

Test Laboratory: Compliance Certification Services

802.11a 5.2GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5200 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5200$ MHz; $\sigma = 5.18$ mho/m; $\epsilon_r = 47.8$; $\rho = 1000$ 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 - SN3686; ConvF(4.08, 4.08, 4.08); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 5.2G_Chain A/Area Scan (13x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.353 mW/g

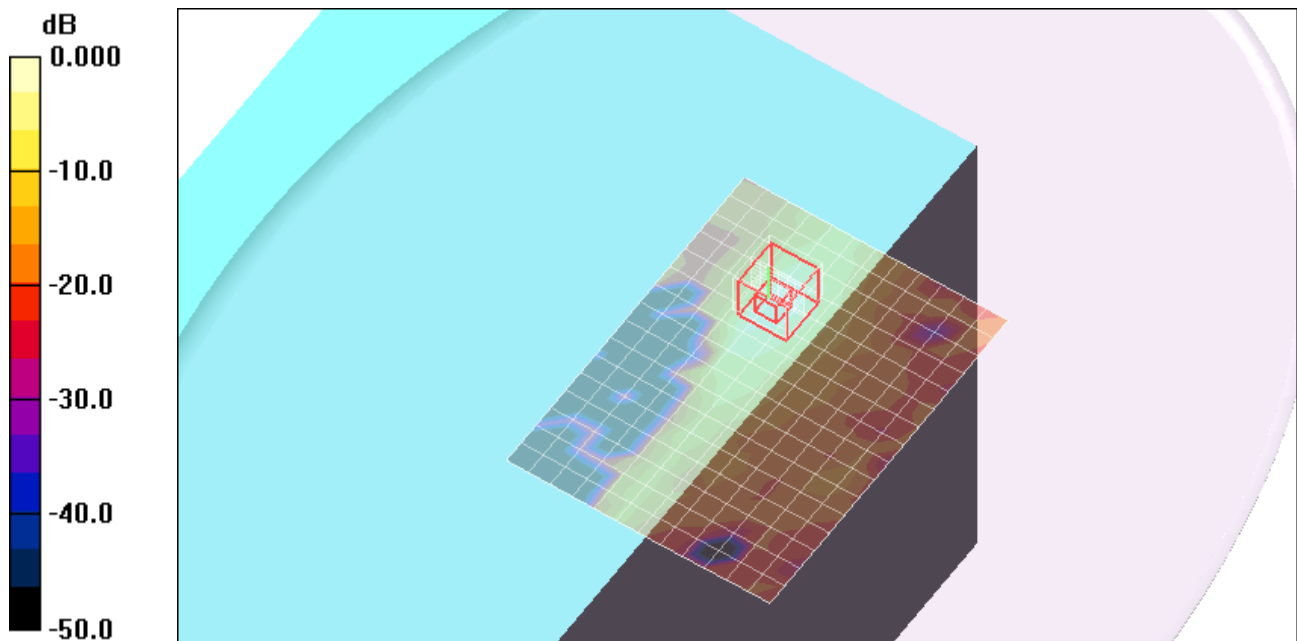
Lapheld - 5.2G_Chain A/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.10 V/m; Power Drift = 1.51 dB

Peak SAR (extrapolated) = 0.609 W/kg

SAR(1 g) = 0.204 mW/g; SAR(10 g) = 0.069 mW/g

Maximum value of SAR (measured) = 0.339 mW/g



0 dB = 0.339mW/g

Test Laboratory: Compliance Certification Services

802.11a 5.2GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5240 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5240$ MHz; $\sigma = 5.36$ mho/m; $\epsilon_r = 48.2$; $\rho = 1000$ 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 - SN3686; ConvF(4.08, 4.08, 4.08); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11a_5.2G_Chain B/Area Scan (15x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.401 mW/g

