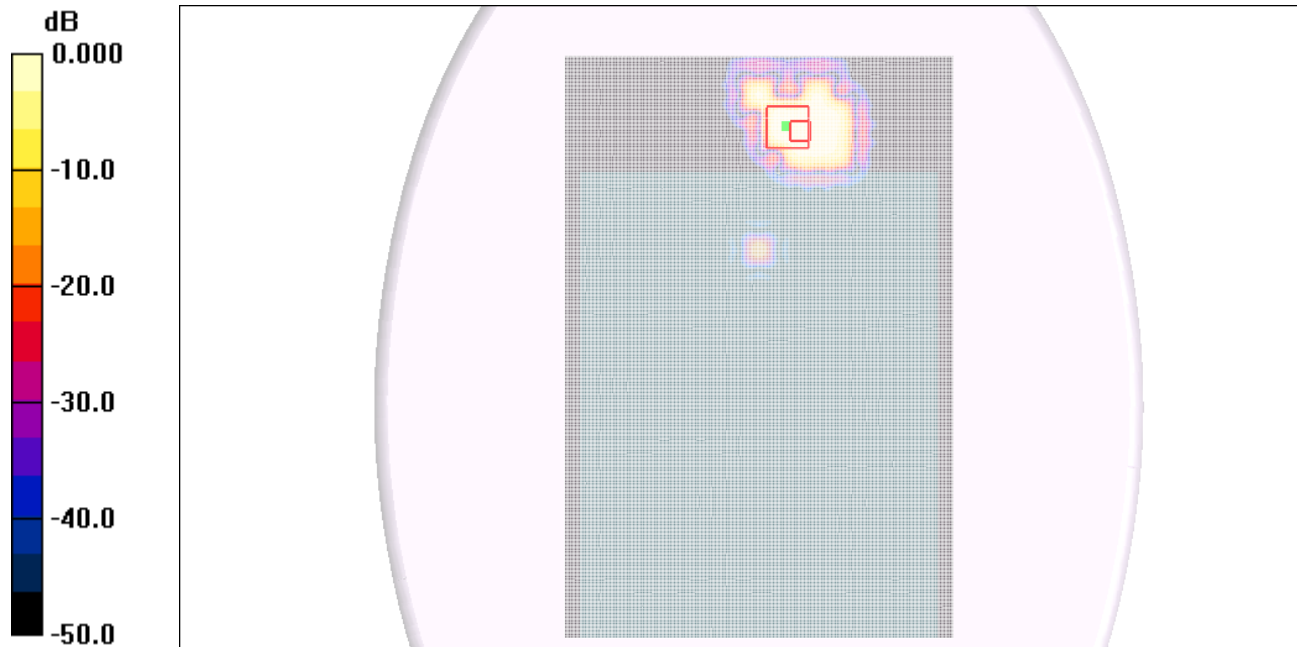
Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(4.07, 4.07, 4.07); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Rear/Base_Ch40/Area Scan (201x301x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.057 mW/g

Rear/Base_Ch40/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 2.97 V/m; Power Drift = -0.026 dB
 Peak SAR (extrapolated) = 0.407 W/kg
SAR(1 g) = 0.045 mW/g; SAR(10 g) = 0.019 mW/g
 Maximum value of SAR (measured) = 0.055 mW/g



0 dB = 0.055mW/g

Test Laboratory: UL CCS SAR Lab D

5GHz_Body

Communication System: 802.11abgn; Frequency: 5200 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5200$ MHz; $\sigma = 5.47$ mho/m; $\epsilon_r = 48.6$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 24.0 deg. C; Liquid Temperature: 23.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(4.07, 4.07, 4.07); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch40/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.962 mW/g

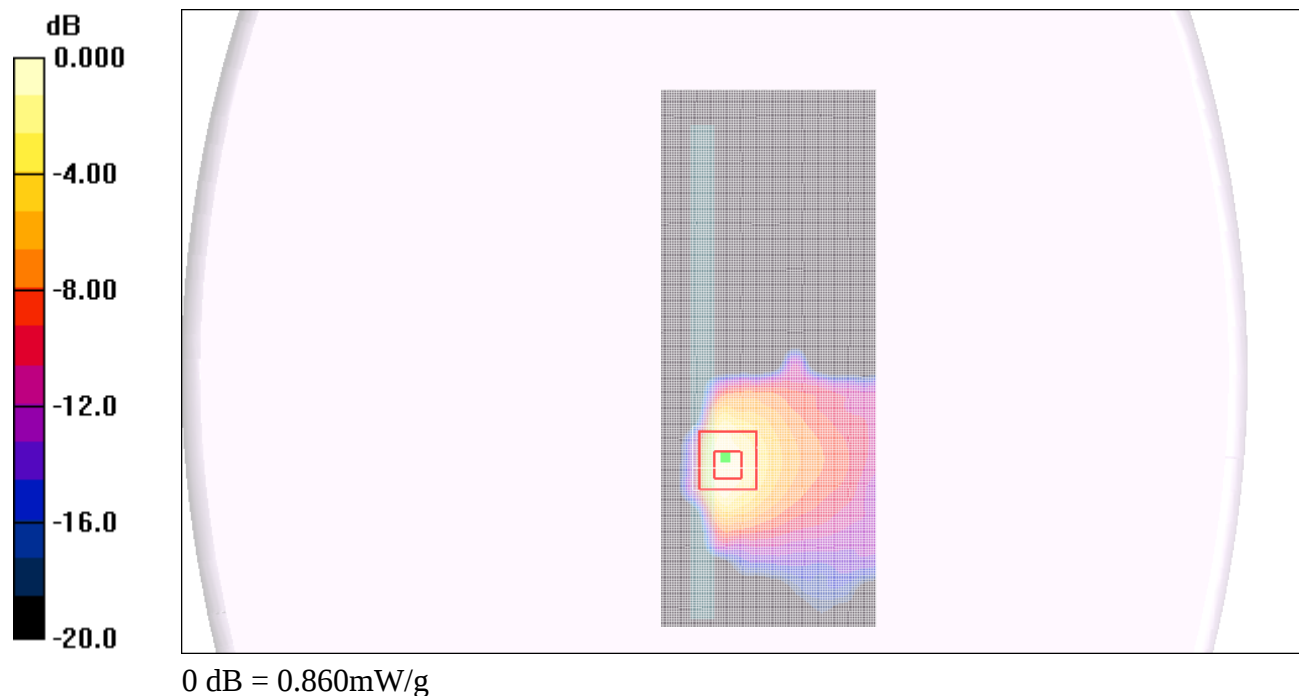
Bottom_Ch40/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 12.0 V/m; Power Drift = 0.176 dB

Peak SAR (extrapolated) = 1.60 W/kg

SAR(1 g) = 0.501 mW/g; SAR(10 g) = 0.171 mW/g

Maximum value of SAR (measured) = 0.860 mW/g

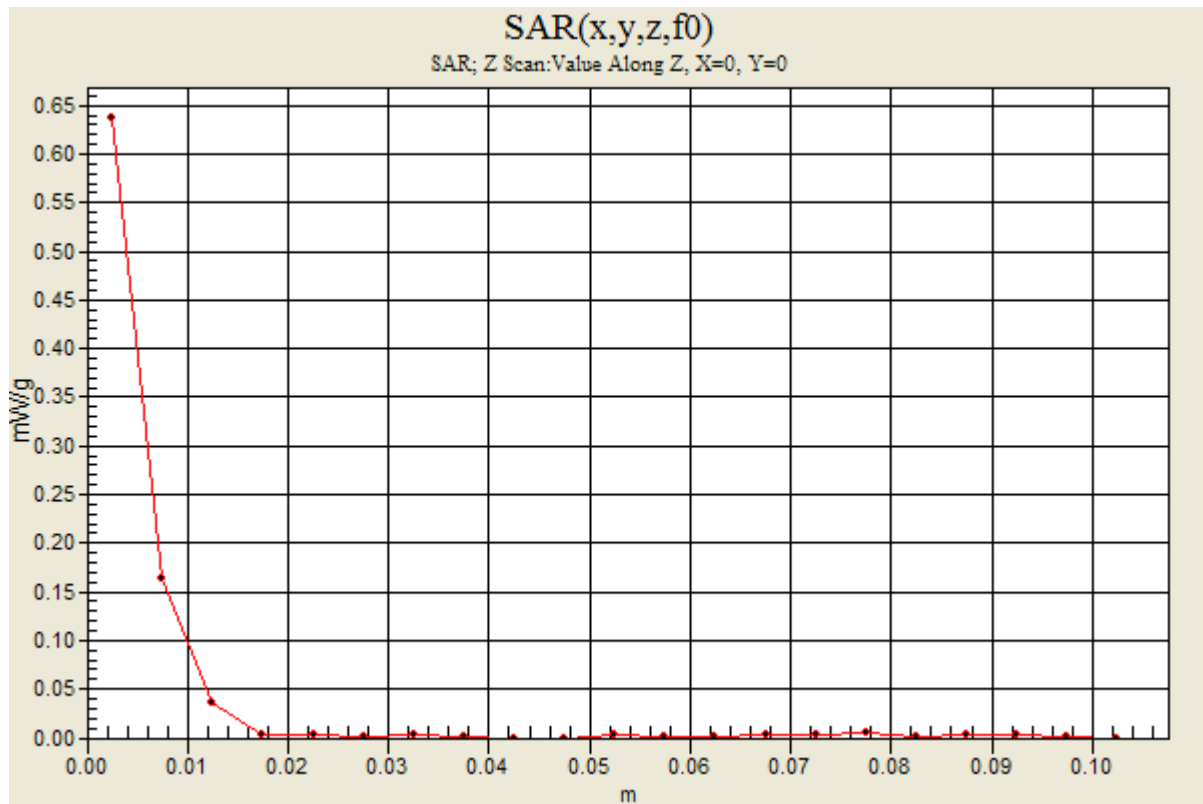


Test Laboratory: UL CCS SAR Lab D

5GHz_Body

Communication System: 802.11abgn; Frequency: 5200 MHz; Duty Cycle: 1:1

Bottom_Ch40/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm
Maximum value of SAR (measured) = 0.637 mW/g



