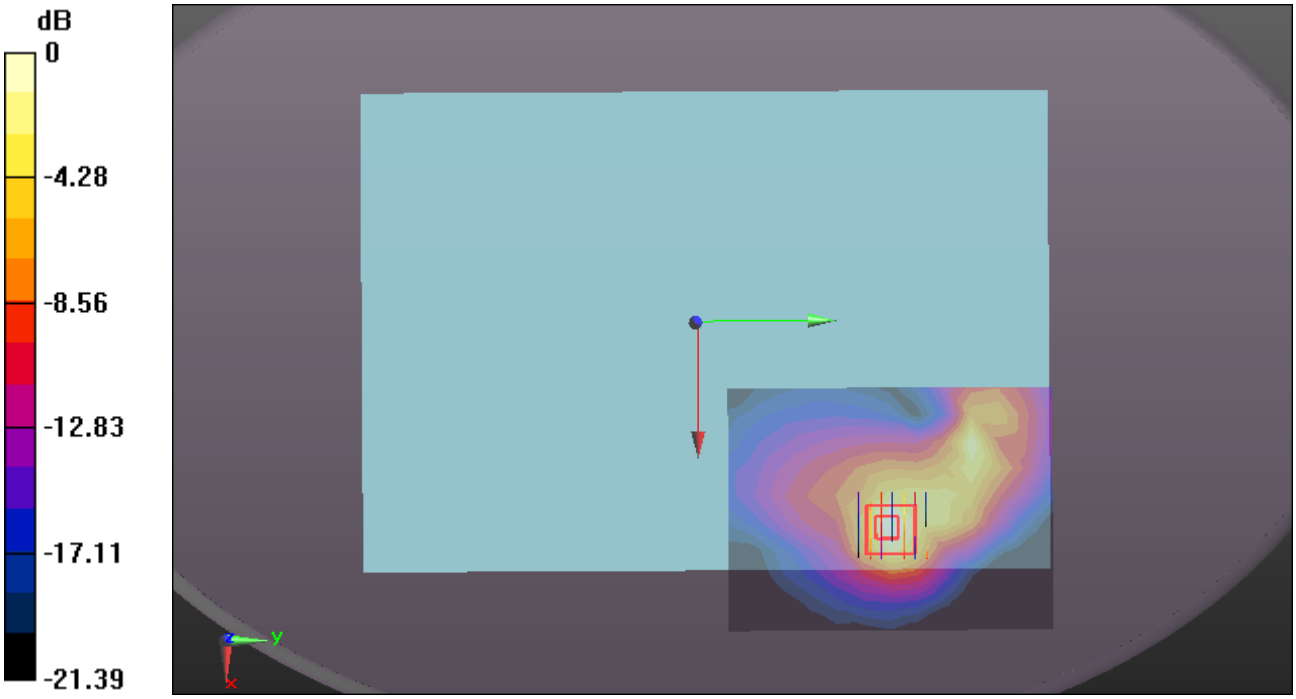
Test Laboratory: Compliance Certification Services Inc. Date: 8/2/2017
WIFI 802.11 b-Body Bottom CH1 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11b (0); Communication System Band: ISM 2.4GHz Band; Frequency: 2412 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2412 MHz; σ = 1.902 S/m; ε_r = 51.725; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.1, 7.1, 7.1); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Chain1 /Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.913 W/kg
WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Chain1 /Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.703 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 1.09 W/kg
SAR(1 g) = 0.420 W/kg; SAR(10 g) = 0.180 W/kg
Maximum value of SAR (measured) = 0.680 W/kg