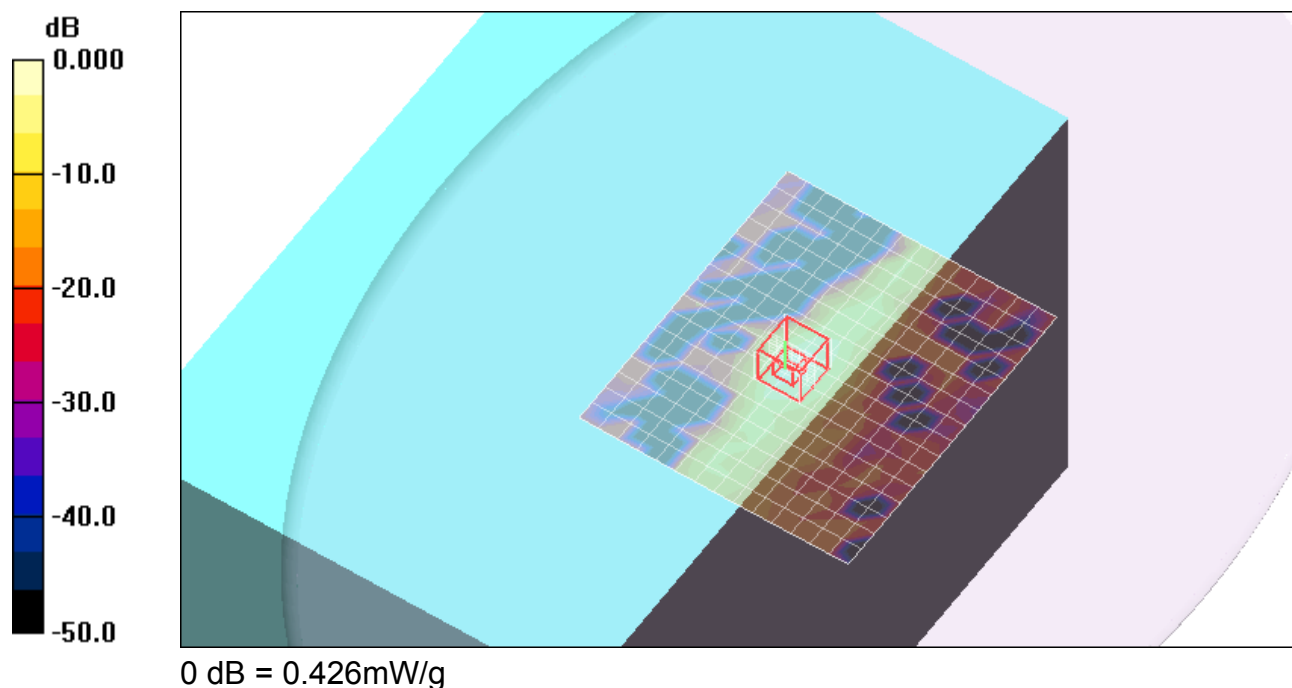
Lapheld - 802.11a_5.2G_Chain B/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.75 V/m; Power Drift = 1.43 dB

Peak SAR (extrapolated) = 0.827 W/kg

SAR(1 g) = 0.252 mW/g; SAR(10 g) = 0.079 mW/g

Maximum value of SAR (measured) = 0.426 mW/g



Test Laboratory: Compliance Certification Services

802.11n 20MHz 5.3GHz

DUT: HP; Type: NA; Serial: NA

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

Medium parameters used (interpolated): $f = 5260$ MHz; $\sigma = 5.41$ mho/m; $\epsilon_r = 48.2$; $\rho = 1000$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11n_5.3G_Chain A/Area Scan (13x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.390 mW/g