Test Laboratory: UL CCS SAR Lab A

WiFi 5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5200 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5200$ MHz; $\sigma = 5.343$ mho/m; $\epsilon_r = 49.128$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.98, 3.98, 3.98); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: ELI v4.0(A); Type: QDOVA001BB; Serial: 1119
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Right Edge/802.11a_ch 40/Area Scan (81x271x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.059 mW/g

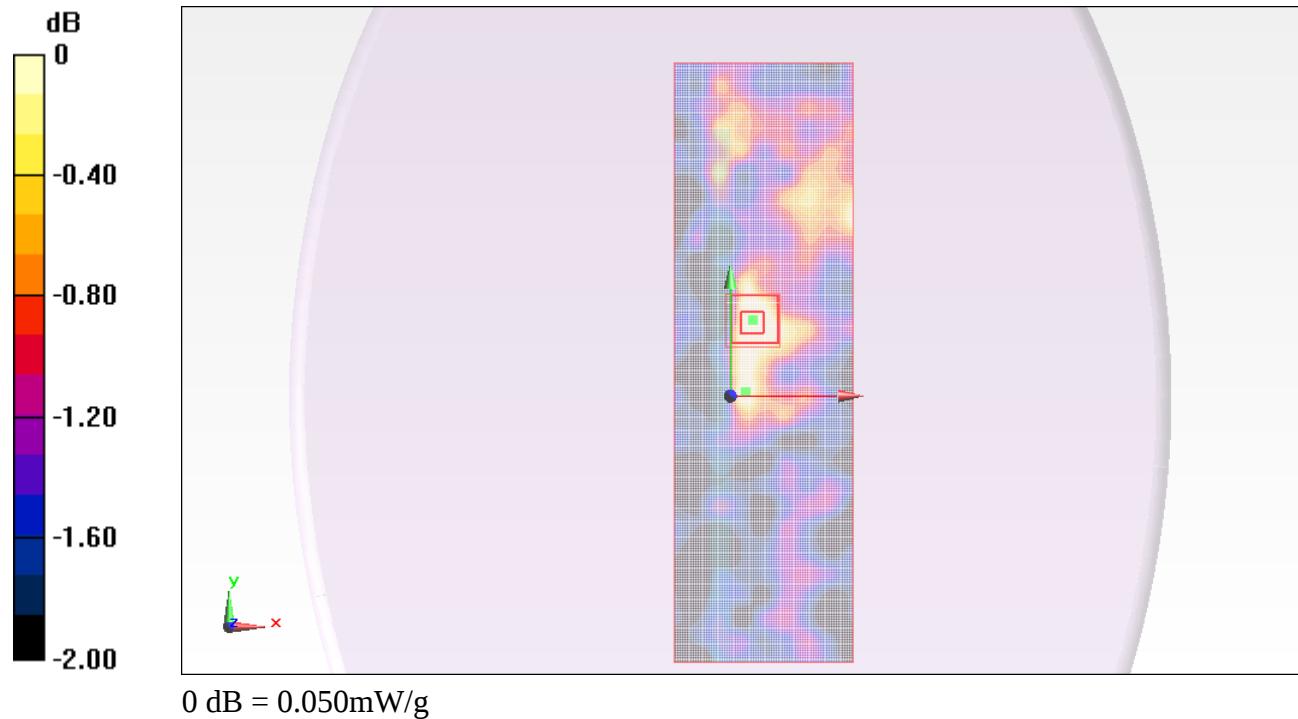
Right Edge/802.11a_ch 40/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 3.226 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.090 W/kg

SAR(1 g) = 0.043 mW/g; SAR(10 g) = 0.039 mW/g

Maximum value of SAR (measured) = 0.054 mW/g



Test Laboratory: UL CCS SAR Lab A

5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.587$ mho/m; $\epsilon_r = 49.014$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.7, 3.7, 3.7); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: ELI v4.0(A); Type: QDOVA001BB; Serial: 1119
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Rear/Base/802.11a_ch 60/Area Scan (201x301x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.158 mW/g

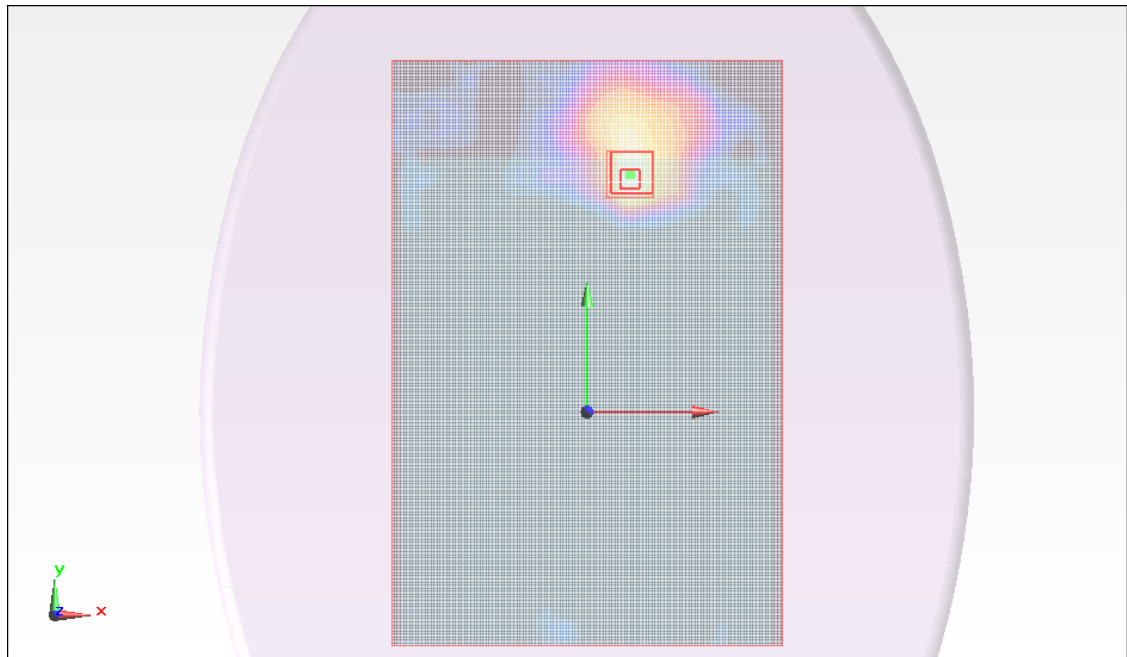
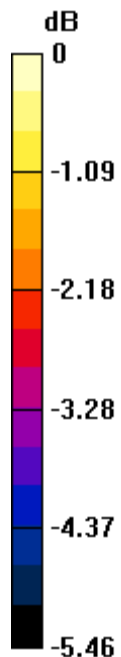
Rear/Base/802.11a_ch 60/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 5.687 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.285 W/kg

SAR(1 g) = 0.117 mW/g; SAR(10 g) = 0.078 mW/g

Maximum value of SAR (measured) = 0.155 mW/g



0 dB = 0.150mW/g

Test Laboratory: UL CCS SAR Lab A

5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5260 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5260$ MHz; $\sigma = 5.347$ mho/m; $\epsilon_r = 48.591$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.7, 3.7, 3.7); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: ELI v4.0(A); Type: QDOVA001BB; Serial: 1119
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Bottom/802.11a_ch 52/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.706 mW/g

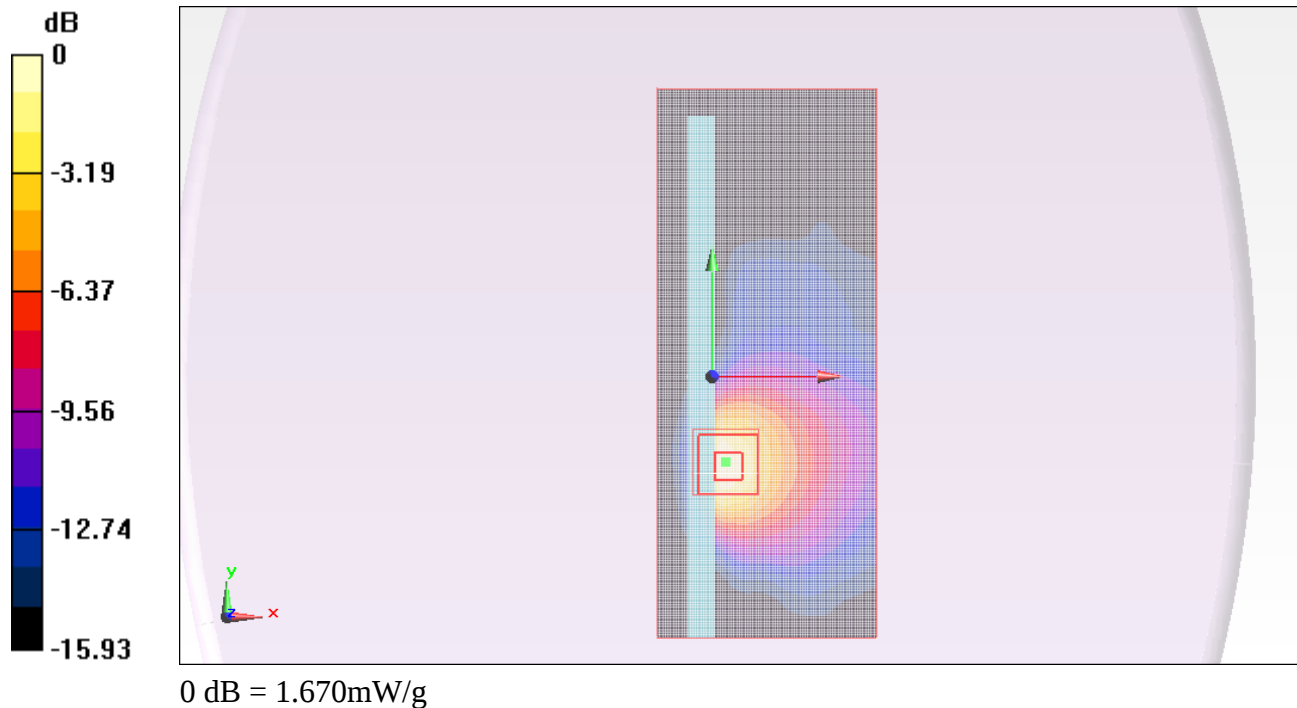
Bottom/802.11a_ch 52/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 17.043 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 3.197 W/kg

