

Test Laboratory: Compliance Certification Services

Lapheld_Main 5.2GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5180 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 5180$ MHz; $\sigma = 5.19$ 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 - SN3686; ConvF(4.08, 4.08, 4.08); Calibrated: 3/23/2009
 - Sensor-Surface: 2.5mm (Mechanical Surface Detection)
 - Electronics: DAE3 Sn500; Calibrated: 9/15/2009
 - Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_L Ch 36/Area Scan (7x12x1):

Measurement grid: dx=10mm, dy=10mm
[Info: Interpolated medium parameters used for SAR evaluation.](#)

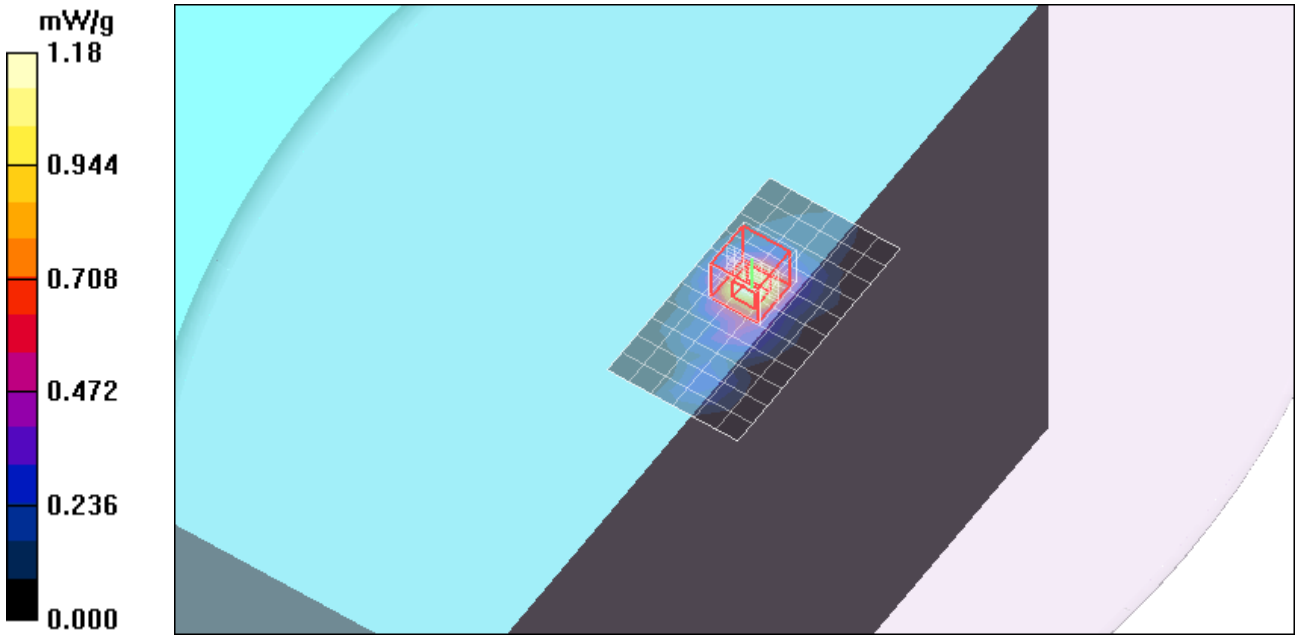
Maximum value of SAR (measured) = 1.18 mW/g

802.11a_Main Ant_L Ch 36/Zoom Scan (7x7x9)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 16.4 V/m; Power Drift = -0.376 dB
Peak SAR (extrapolated) = 2.75 W/kg

SAR(1 g) = 0.826 mW/g; SAR(10 g) = 0.309 mW/g
[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.32 mW/g



Test Laboratory: Compliance Certification Services

Lapheld_Main 5.2GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5200 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5200$ MHz; $\sigma = 5.31$ mho/m; $\epsilon_r = 45.7$; $\rho = 1000$ kg/m³
Phantom section: Flat Section

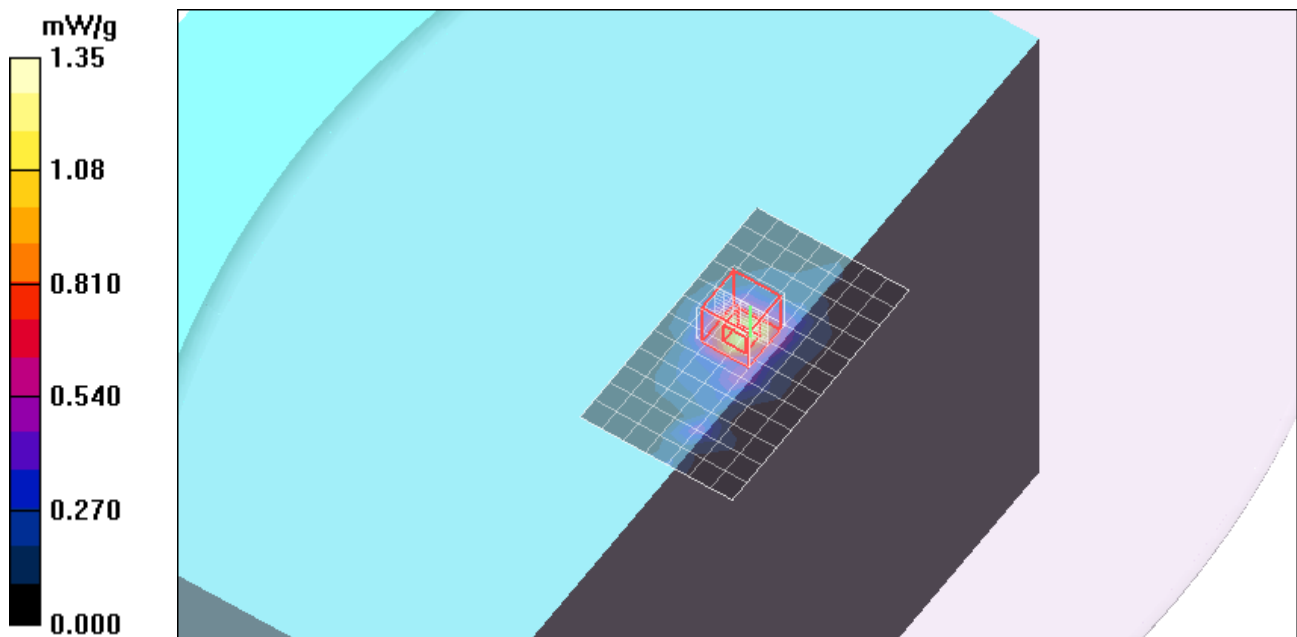
Room Ambient Temperature: 25.0 deg. C; Liquid Temperature: 24.0 deg. C

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 - SN3686; ConvF(4.08, 4.08, 4.08); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_M Ch 40/Area Scan (8x13x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.35 mW/g

802.11a_Main Ant_M Ch 40/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 17.5 V/m; Power Drift = -0.142 dB
Peak SAR (extrapolated) = 2.71 W/kg
SAR(1 g) = 0.888 mW/g; SAR(10 g) = 0.332 mW/g
Maximum value of SAR (measured) = 1.41 mW/g



Test Laboratory: Compliance Certification Services

Lapheld_Main 5.2GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5240 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 5240$ MHz; $\sigma = 5.27$ mho/m; $\epsilon_r = 46.9$; $\rho = 1000$ 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 - SN3686; ConvF(4.08, 4.08, 4.08); Calibrated: 3/23/2009
 - Sensor-Surface: 2.5mm (Mechanical Surface Detection)
 - Electronics: DAE3 Sn500; Calibrated: 9/15/2009
 - Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
 - Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_H Ch 48/Area Scan (7x12x1):