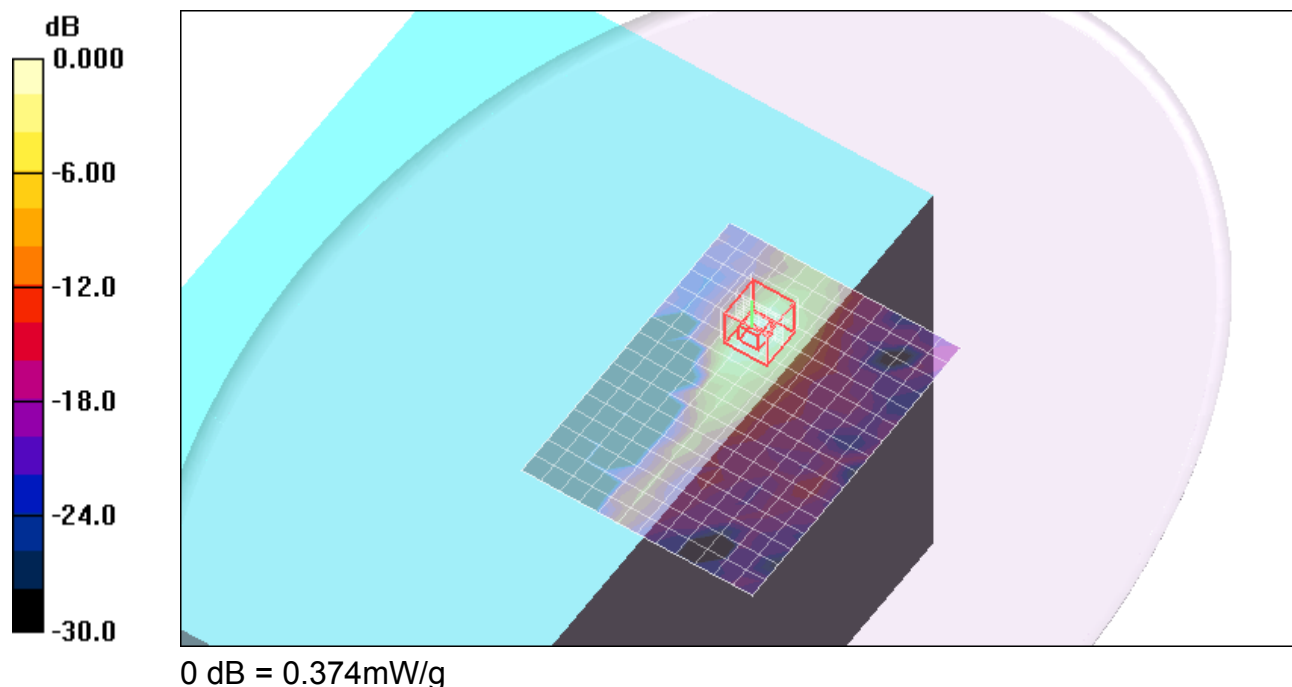
Lapheld - 802.11n_5.3G_Chain A/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.13 V/m; Power Drift = 1.51 dB

Peak SAR (extrapolated) = 0.672 W/kg

SAR(1 g) = 0.226 mW/g; SAR(10 g) = 0.076 mW/g

Maximum value of SAR (measured) = 0.374 mW/g



Test Laboratory: Compliance Certification Services

802.11n 20MHz 5.3GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5310 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5310$ MHz; $\sigma = 5.47$ mho/m; $\epsilon_r = 48.1$; $\rho = 1000$ 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 - SN3686; ConvF(3.81, 3.81, 3.81); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11n_5.3G_Chain B/Area Scan (15x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.434 mW/g

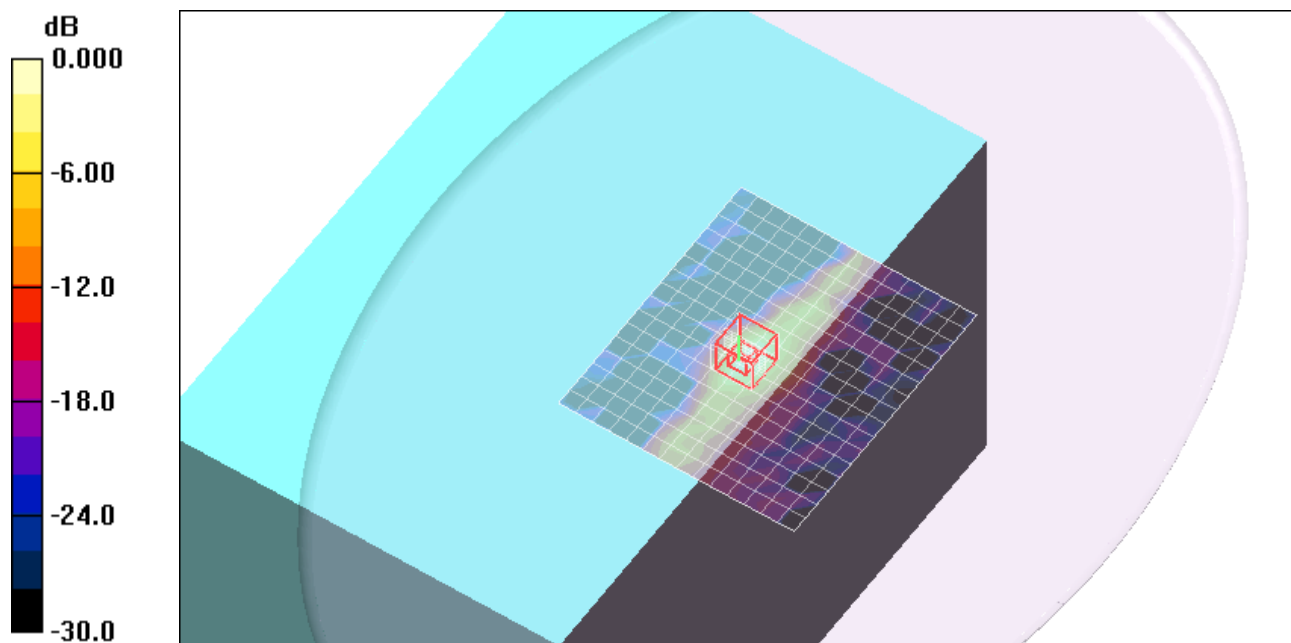
Lapheld - 802.11n_5.3G_Chain B/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.84 V/m; Power Drift = 1.43 dB