SAR(1 g) = 1 mW/g; SAR(10 g) = 0.379 mW/g

Maximum value of SAR (measured) = 1.671 mW/g



Test Laboratory: UL CCS SAR Lab A

5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.587$ mho/m; $\epsilon_r = 49.014$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

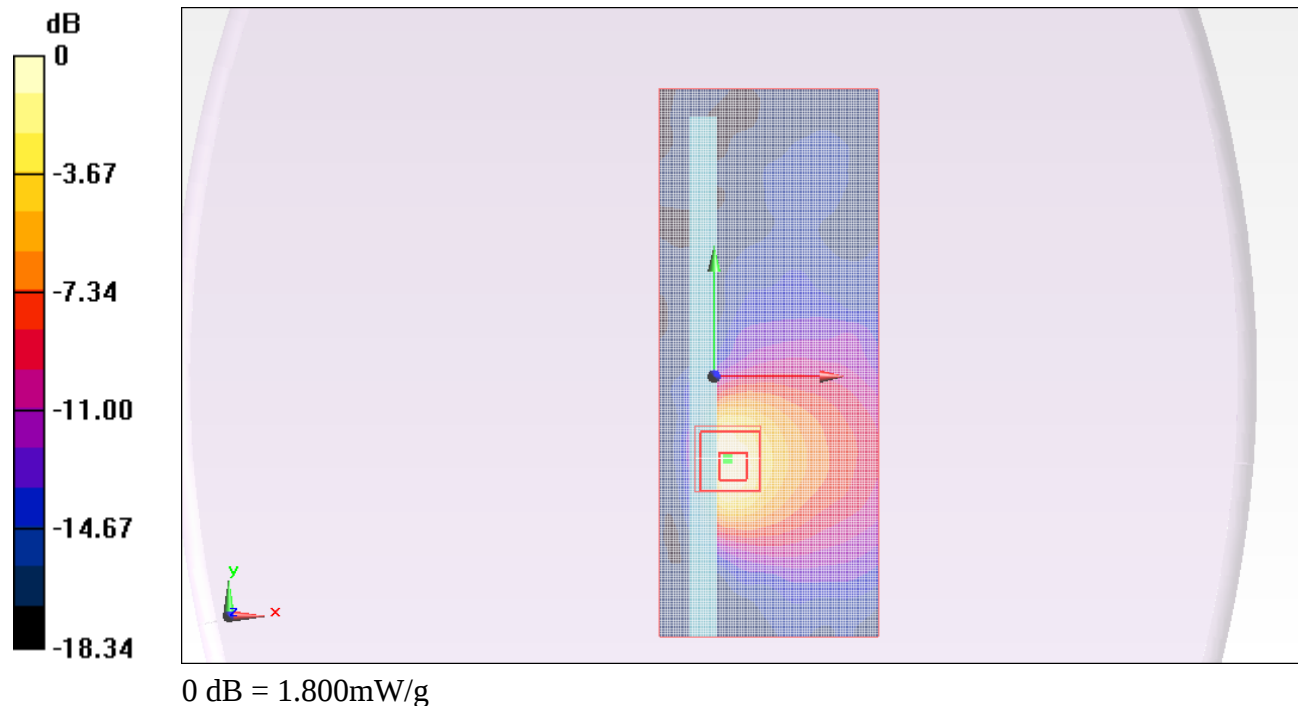
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.7, 3.7, 3.7); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: ELI v4.0(A); Type: QDOVA001BB; Serial: 1119
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Bottom/802.11a_ch 60/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.986 mW/g

Bottom/802.11a_ch 60/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 18.035 V/m; Power Drift = 0.07 dB
 Peak SAR (extrapolated) = 3.601 W/kg
SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.426 mW/g
 Maximum value of SAR (measured) = 1.804 mW/g

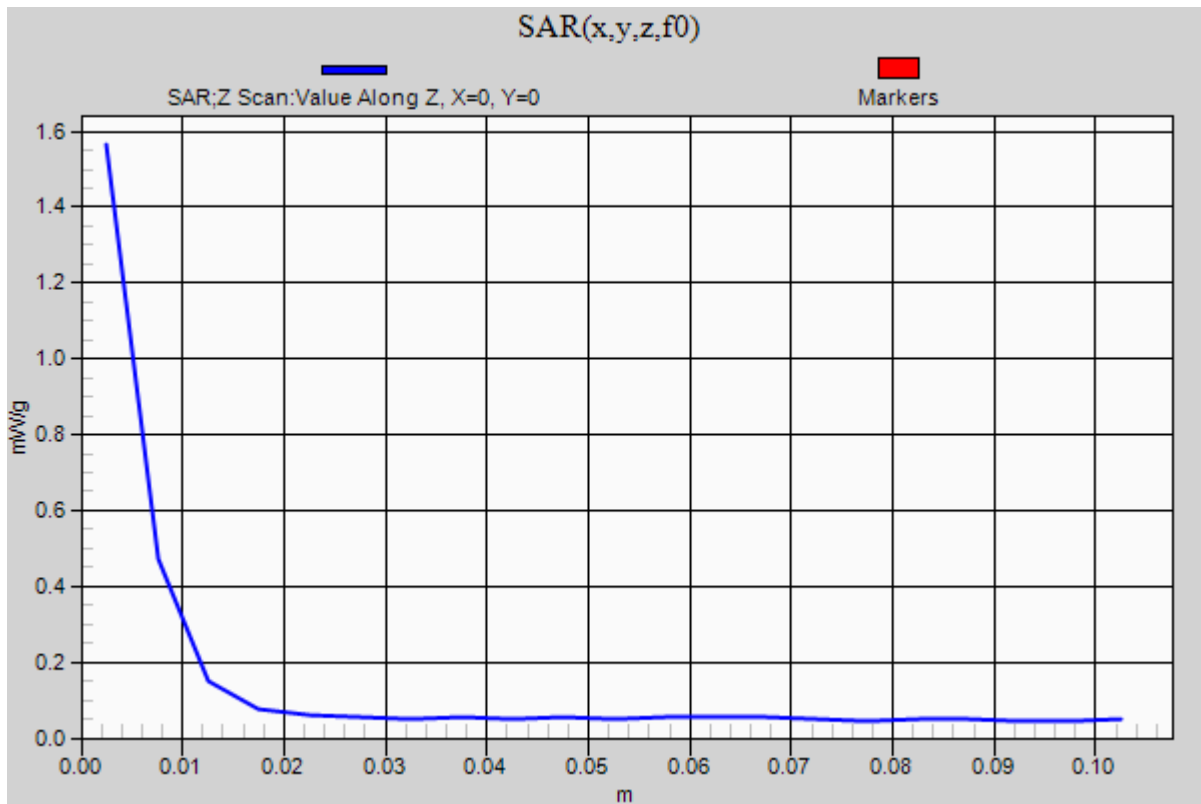


Test Laboratory: UL CCS SAR Lab A

5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1

Bottom/802.11a_ch 60/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm
Maximum value of SAR (measured) = 1.565 mW/g



Test Laboratory: UL CCS SAR Lab A

5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5320 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5320$ MHz; $\sigma = 5.425$ mho/m; $\epsilon_r = 48.496$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