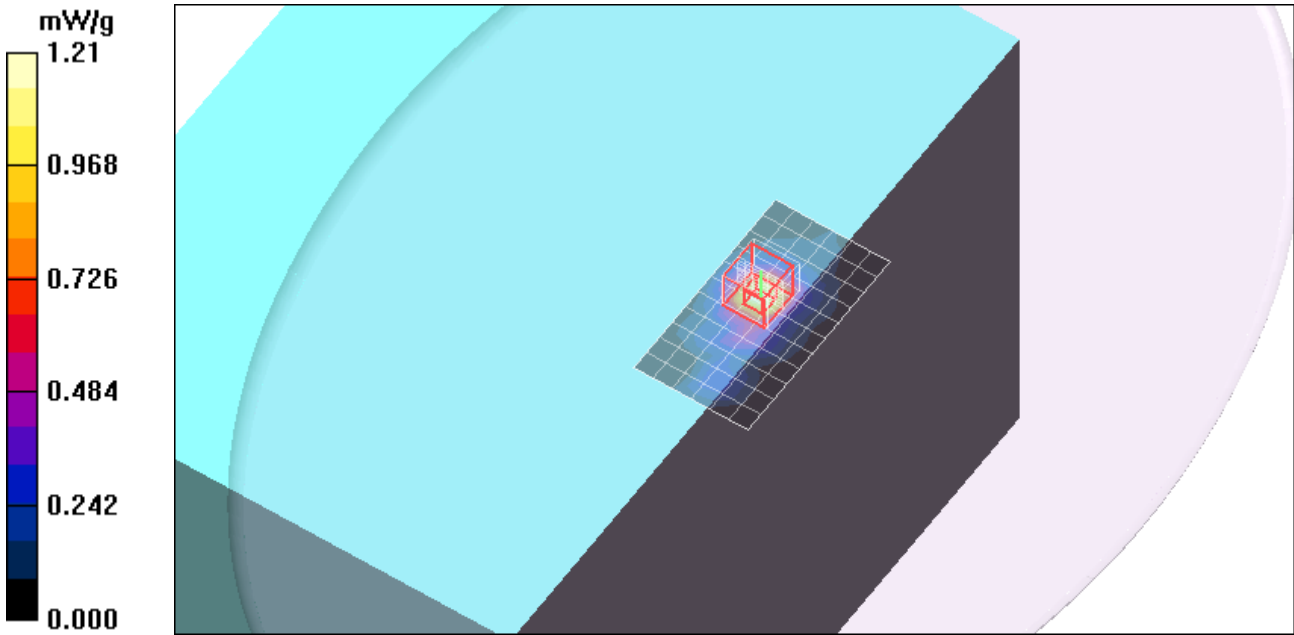
Measurement grid: dx=10mm, dy=10mm

Info: [Interpolated medium parameters used for SAR evaluation.](#)
Maximum value of SAR (measured) = 1.21 mW/g

802.11a_Main Ant_H Ch 48/Zoom Scan (7x7x9)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2.5mm
Reference Value = 16.6 V/m; Power Drift = -0.417 dB
Peak SAR (extrapolated) = 2.55 W/kg

SAR(1 g) = 0.842 mW/g; SAR(10 g) = 0.307 mW/g
Info: [Interpolated medium parameters used for SAR evaluation.](#)
Maximum value of SAR (measured) = 1.38 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.3GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.28$ mho/m; $\epsilon_r = 46.8$; $\rho = 1000$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_L Ch 52/Area Scan (7x12x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.45 mW/g

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

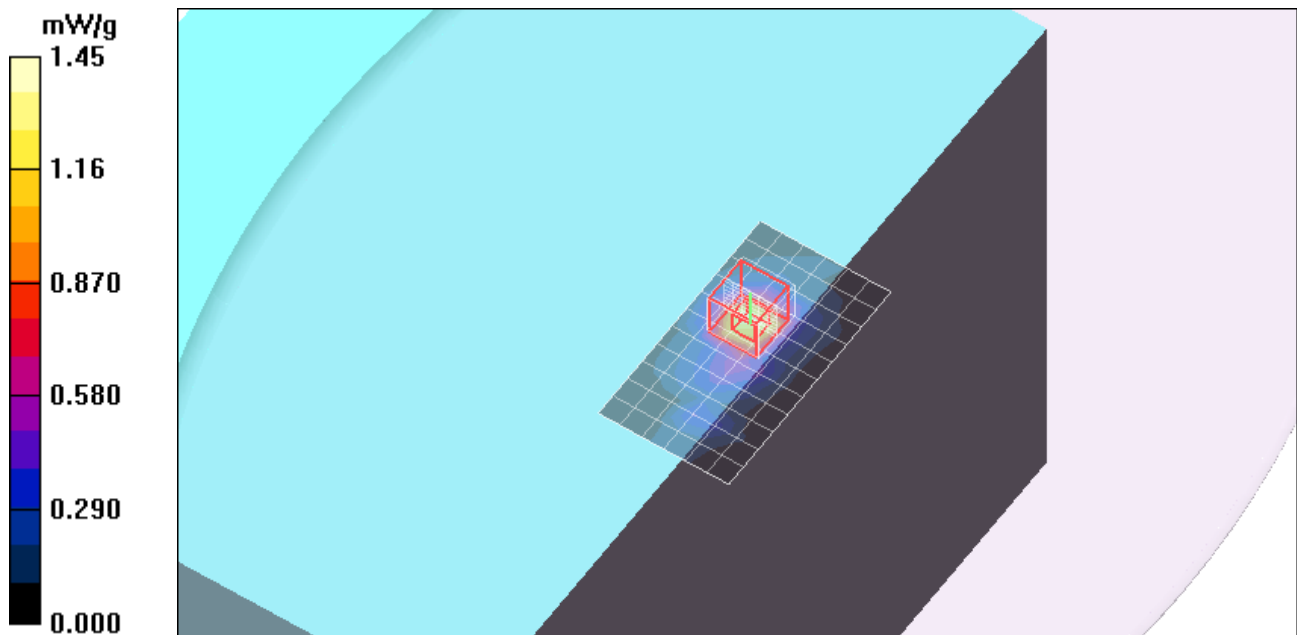
Reference Value = 19.2 V/m; Power Drift = -0.256 dB

Peak SAR (extrapolated) = 3.40 W/kg

SAR(1 g) = 1.12 mW/g; SAR(10 g) = 0.419 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.81 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.3GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5300 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5300$ MHz; $\sigma = 5.34$ mho/m; $\epsilon_r = 45.6$; $\rho = 1000$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_M Ch 60/Area Scan (8x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.27 mW/g

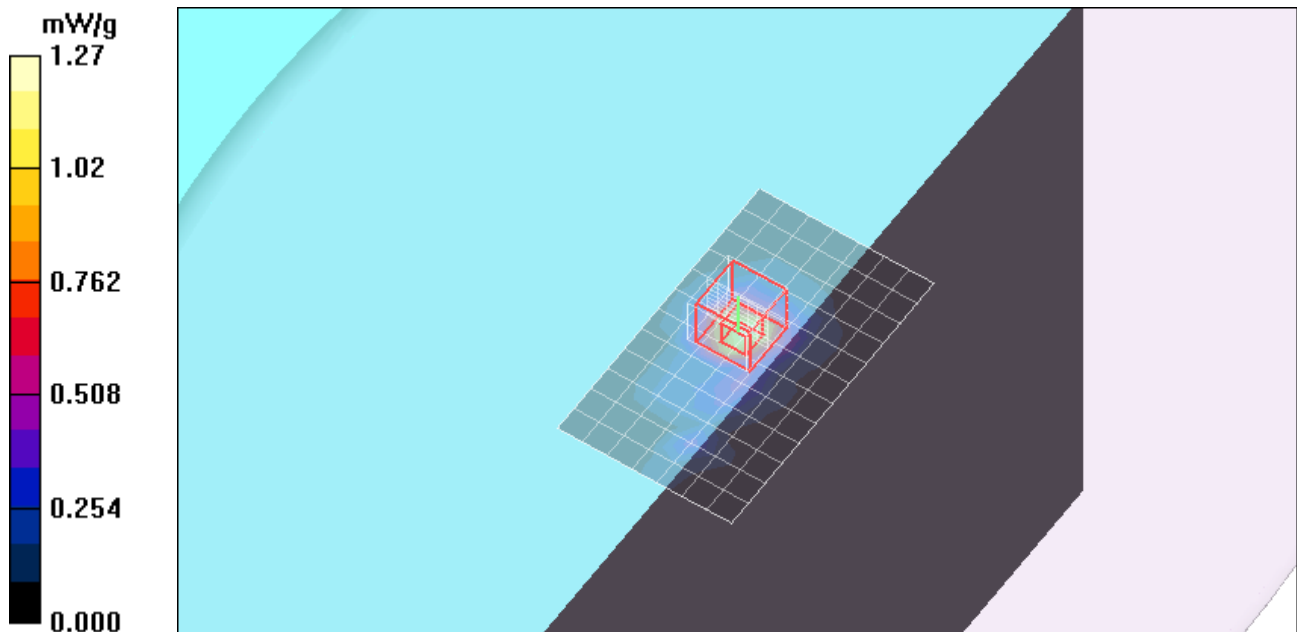
802.11a_Main Ant_M Ch 60/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 16.7 V/m; Power Drift = -0.020 dB