Peak SAR (extrapolated) = 0.895 W/kg

SAR(1 g) = 0.273 mW/g; SAR(10 g) = 0.085 mW/g

Maximum value of SAR (measured) = 0.461 mW/g



0 dB = 0.461mW/g

Test Laboratory: Compliance Certification Services

802.11a 5.5 GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5600 MHz; Duty Cycle: 1:1
 Medium parameters used: $f = 5600$ MHz; $\sigma = 5.86$ mho/m; $\epsilon_r = 47.6$; $\rho = 1000$ 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 - SN3686; ConvF(3.61, 3.61, 3.61); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11a_5.5G_Chain A/Area Scan (12x16x1): Measurement grid: dx=10mm, dy=10mm
 Maximum value of SAR (measured) = 0.362 mW/g

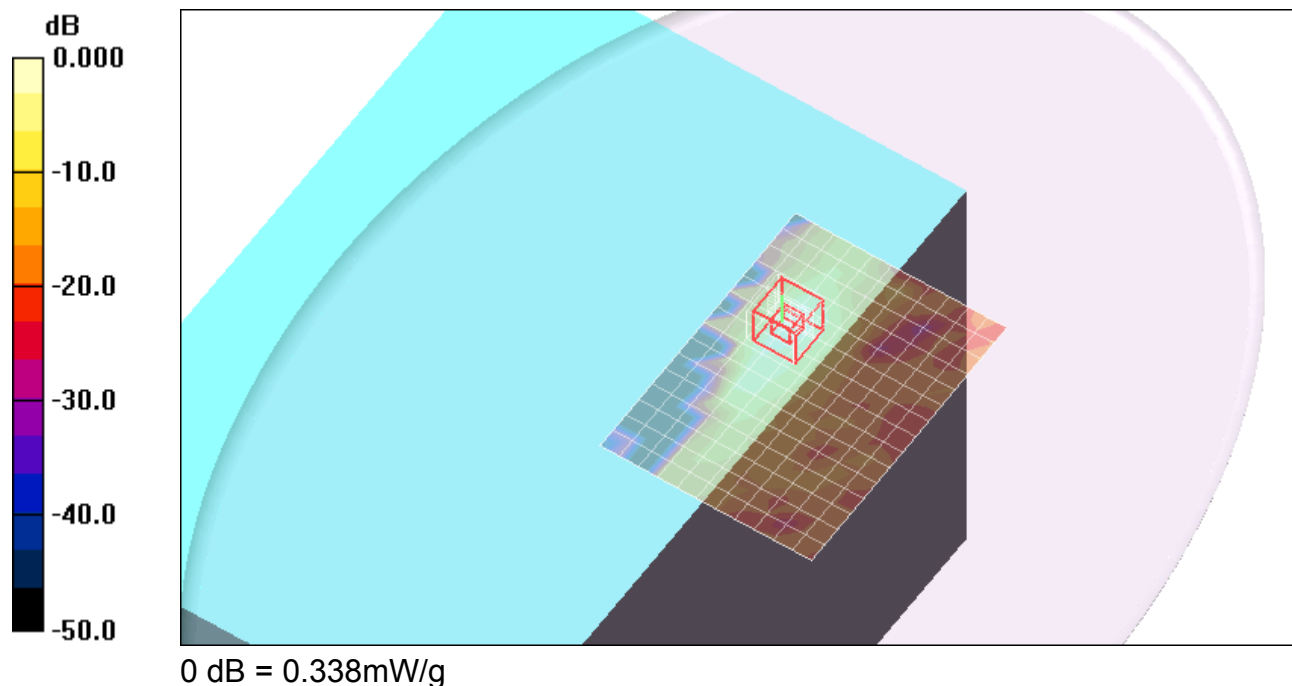
Lapheld - 802.11a_5.5G_Chain A/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.36 V/m; Power Drift = -0.076 dB