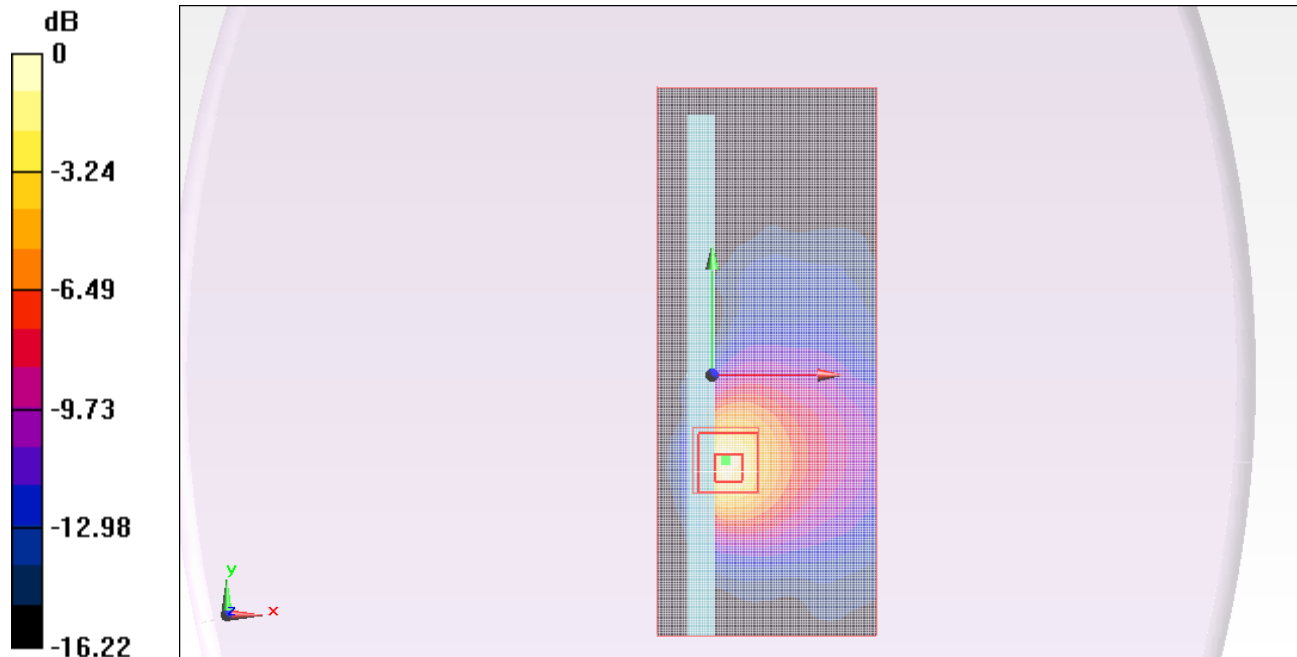
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.7, 3.7, 3.7); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: ELI v4.0(A); Type: QDOVA001BB; Serial: 1119
- Measurement SW: DASY52, Version 52.6 (2);SEMCAD X Version 14.4.5 (3634)

Bottom/802.11a_ch 64/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 1.625 mW/g

Bottom/802.11a_ch 64/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 17.502 V/m; Power Drift = 0.10 dB
 Peak SAR (extrapolated) = 3.425 W/kg
SAR(1 g) = 1.09 mW/g; SAR(10 g) = 0.408 mW/g
 Maximum value of SAR (measured) = 1.829 mW/g



0 dB = 1.830mW/g

Test Laboratory: UL CCS SAR Lab A

5GHz_Body

Communication System: WLAN 5GHz; Frequency: 5300 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.404$ mho/m; $\epsilon_r = 48.517$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY5 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3686; ConvF(3.7, 3.7, 3.7); Calibrated: 1/24/2011
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used)), Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 7/14/2011
- Phantom: ELI v4.0(A); Type: QDOVA001BB; Serial: 1119
- Measurement SW: DASY52, Version 52.6 (2); SEMCAD X Version 14.4.5 (3634)

Right Edge/802.11a_ch 60 2/Area Scan (81x271x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.074 mW/g

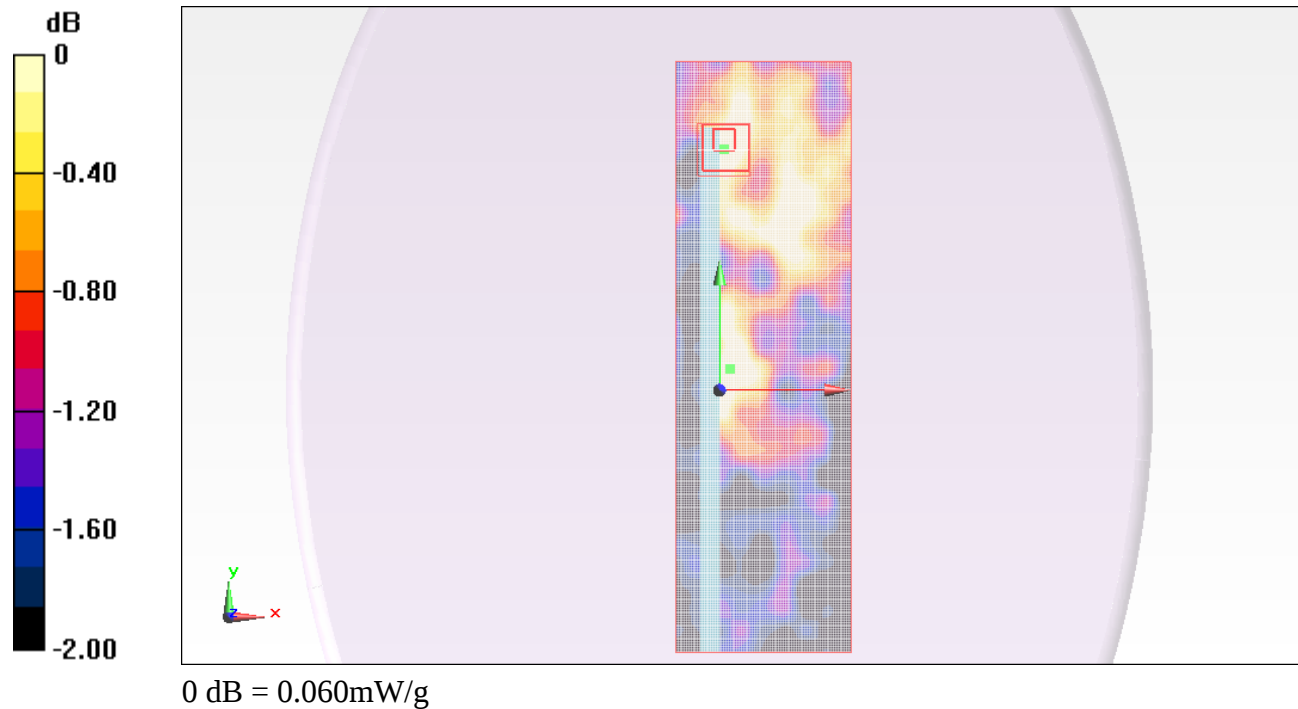
Right Edge/802.11a_ch 60 2/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 3.554 V/m; Power Drift = -0.12 dB

Peak SAR (extrapolated) = 0.069 W/kg

SAR(1 g) = 0.052 mW/g; SAR(10 g) = 0.045 mW/g

Maximum value of SAR (measured) = 0.061 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.85$ mho/m; $\epsilon_r = 47.6$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.36, 3.36, 3.36); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Rear/Base_Ch120/Area Scan (201x301x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 0.166 mW/g

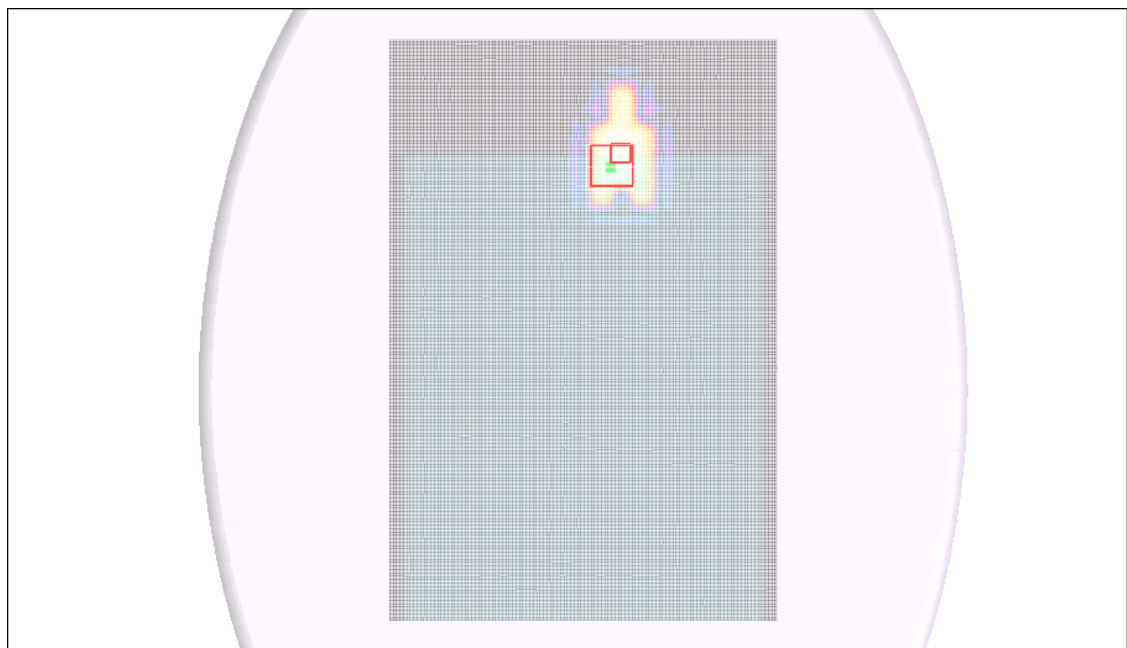
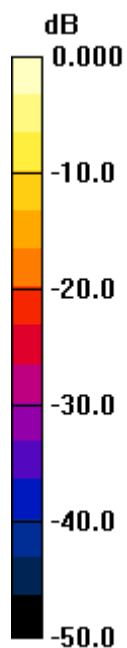
Rear/Base_Ch120/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 4.05 V/m; Power Drift = 0.000 dB