Peak SAR (extrapolated) = 2.60 W/kg

SAR(1 g) = 0.832 mW/g; SAR(10 g) = 0.304 mW/g

Maximum value of SAR (measured) = 1.37 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.3GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5320 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 5320$ MHz; $\sigma = 5.43$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_H Ch 64/Area Scan (8x13x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.837 mW/g

802.11a_Main Ant_H Ch 64/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

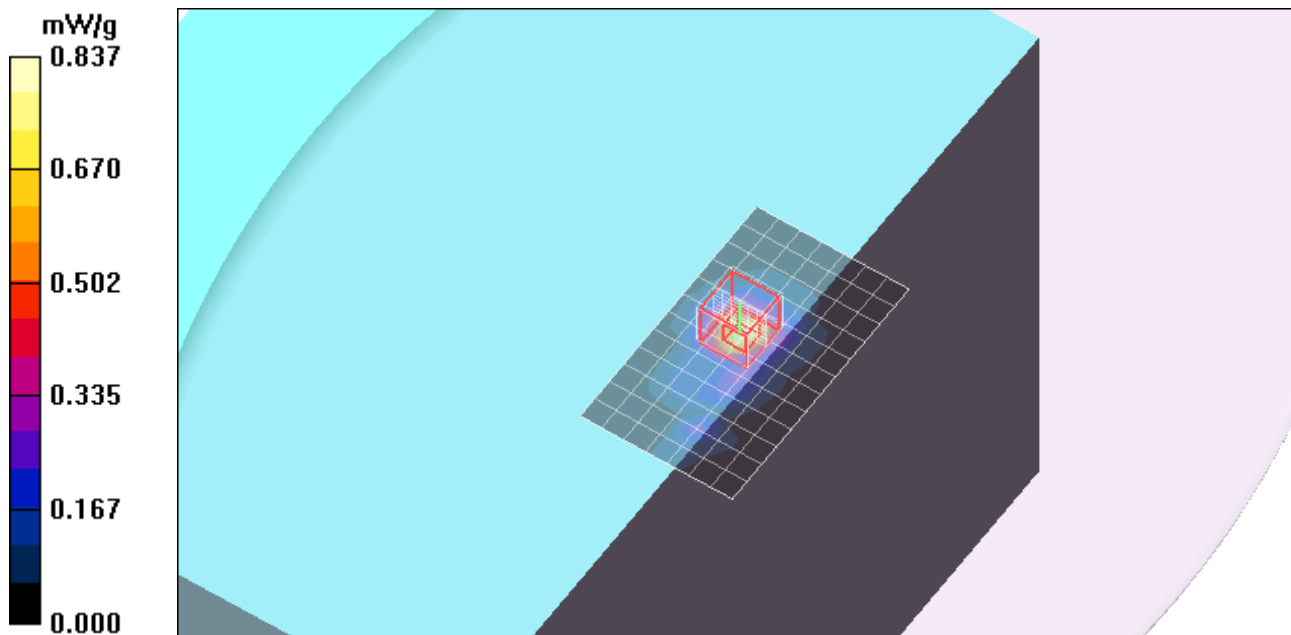
Reference Value = 13.4 V/m; Power Drift = 0.102 dB

Peak SAR (extrapolated) = 1.80 W/kg

SAR(1 g) = 0.540 mW/g; SAR(10 g) = 0.199 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.879 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5500 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5500$ MHz; $\sigma = 5.48$ mho/m; $\epsilon_r = 46.4$; $\rho = 1000$ 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 - SN3686; ConvF(3.76, 3.76, 3.76); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_L Ch 100/Area Scan (7x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.951 mW/g

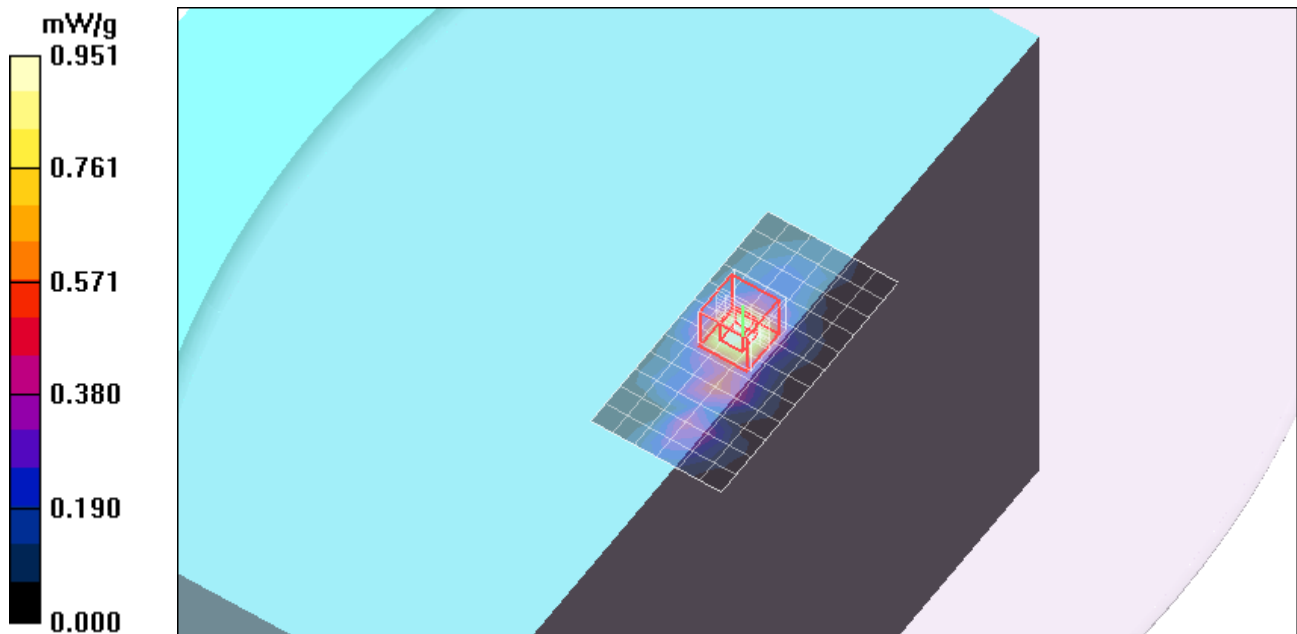
802.11a_Main Ant_L Ch 100/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 14.5 V/m; Power Drift = -0.446 dB

Peak SAR (extrapolated) = 2.16 W/kg

SAR(1 g) = 0.704 mW/g; SAR(10 g) = 0.245 mW/g

Maximum value of SAR (measured) = 1.18 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.77$ mho/m; $\epsilon_r = 46.4$; $\rho = 1000$ 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 - SN3686; ConvF(3.61, 3.61, 3.61); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_M Ch 120/Area Scan (7x13x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.27 mW/g