Peak SAR (extrapolated) = 0.675 W/kg

SAR(1 g) = 0.200 mW/g; SAR(10 g) = 0.066 mW/g

Maximum value of SAR (measured) = 0.338 mW/g



Test Laboratory: Compliance Certification Services

802.11a 5.5GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5700 MHz; Duty Cycle: 1:1
Medium parameters used: $f = 5700$ MHz; $\sigma = 6.02$ mho/m; $\epsilon_r = 47.3$; $\rho = 1000$ 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 - SN3686; ConvF(3.61, 3.61, 3.61); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11a_5.5G_Chain B/Area Scan (15x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.457 mW/g

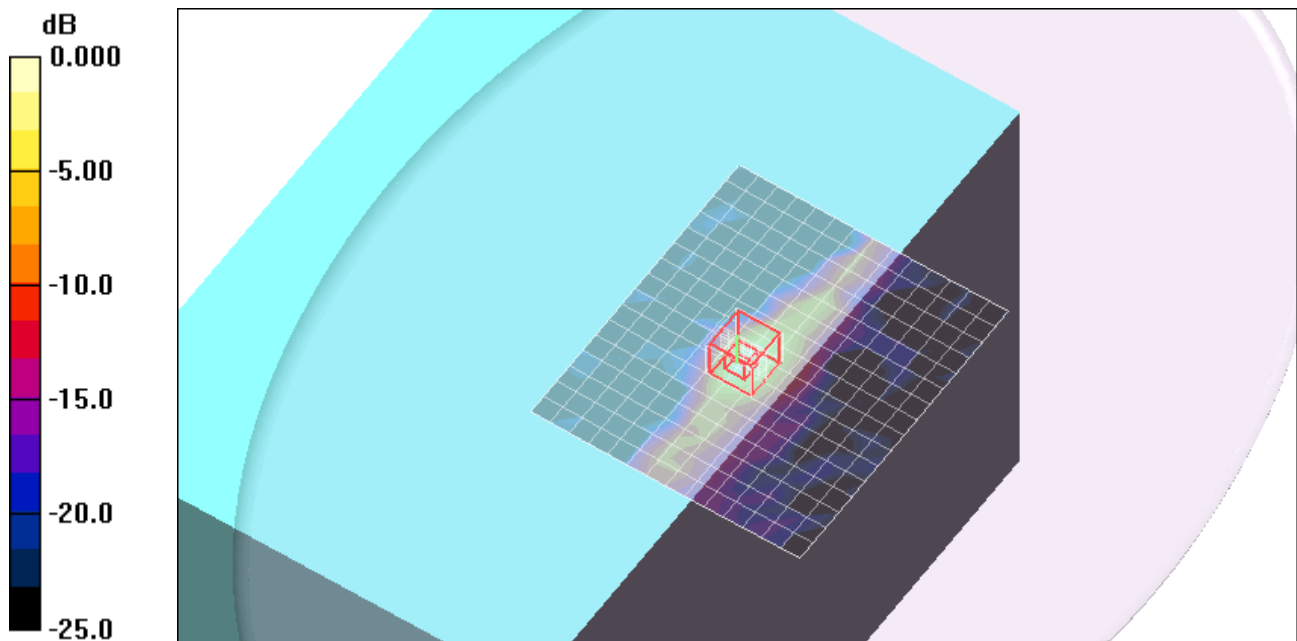
Lapheld - 802.11a_5.5G_Chain B/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.77 V/m; Power Drift = 1.43 dB