Peak SAR (extrapolated) = 0.603 W/kg

SAR(1 g) = 0.068 mW/g; SAR(10 g) = 0.020 mW/g

Maximum value of SAR (measured) = 0.095 mW/g



0 dB = 0.095mW/g

Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5500 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5500$ MHz; $\sigma = 5.72$ mho/m; $\epsilon_r = 47.8$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.53, 3.53, 3.53); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch100/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.95 mW/g

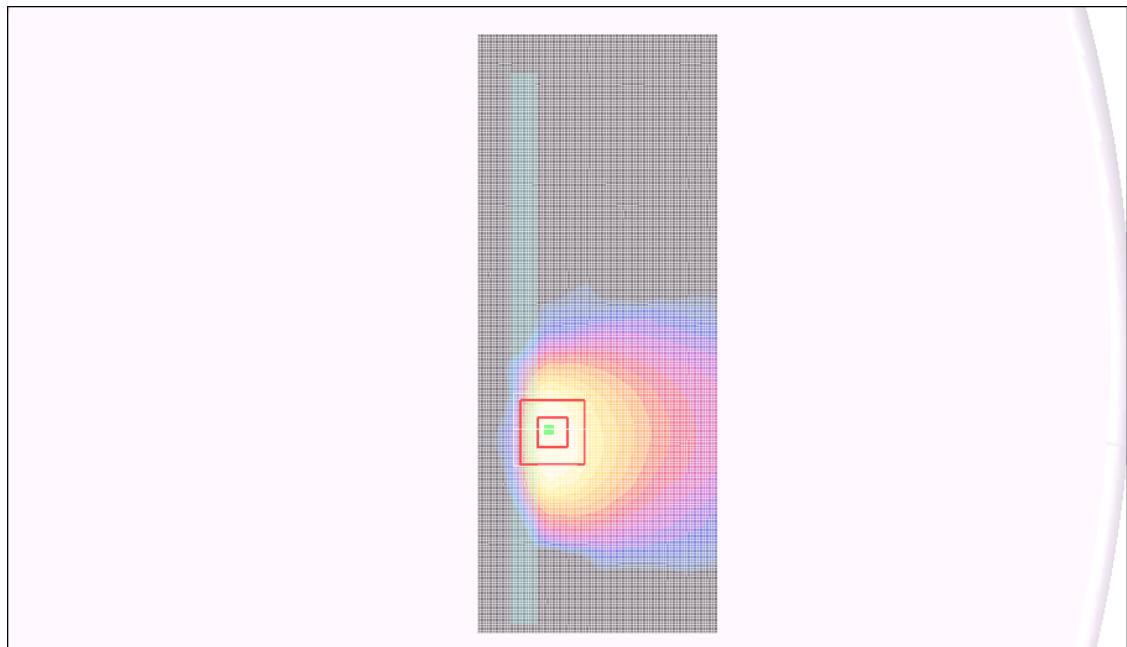
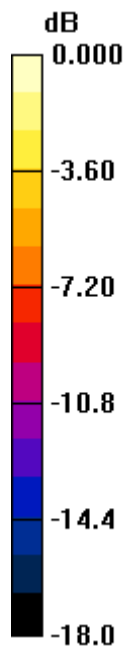
Bottom_Ch100/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 15.1 V/m; Power Drift = -0.006 dB

Peak SAR (extrapolated) = 2.79 W/kg

SAR(1 g) = 0.887 mW/g; SAR(10 g) = 0.319 mW/g

Maximum value of SAR (measured) = 1.53 mW/g



0 dB = 1.53mW/g

Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.85$ mho/m; $\epsilon_r = 47.6$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

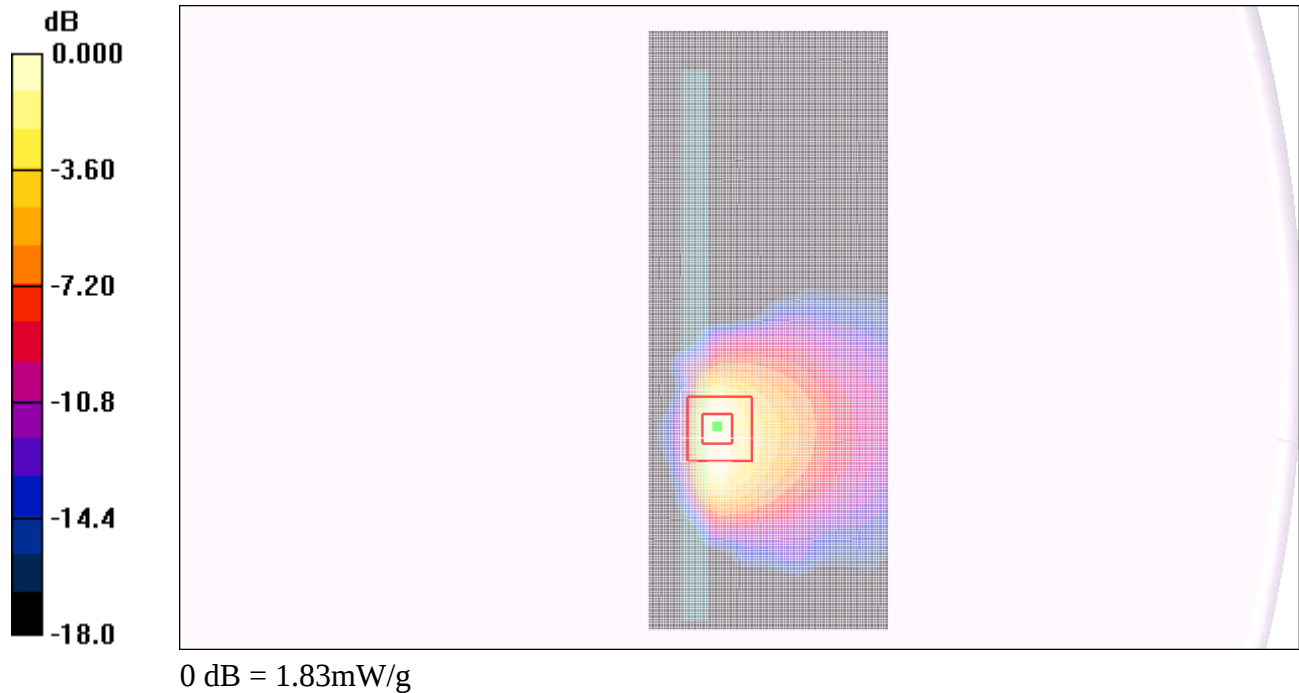
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.36, 3.36, 3.36); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch120/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 2.34 mW/g

Bottom_Ch120/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 19.3 V/m; Power Drift = -0.081 dB
 Peak SAR (extrapolated) = 3.45 W/kg
SAR(1 g) = 1.08 mW/g; SAR(10 g) = 0.374 mW/g
 Maximum value of SAR (measured) = 1.83 mW/g



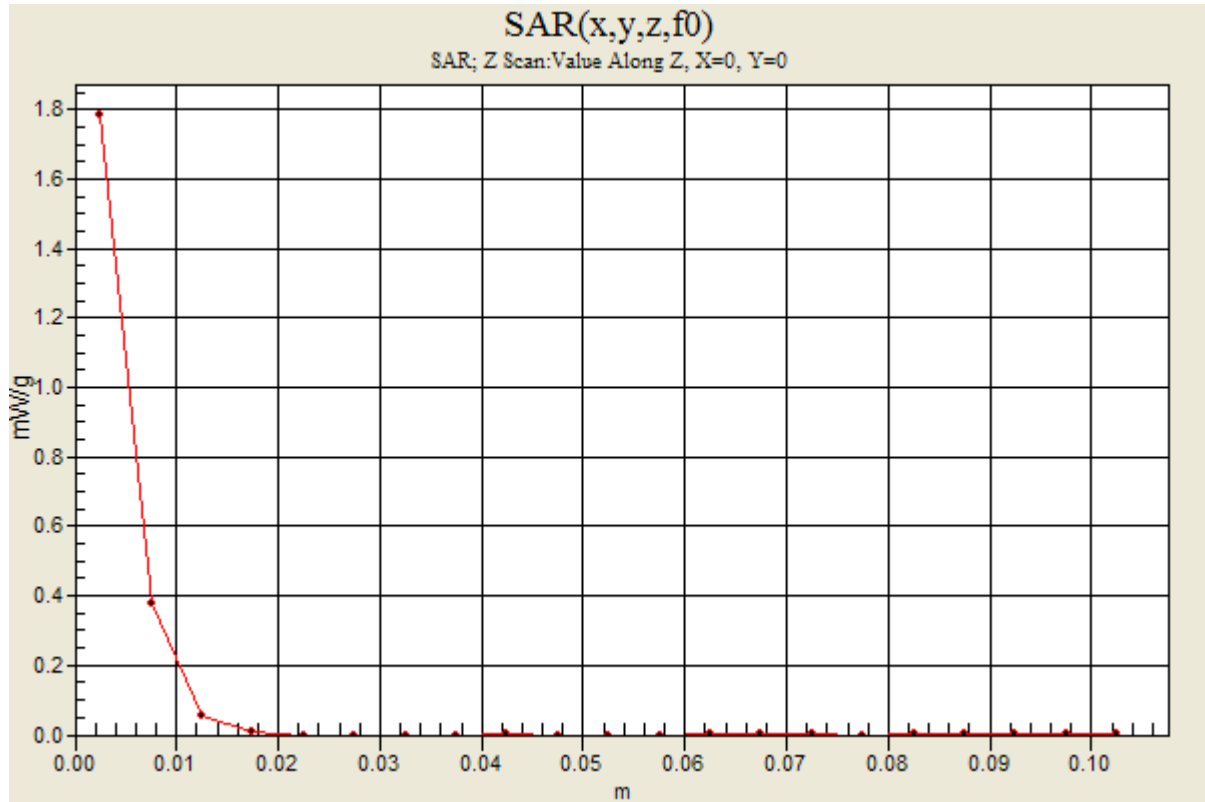
Test Laboratory: UL CCS SAR Lab D

5GHz_Body

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1

Bottom_Ch120/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 1.78 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5700 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5700$ MHz; $\sigma = 5.99$ mho/m; $\epsilon_r = 47.4$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.36, 3.36, 3.36); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch140/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (interpolated) = 1.62 mW/g