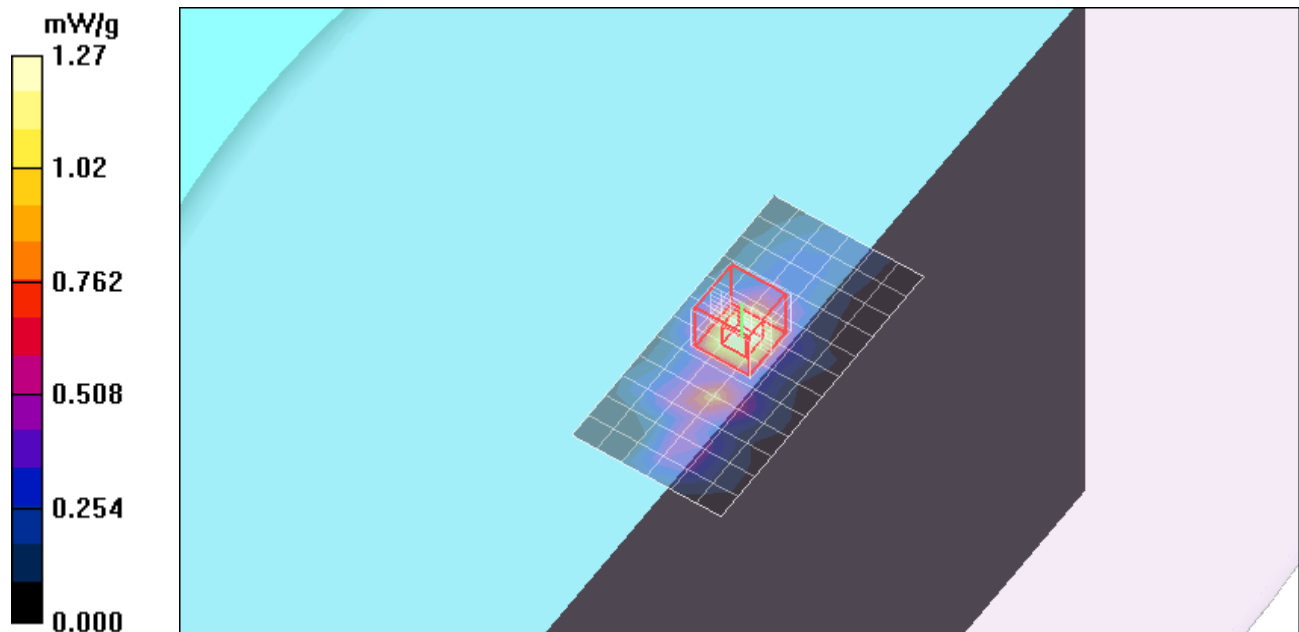
802.11a_Main Ant_M Ch 120/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm,
dz=2.5mm

Reference Value = 15.8 V/m; Power Drift = -0.191 dB

Peak SAR (extrapolated) = 2.91 W/kg

SAR(1 g) = 0.908 mW/g; SAR(10 g) = 0.341 mW/g

Maximum value of SAR (measured) = 1.45 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5700 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5700$ MHz; $\sigma = 5.99$ 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 - SN3686; ConvF(3.84, 3.84, 3.84); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_H Ch 140/Area Scan (7x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.596 mW/g

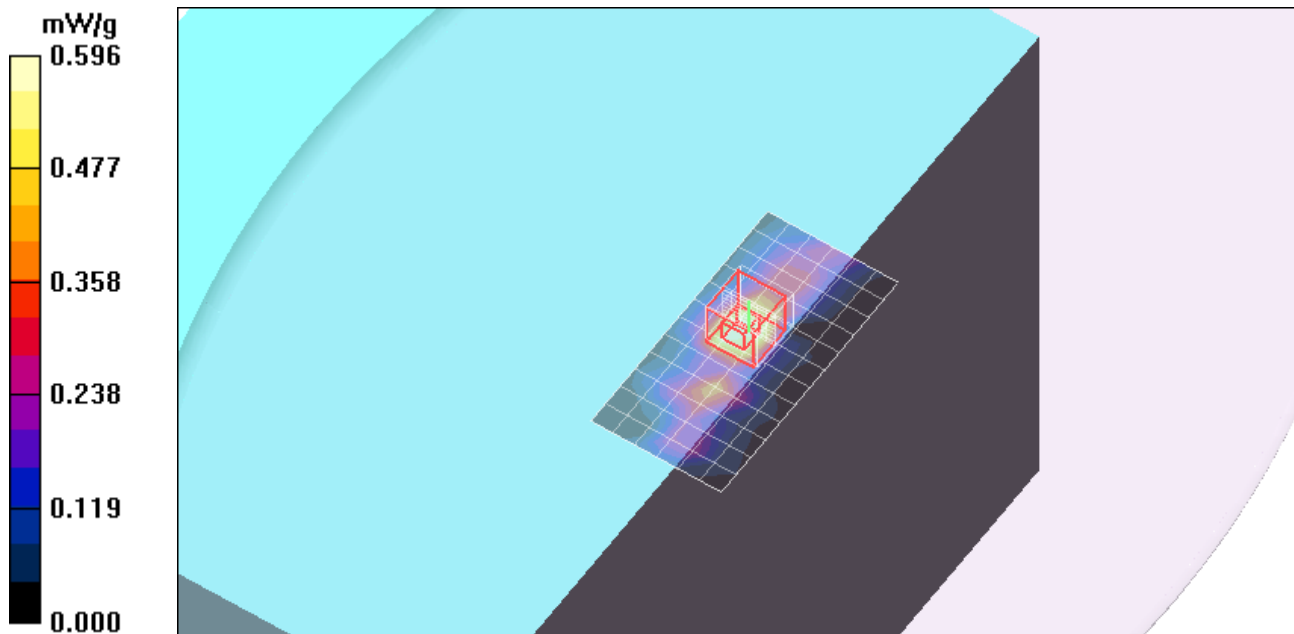
802.11a_Main Ant_H Ch 140/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 10.8 V/m; Power Drift = -0.229 dB

Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.398 mW/g; SAR(10 g) = 0.149 mW/g

Maximum value of SAR (measured) = 0.689 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.8GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5785 MHz; Duty Cycle: 1:1
Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 6.04$ mho/m; $\epsilon_r = 45.2$; $\rho = 1000$ 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 - SN3686; ConvF(3.84, 3.84, 3.84); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Main Ant_M Ch 157/Area Scan (7x12x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.618 mW/g