Peak SAR (extrapolated) = 0.944 W/kg

SAR(1 g) = 0.218 mW/g; SAR(10 g) = 0.090 mW/g

Maximum value of SAR (measured) = 0.486 mW/g



Test Laboratory: Compliance Certification Services

802.11a_5.8GHz

DUT: HP; Type: NA; Serial: NA

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

Medium parameters used (interpolated): $f = 5785$ MHz; $\sigma = 6.13$ mho/m; $\epsilon_r = 47$; $\rho = 1000$ 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 - SN3686; ConvF(3.84, 3.84, 3.84); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11a_5.8G_Chain A/Area Scan (13x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.442 mW/g

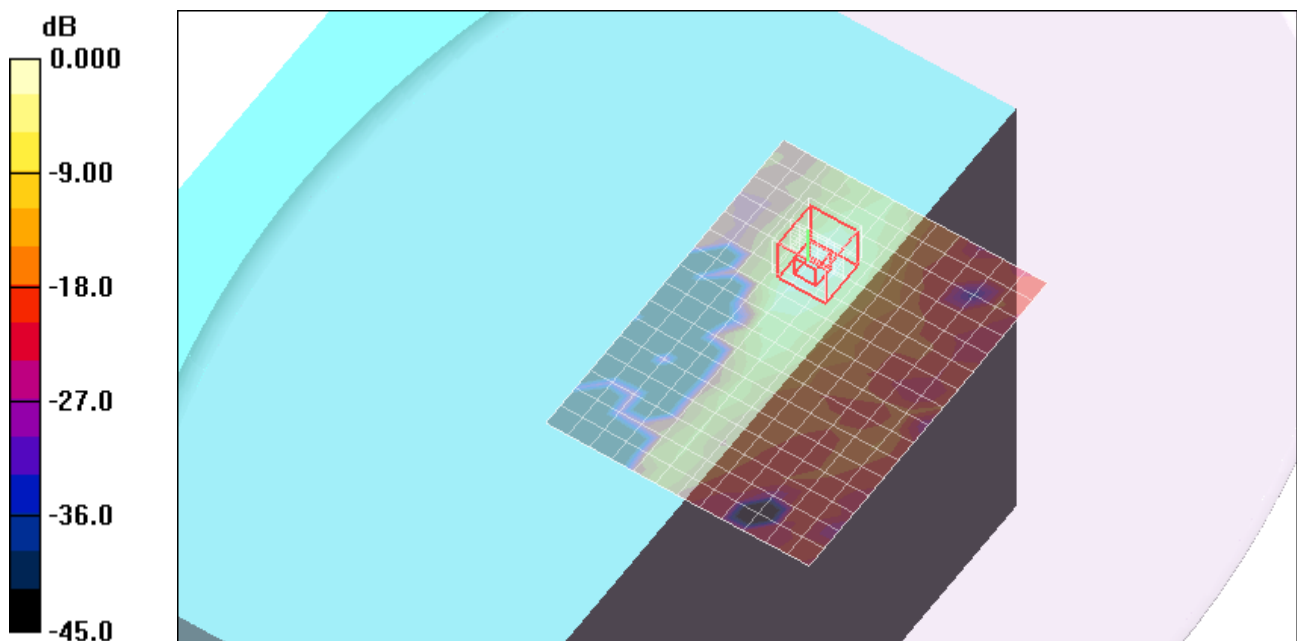
Lapheld - 802.11a_5.8G_Chain A/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 1.13 V/m; Power Drift = 1.51 dB