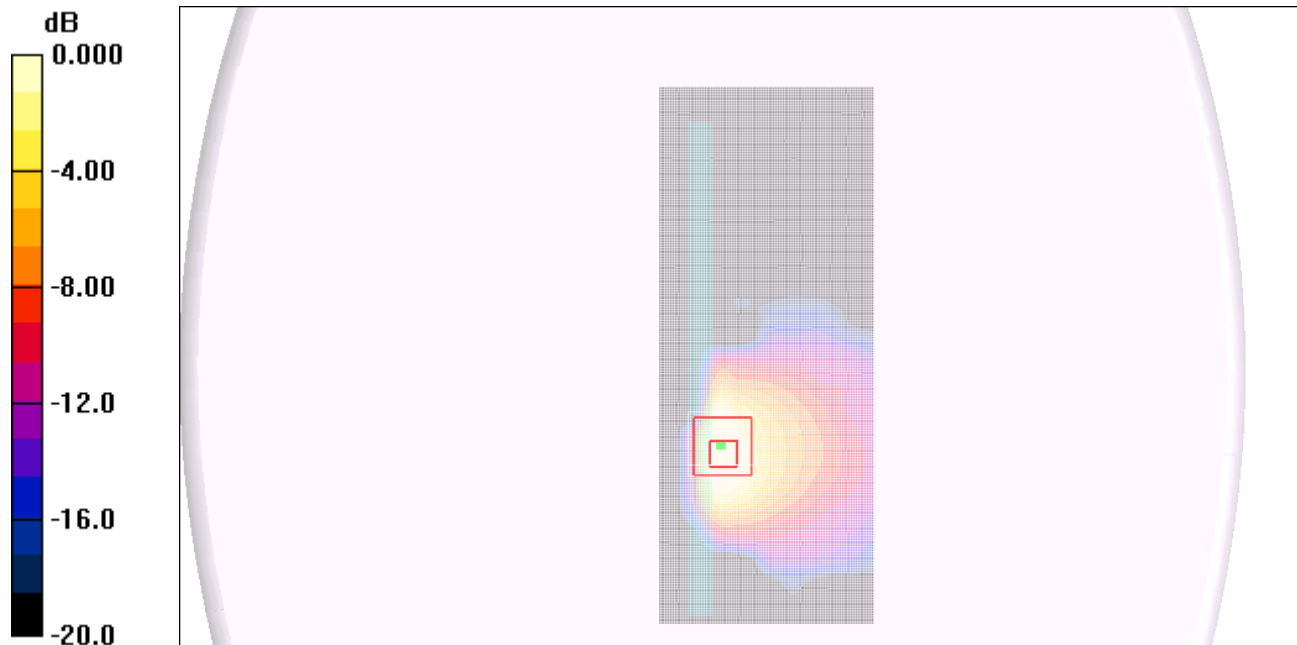
Bottom_Ch140/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 13.8 V/m; Power Drift = 0.191 dB

Peak SAR (extrapolated) = 2.03 W/kg

SAR(1 g) = 0.605 mW/g; SAR(10 g) = 0.207 mW/g

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



0 dB = 1.03mW/g

Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.85$ mho/m; $\epsilon_r = 47.6$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

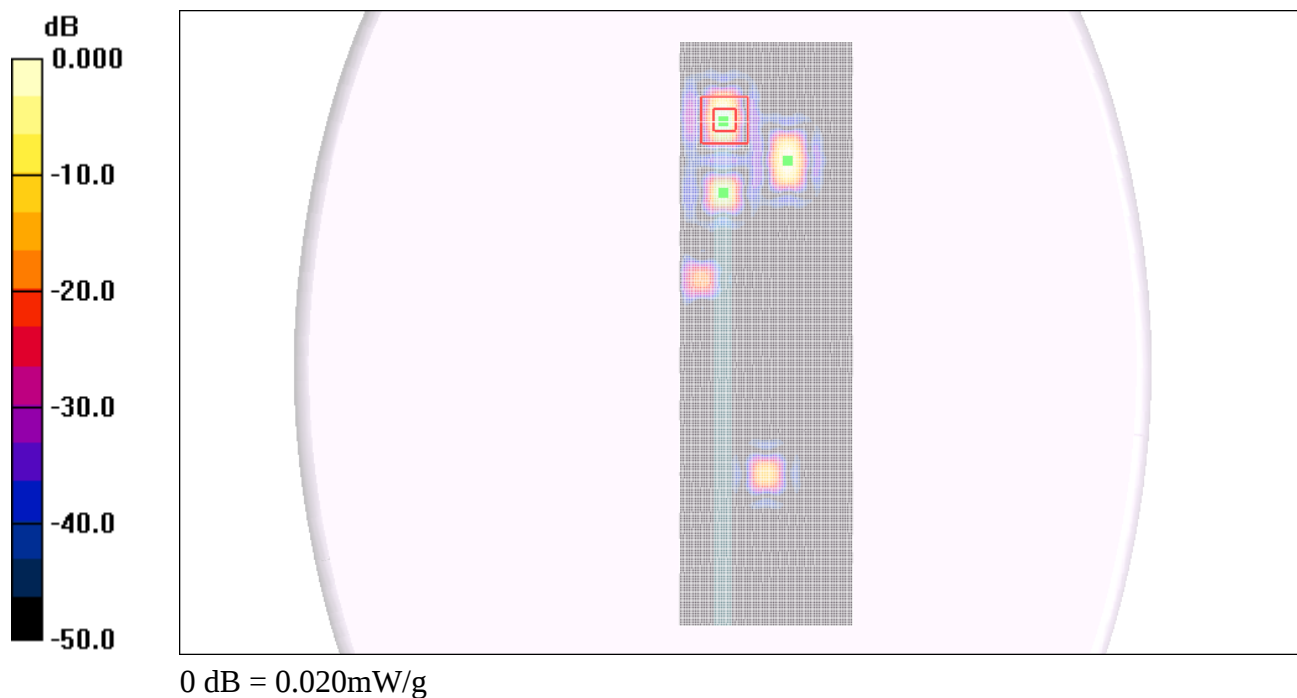
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.36, 3.36, 3.36); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Right Edge_Ch120/Area Scan (81x271x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.025 mW/g

Right Edge_Ch120/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 1.89 V/m; Power Drift = 0.132 dB
Peak SAR (extrapolated) = 0.130 W/kg
SAR(1 g) = 0.011 mW/g; SAR(10 g) = 0.00161 mW/g
Maximum value of SAR (measured) = 0.020 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5785 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5785$ MHz; $\sigma = 6.14$ mho/m; $\epsilon_r = 46.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

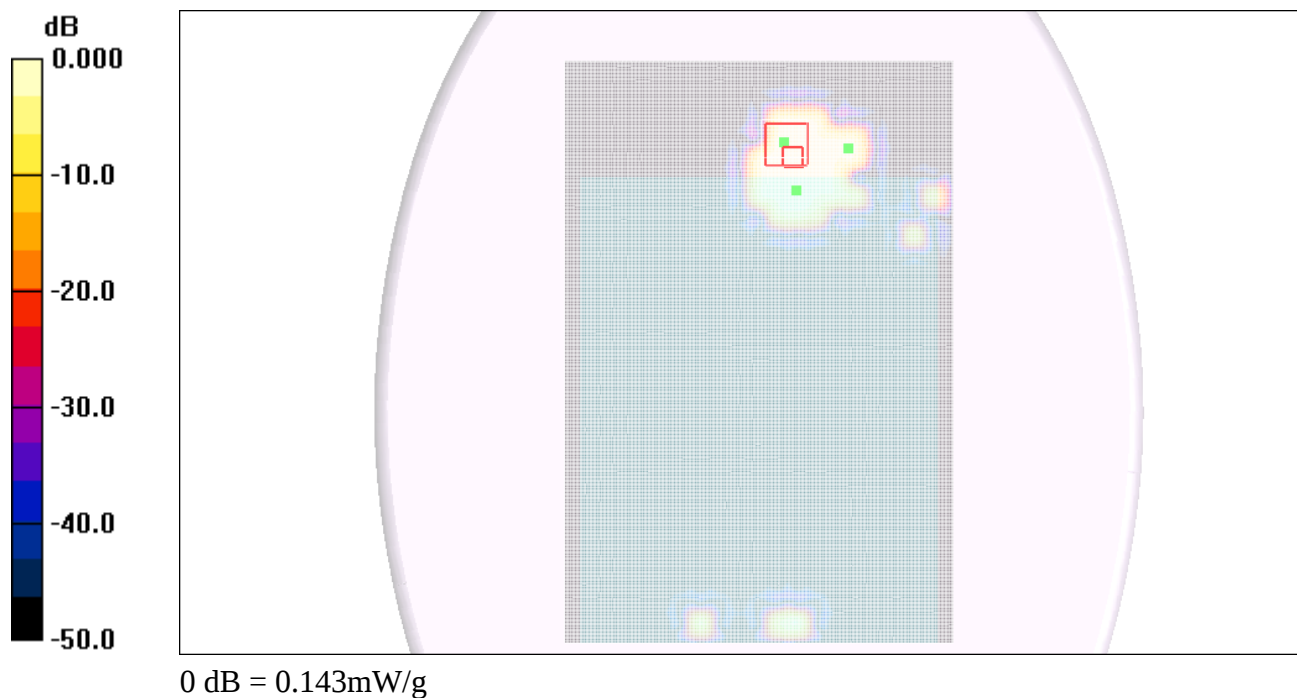
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.65, 3.65, 3.65); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Rear/Base_Ch157/Area Scan (201x301x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 0.155 mW/g