802.11a_Main Ant_M Ch 157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

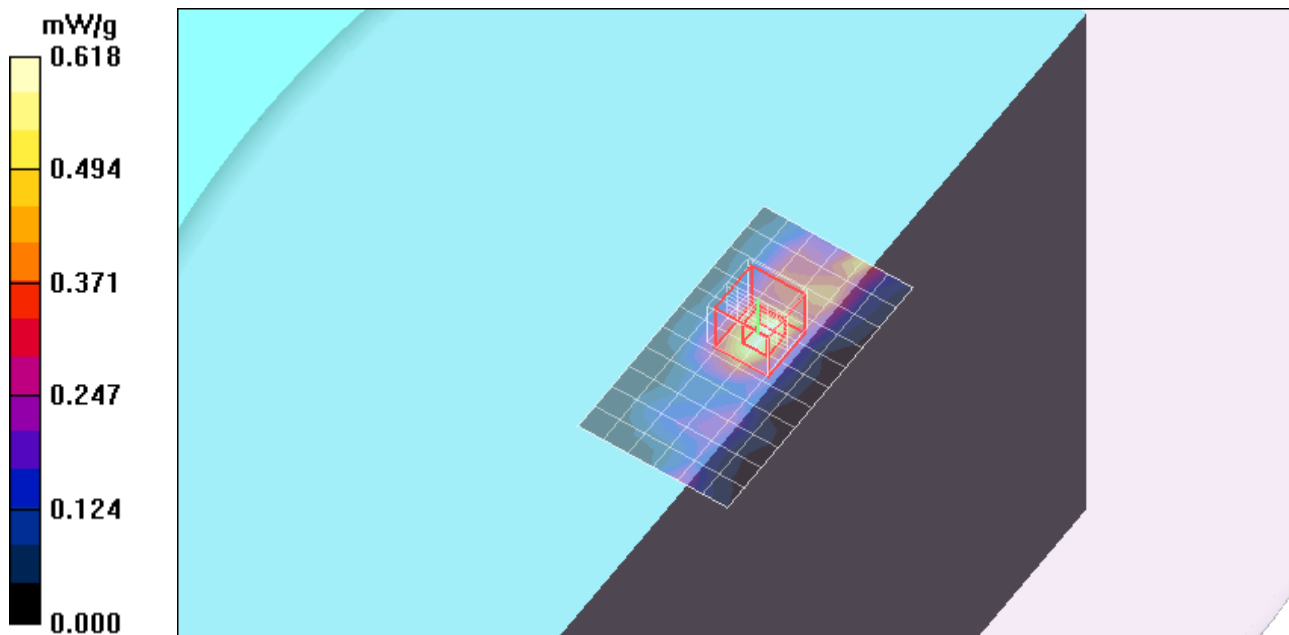
Reference Value = 11.1 V/m; Power Drift = 0.006 dB

Peak SAR (extrapolated) = 1.56 W/kg

SAR(1 g) = 0.432 mW/g; SAR(10 g) = 0.153 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.715 mW/g



Test Laboratory: Compliance Certification Services

Lapheld_Aux 5.2GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5200 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5200$ MHz; $\sigma = 5.31$ mho/m; $\epsilon_r = 45.7$; $\rho = 1000$ 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 - SN3686; ConvF(4.08, 4.08, 4.08); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Aux Ant_M Ch 40/Area Scan (8x11x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.427 mW/g

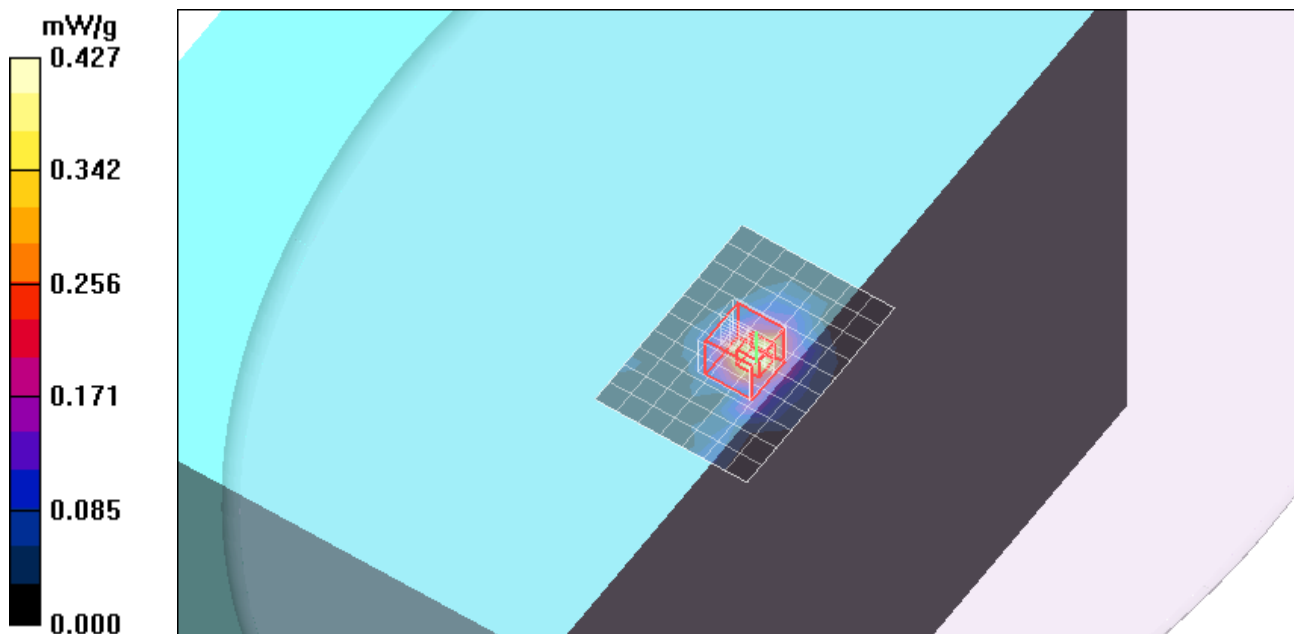
802.11a_Aux Ant_M Ch 40/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 9.66 V/m; Power Drift = 0.053 dB

Peak SAR (extrapolated) = 1.41 W/kg

SAR(1 g) = 0.281 mW/g; SAR(10 g) = 0.099 mW/g

Maximum value of SAR (measured) = 0.423 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.3GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5260 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.28$ mho/m; $\epsilon_r = 46.8$; $\rho = 1000$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Aux Ant_L Ch 52/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.23 mW/g

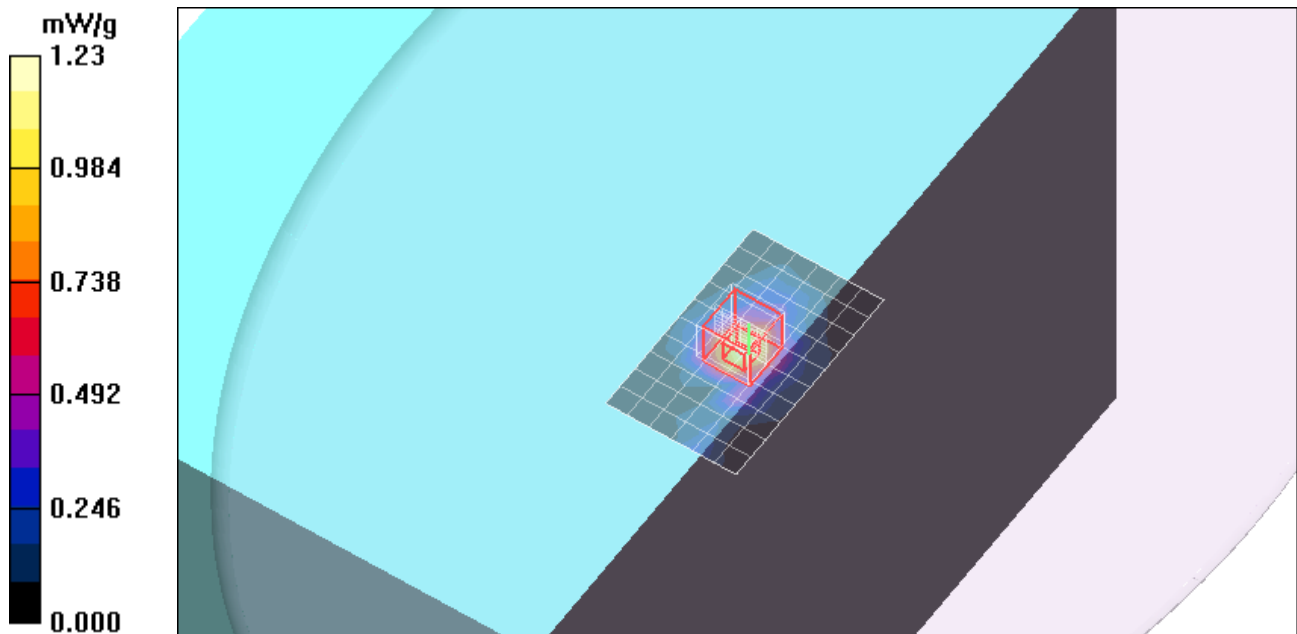
802.11a_Aux Ant_L Ch 52/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 16.7 V/m; Power Drift = -0.128 dB