Peak SAR (extrapolated) = 0.762 W/kg

SAR(1 g) = 0.256 mW/g; SAR(10 g) = 0.086 mW/g

Maximum value of SAR (measured) = 0.424 mW/g



0 dB = 0.424mW/g

Test Laboratory: Compliance Certification Services

802.11a_5.8GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5825 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 5825$ MHz; $\sigma = 6.21$ mho/m; $\epsilon_r = 46.9$; $\rho = 1000$ 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 - SN3686; ConvF(3.84, 3.84, 3.84); Calibrated: 3/23/2009
- Sensor-Surface: 2.5mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn427; Calibrated: 10/20/2008
- Phantom: Flat Phantom ELI4.0; Type: QDOVA001BA; Serial: SN:1003
- Measurement SW: DASY4, V4.7 Build 80; Postprocessing SW: SEMCAD, V1.8 Build 186

Lapheld - 802.11a_5.8G_Chain B/Area Scan (15x17x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.491 mW/g

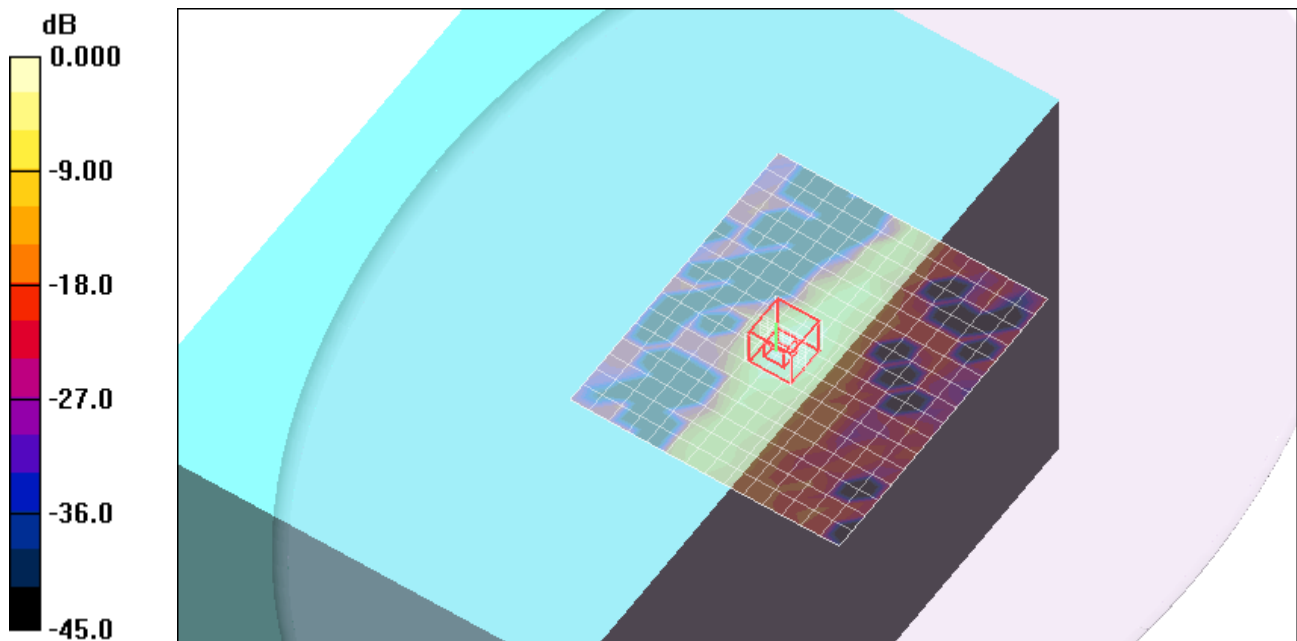
Lapheld - 802.11a_5.8G_Chain B/Zoom Scan (7x7x9)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2.5mm

Reference Value = 2.83 V/m; Power Drift = 1.43 dB

Peak SAR (extrapolated) = 1.01 W/kg

SAR(1 g) = 0.309 mW/g; SAR(10 g) = 0.097 mW/g

Maximum value of SAR (measured) = 0.522 mW/g



Test Laboratory: Compliance Certification Services

802.11a_5.8GHz

DUT: HP; Type: NA; Serial: NA

Communication System: 802.11abgn; Frequency: 5825 MHz; Duty Cycle: 1:1

Lapheld - 802.11a_5.8G_Chain B/Z Scan (1x1x29): Measurement grid: dx=20mm, dy=20mm, dz=3.5mm

Maximum value of SAR (measured) = 0.511 mW/g