Rear/Base_Ch157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 4.84 V/m; Power Drift = 0.076 dB
Peak SAR (extrapolated) = 0.602 W/kg
SAR(1 g) = 0.069 mW/g; SAR(10 g) = 0.028 mW/g
Maximum value of SAR (measured) = 0.143 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5745 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5745$ MHz; $\sigma = 6.09$ mho/m; $\epsilon_r = 46.2$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

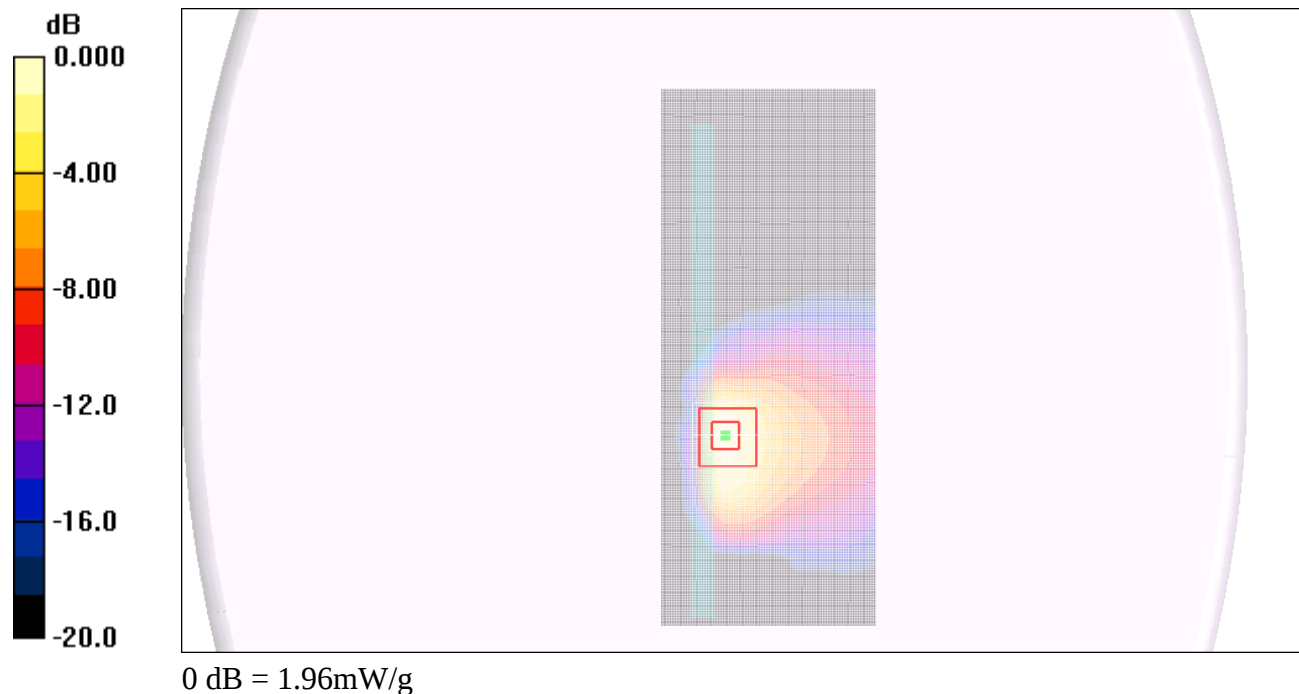
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.65, 3.65, 3.65); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch149/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.09 mW/g

Bottom_Ch149/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 19.2 V/m; Power Drift = -0.189 dB
Peak SAR (extrapolated) = 3.80 W/kg
SAR(1 g) = 1.15 mW/g; SAR(10 g) = 0.401 mW/g
Maximum value of SAR (measured) = 1.96 mW/g



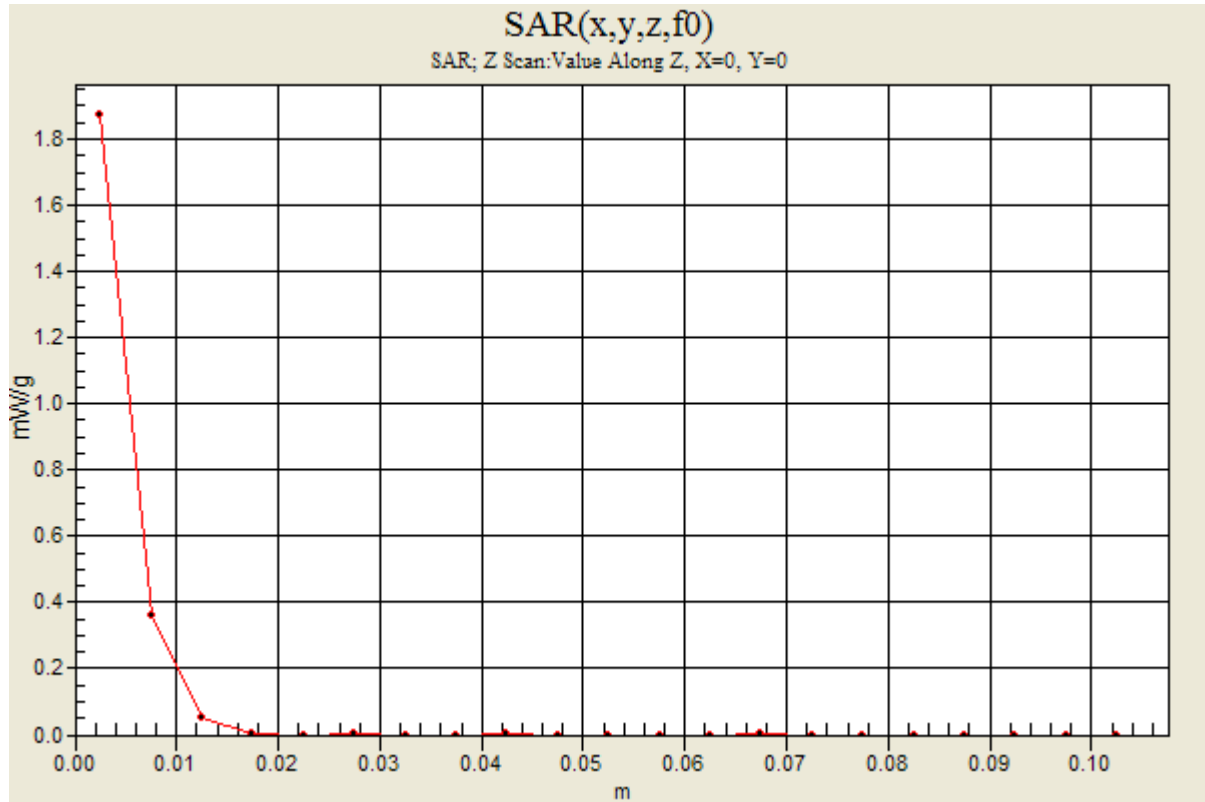
Test Laboratory: UL CCS SAR Lab D

5GHz_Body

Communication System: 802.11abgn; Frequency: 5745 MHz; Duty Cycle: 1:1

Bottom_Ch149/Z Scan (1x1x21): Measurement grid: dx=20mm, dy=20mm, dz=5mm

Maximum value of SAR (measured) = 1.87 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5785 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5785$ MHz; $\sigma = 6.14$ mho/m; $\epsilon_r = 46.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