Peak SAR (extrapolated) = 2.22 W/kg

SAR(1 g) = 0.784 mW/g; SAR(10 g) = 0.310 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.3GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5300 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5300 \text{ MHz}$; $\sigma = 5.34 \text{ mho/m}$; $\epsilon_r = 45.6$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Aux Ant_M Ch 60/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.61 mW/g

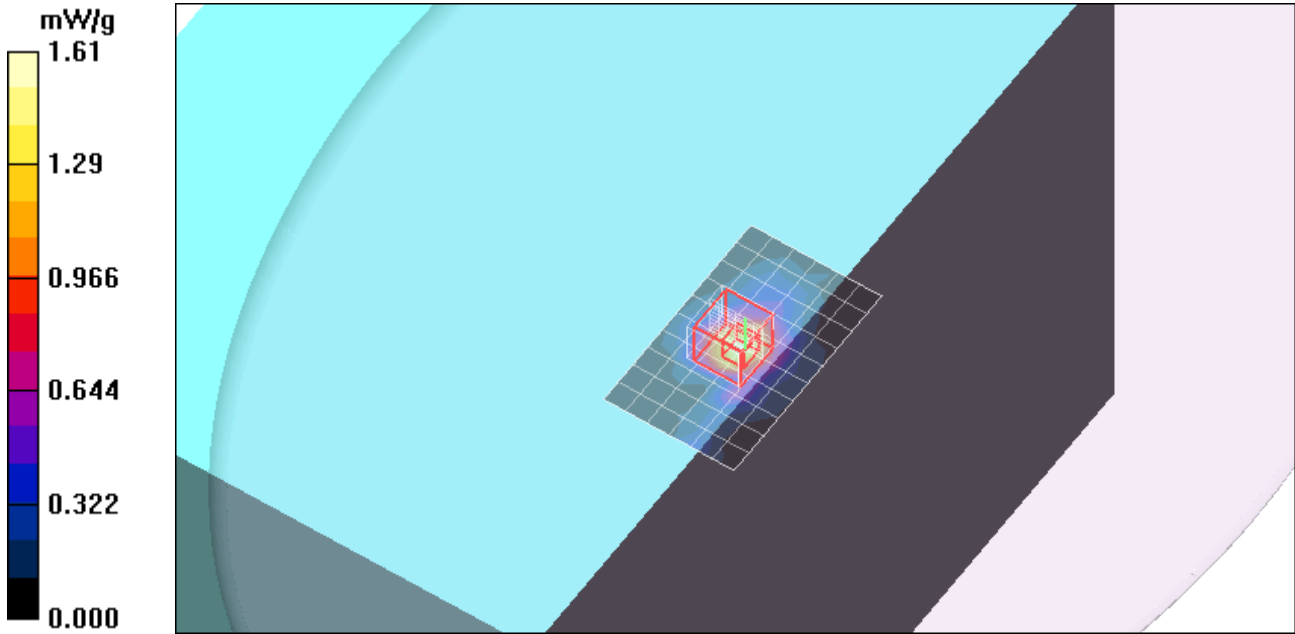
802.11a_Aux Ant_M Ch 60/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 18.0 V/m; Power Drift = 0.167 dB

Peak SAR (extrapolated) = 2.94 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.401 mW/g

Maximum value of SAR (measured) = 1.60 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.3GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5320 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5320$ MHz; $\sigma = 5.43$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Aux Ant_H Ch 64/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.27 mW/g

802.11a_Aux Ant_H Ch 64/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

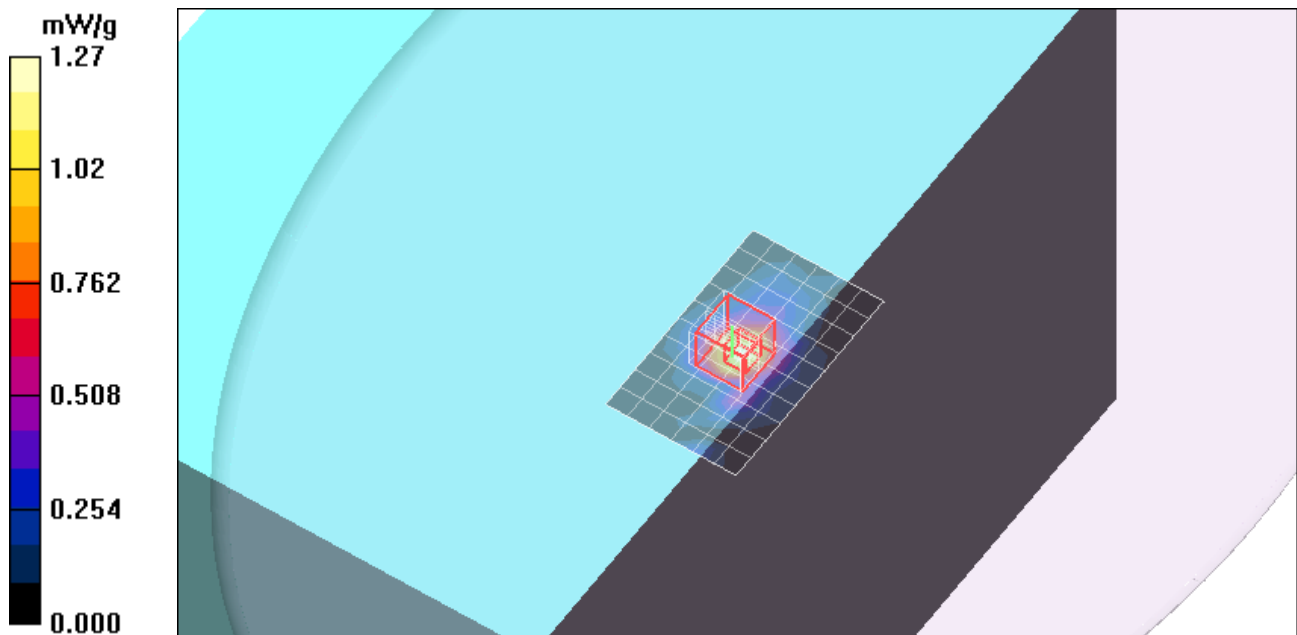
Reference Value = 16.5 V/m; Power Drift = -0.100 dB

Peak SAR (extrapolated) = 2.44 W/kg

SAR(1 g) = 0.832 mW/g; SAR(10 g) = 0.318 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.29 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5600$ MHz; $\sigma = 5.77$ mho/m; $\epsilon_r = 46.4$; $\rho = 1000$ 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 - SN3686; ConvF(3.61, 3.61, 3.61); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Aux Ant_Ch 120/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 0.924 mW/g

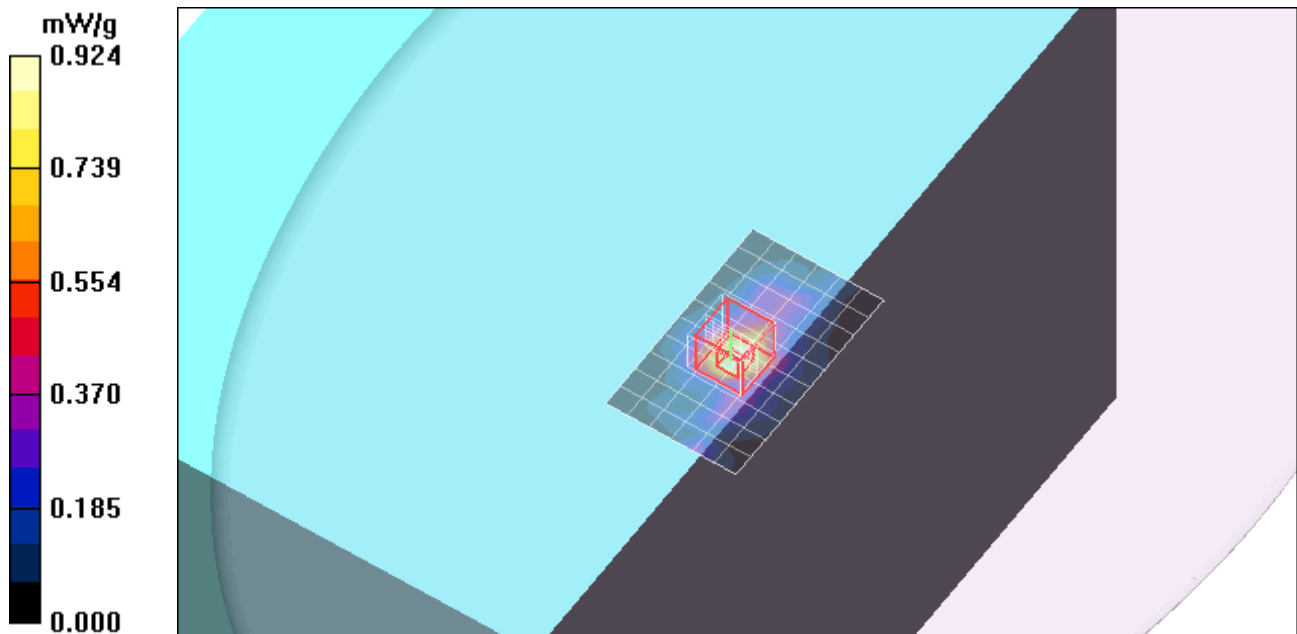
802.11a_Aux Ant_Ch 120/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 13.5 V/m; Power Drift = -0.443 dB

Peak SAR (extrapolated) = 2.07 W/kg

SAR(1 g) = 0.644 mW/g; SAR(10 g) = 0.236 mW/g

Maximum value of SAR (measured) = 1.02 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.8GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 6.04$ mho/m; $\epsilon_r = 45.2$; $\rho = 1000$ 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 - SN3686; ConvF(3.84, 3.84, 3.84); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11a_Aux Ant_Ch 157/Area Scan (7x11x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.10 mW/g

802.11a_Aux Ant_Ch 157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

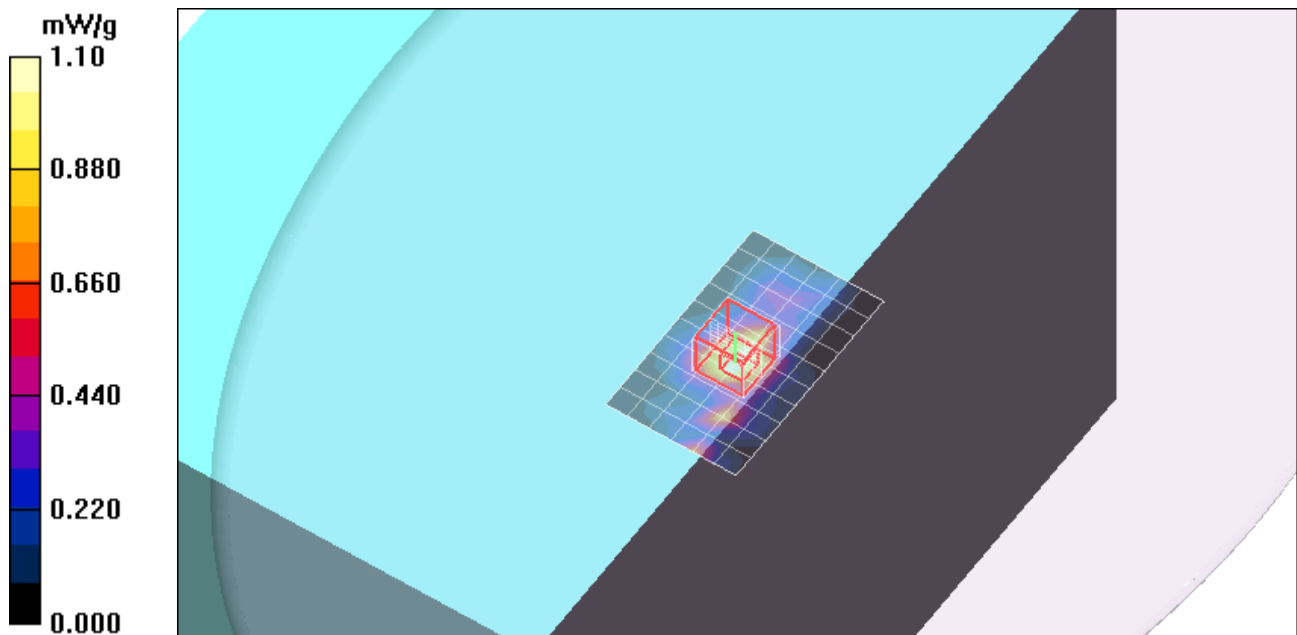
Reference Value = 14.7 V/m; Power Drift = -0.033 dB

Peak SAR (extrapolated) = 2.55 W/kg

SAR(1 g) = 0.783 mW/g; SAR(10 g) = 0.303 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.25 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.8GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5785 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 6.04$ mho/m; $\epsilon_r = 45.2$; $\rho = 1000$ 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 - SN3686; ConvF(3.84, 3.84, 3.84); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11n HT20_Main&Aux Ant_Ch 157/Area Scan (9x16x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.974 mW/g

802.11n HT20_Main&Aux Ant_Ch 157/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

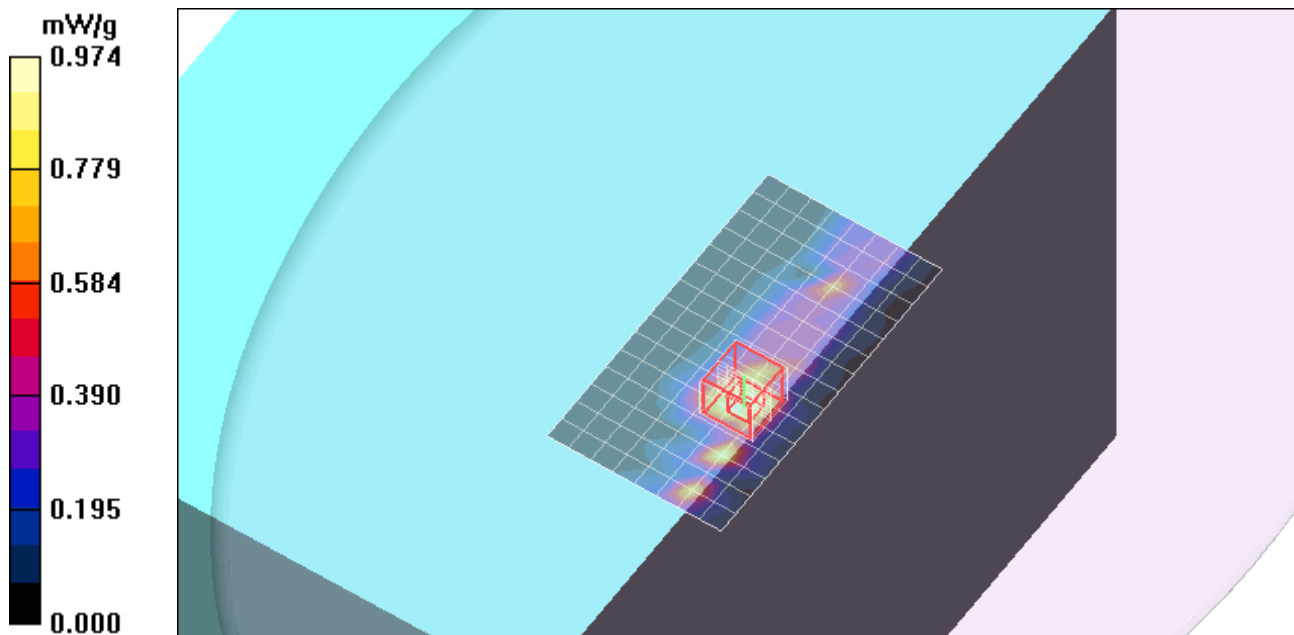
Reference Value = 13.6 V/m; Power Drift = -0.068 dB