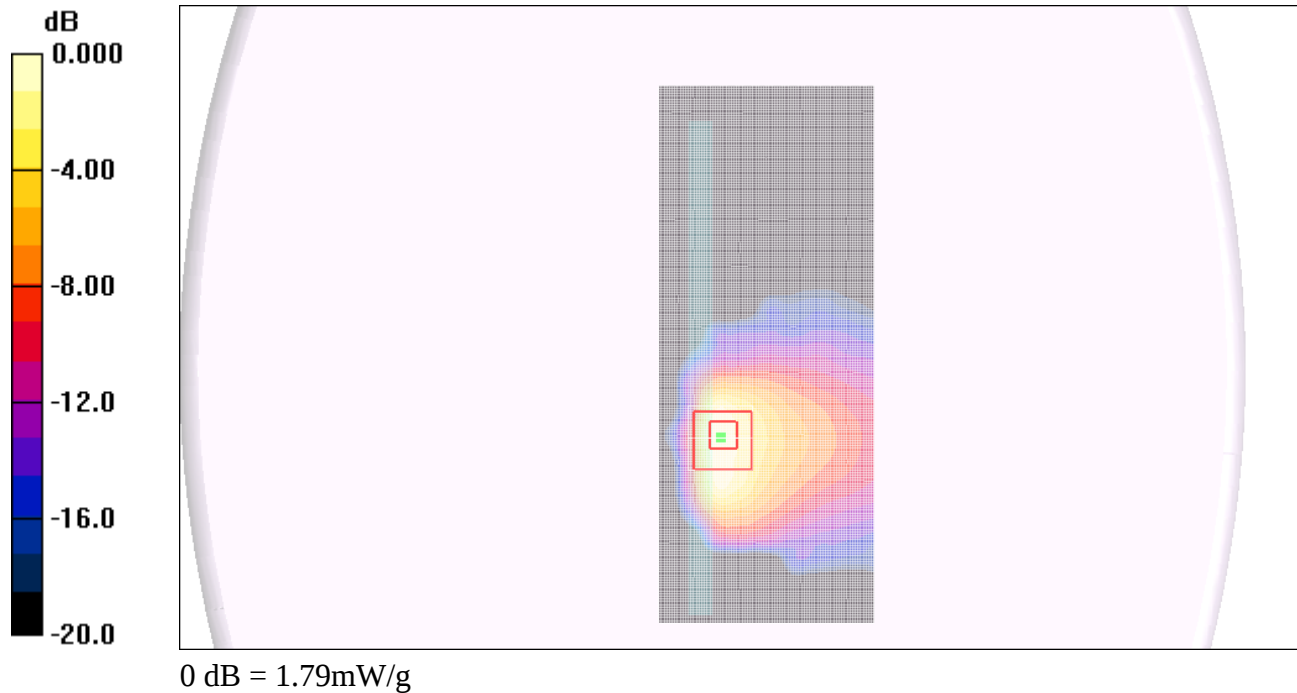
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.65, 3.65, 3.65); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch157/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 2.18 mW/g

Bottom_Ch157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 18.2 V/m; Power Drift = -0.069 dB
 Peak SAR (extrapolated) = 3.52 W/kg
SAR(1 g) = 1.04 mW/g; SAR(10 g) = 0.368 mW/g
 Maximum value of SAR (measured) = 1.79 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5825 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5825$ MHz; $\sigma = 6.21$ mho/m; $\epsilon_r = 46.1$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.65, 3.65, 3.65); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection (Locations From Previous Scan Used))Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Bottom_Ch165/Area Scan (81x201x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (interpolated) = 2.10 mW/g

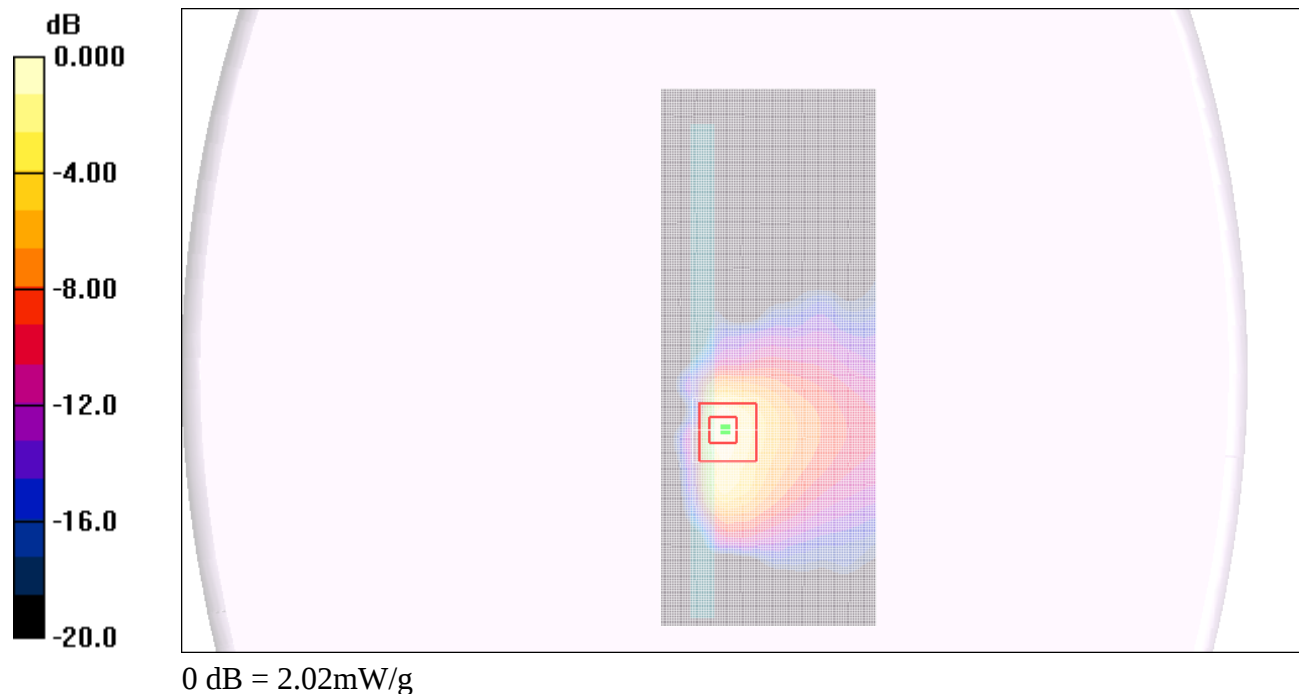
Bottom_Ch165/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 19.0 V/m; Power Drift = -0.190 dB

Peak SAR (extrapolated) = 3.91 W/kg

SAR(1 g) = 1.14 mW/g; SAR(10 g) = 0.392 mW/g

Maximum value of SAR (measured) = 2.02 mW/g



Test Laboratory: UL CCS SAR Lab D

5GHz_Body

DUT: Apple; Type: 17 inch; Serial: N/A

Communication System: 802.11abgn; Frequency: 5785 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5785$ MHz; $\sigma = 6.14$ mho/m; $\epsilon_r = 46.1$; $\rho = 1000$ kg/m³
 Phantom section: Flat Section

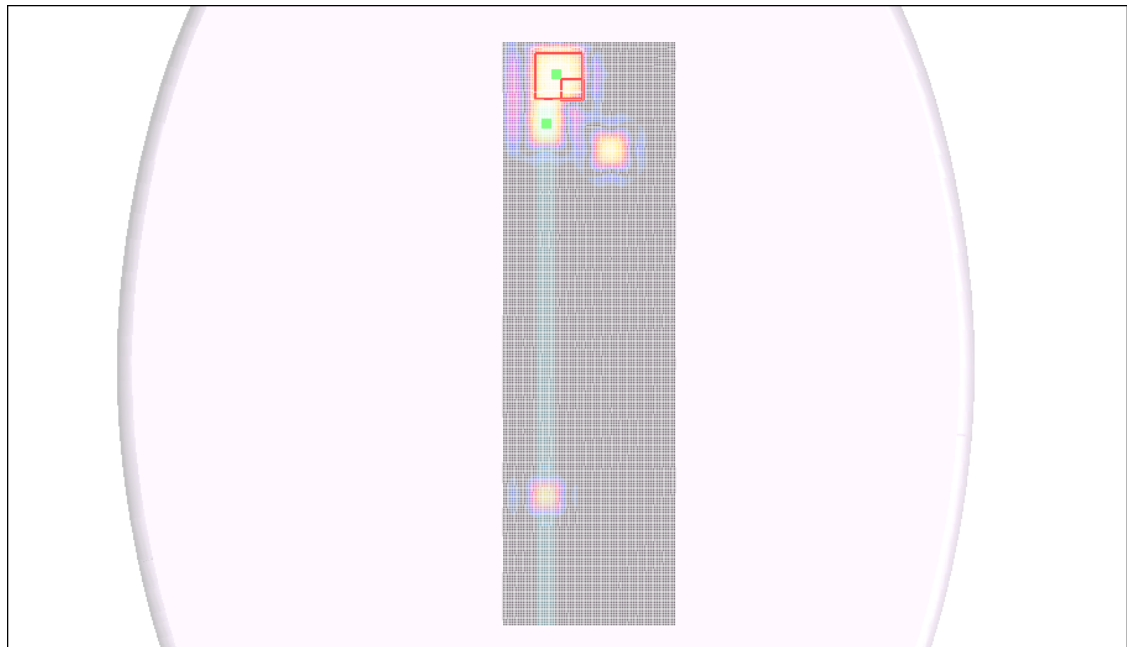
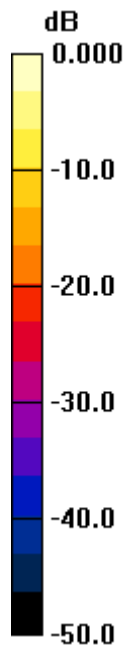
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

DASY4 Configuration:

- Area Scan setting - Find Secondary Maximum Within: 2.0 dB and with a peak SAR value greater than 0.0012W/kg
- Probe: EX3DV4 - SN3749; ConvF(3.65, 3.65, 3.65); Calibrated: 12/13/2010
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1259; Calibrated: 5/3/2011
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BB; Serial: SN:1017
- Measurement SW: DASY4, V4.7 Build 80; Post processing SW: SEMCAD, V1.8 Build 186

Right Edge_Ch157/Area Scan (81x271x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (interpolated) = 0.081 mW/g

Right Edge_Ch157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
 Reference Value = 2.64 V/m; Power Drift = 0.139 dB
 Peak SAR (extrapolated) = 0.201 W/kg
SAR(1 g) = 0.019 mW/g; SAR(10 g) = 0.00563 mW/g
 Maximum value of SAR (measured) = 0.034 mW/g



0 dB = 0.034mW/g