Peak SAR (extrapolated) = 2.25 W/kg

SAR(1 g) = 0.697 mW/g; SAR(10 g) = 0.264 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.18 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5510 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5510$ MHz; $\sigma = 5.54$ 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 - SN3686; ConvF(3.76, 3.76, 3.76); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11n HT40_Main&Aux Ant_Ch 102/Area Scan (8x12x1): Measurement grid: dx=10mm, dy=10mm[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.11 mW/g

802.11n HT40_Main&Aux Ant_Ch 102/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 15.0 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 2.17 W/kg

SAR(1 g) = 0.695 mW/g; SAR(10 g) = 0.268 mW/g[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.12 mW/g

802.11n HT40_Main&Aux Ant_Ch 102/Zoom Scan 2 (7x7x9)/Cube 0: Measurement grid:

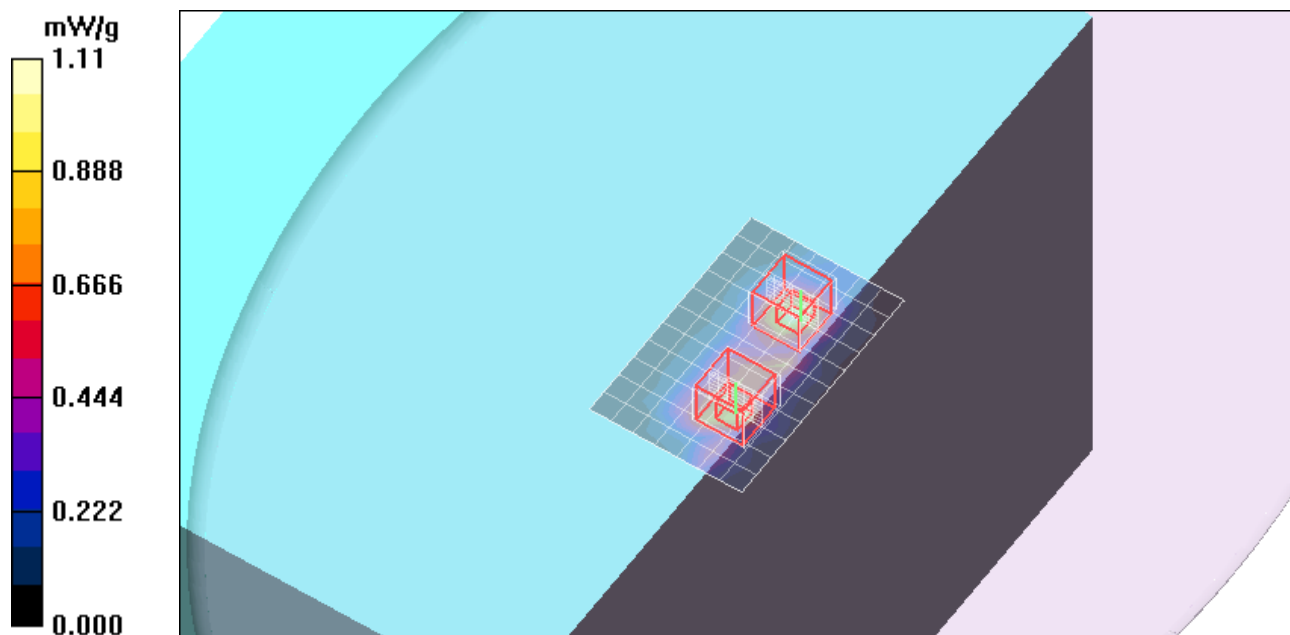
dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 15.0 V/m; Power Drift = -0.039 dB

Peak SAR (extrapolated) = 2.38 W/kg

SAR(1 g) = 0.594 mW/g; SAR(10 g) = 0.230 mW/g[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.980 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5590 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5590$ MHz; $\sigma = 5.78$ 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 - SN3686; ConvF(3.61, 3.61, 3.61); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11n HT40_Main&Aux Ant_Ch 118/Area Scan (9x14x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.51 mW/g

802.11n HT40_Main&Aux Ant_Ch 118/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

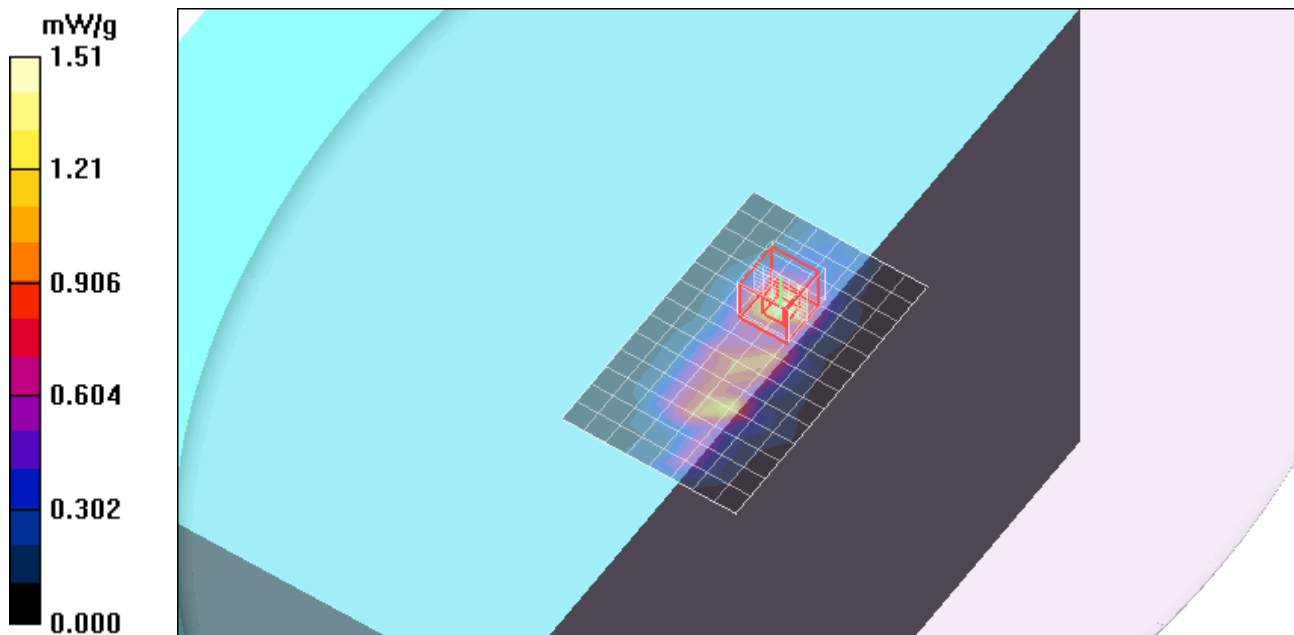
Reference Value = 17.2 V/m; Power Drift = -0.074 dB

Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 0.943 mW/g; SAR(10 g) = 0.345 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.47 mW/g



Test Laboratory: Compliance Certification Services

Laptop - Lapheld_5.6GHz

DUT: Apple; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5670 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5670$ MHz; $\sigma = 5.88$ mho/m; $\epsilon_r = 45.5$; $\rho = 1000$ 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 - SN3686; ConvF(3.61, 3.61, 3.61); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn500; Calibrated: 9/15/2009
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

802.11n HT40_Main&Aux Ant_Ch 134/Area Scan (8x12x1): Measurement grid: dx=10mm, dy=10mm

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.46 mW/g

802.11n HT40_Main&Aux Ant_Ch 134/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 16.8 V/m; Power Drift = 0.037 dB

Peak SAR (extrapolated) = 3.33 W/kg

SAR(1 g) = 1.03 mW/g; SAR(10 g) = 0.383 mW/g

[Info: Interpolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 1.70 mW/g