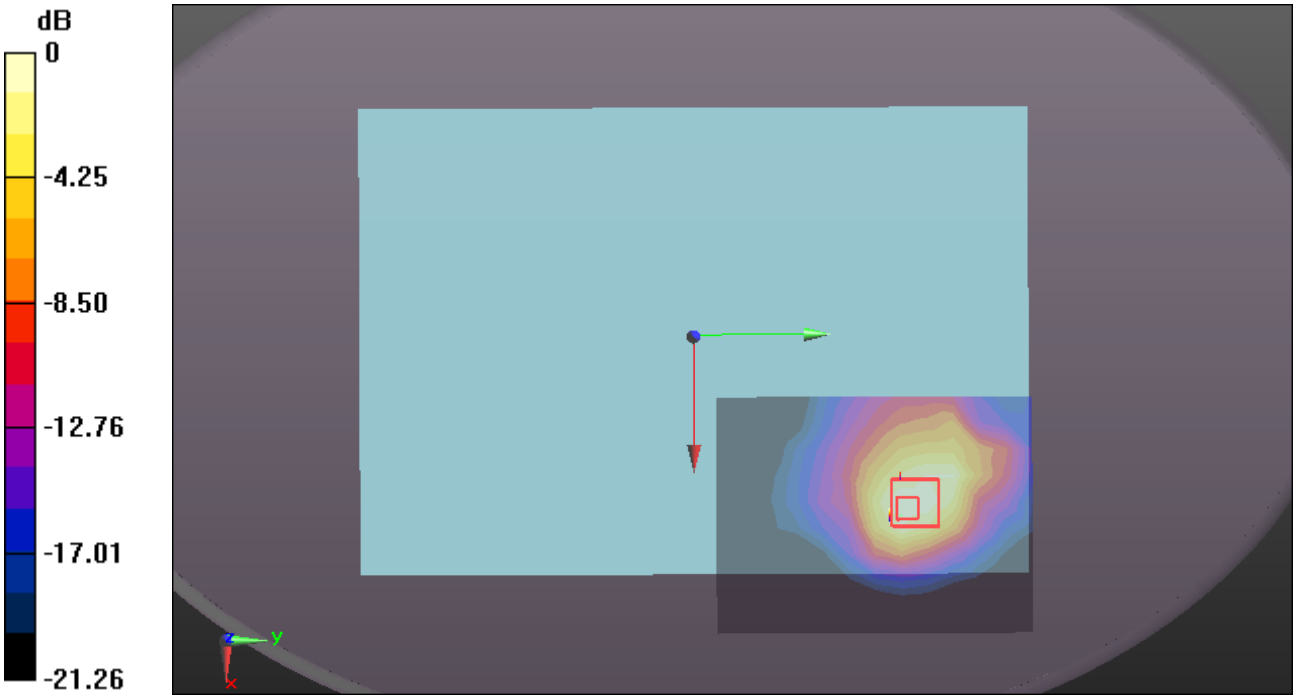


0 dB = 0.680 W/kg = -1.67 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 8/2/2017
WIFI 802.11 b-Body Bottom CH6 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11b (0); Communication System Band: ISM 2.4GHz Band; Frequency: 2437 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2437 MHz; σ = 1.937 S/m; ε_r = 51.701; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.1, 7.1, 7.1); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Chain1 /Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.720 W/kg
WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Chain1 /Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.514 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.937 W/kg
SAR(1 g) = 0.501 W/kg; SAR(10 g) = 0.272 W/kg
Maximum value of SAR (measured) = 0.705 W/kg

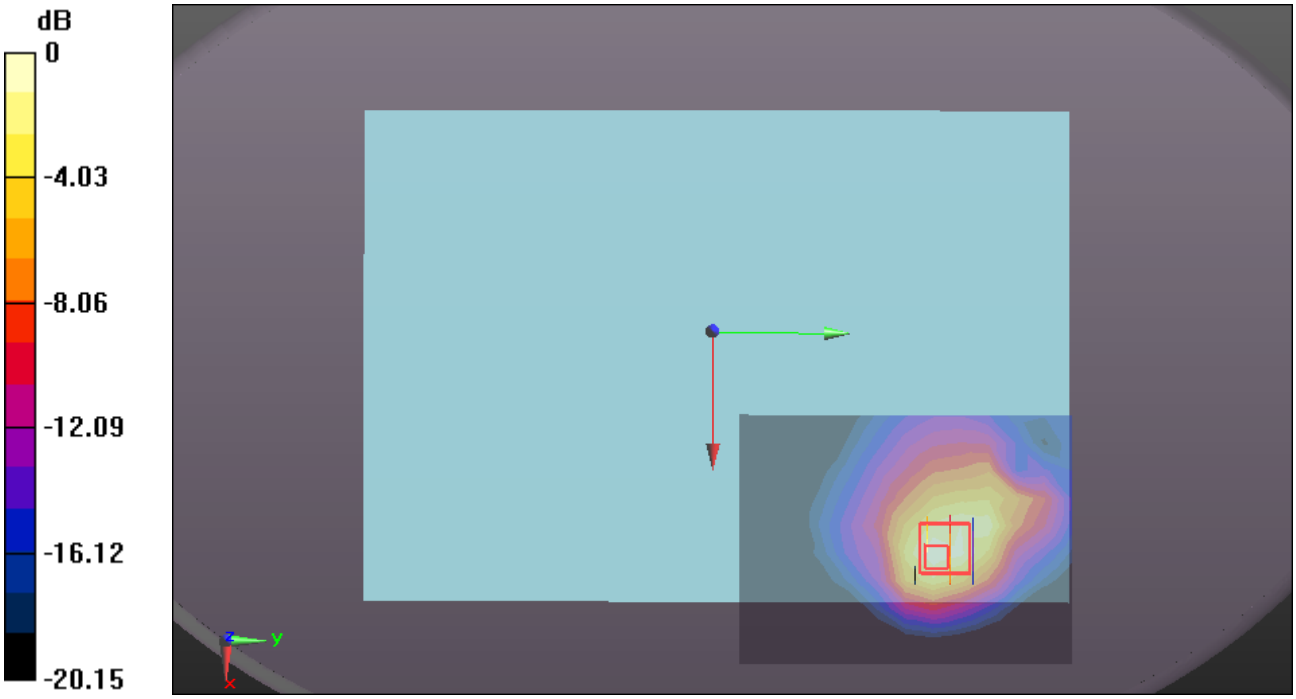


0 dB = 0.705 W/kg = -1.52 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 8/2/2017
WIFI 802.11 b-Body Bottom CH11 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11b (0); Communication System Band: ISM 2.4GHz Band; Frequency: 2462 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2462 MHz; σ = 1.963 S/m; ε_r = 51.648; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.1, 7.1, 7.1); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Chain1 /Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.739 W/kg
WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Chain1 /Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.921 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 0.936 W/kg
SAR(1 g) = 0.491 W/kg; SAR(10 g) = 0.260 W/kg
Maximum value of SAR (measured) = 0.694 W/kg

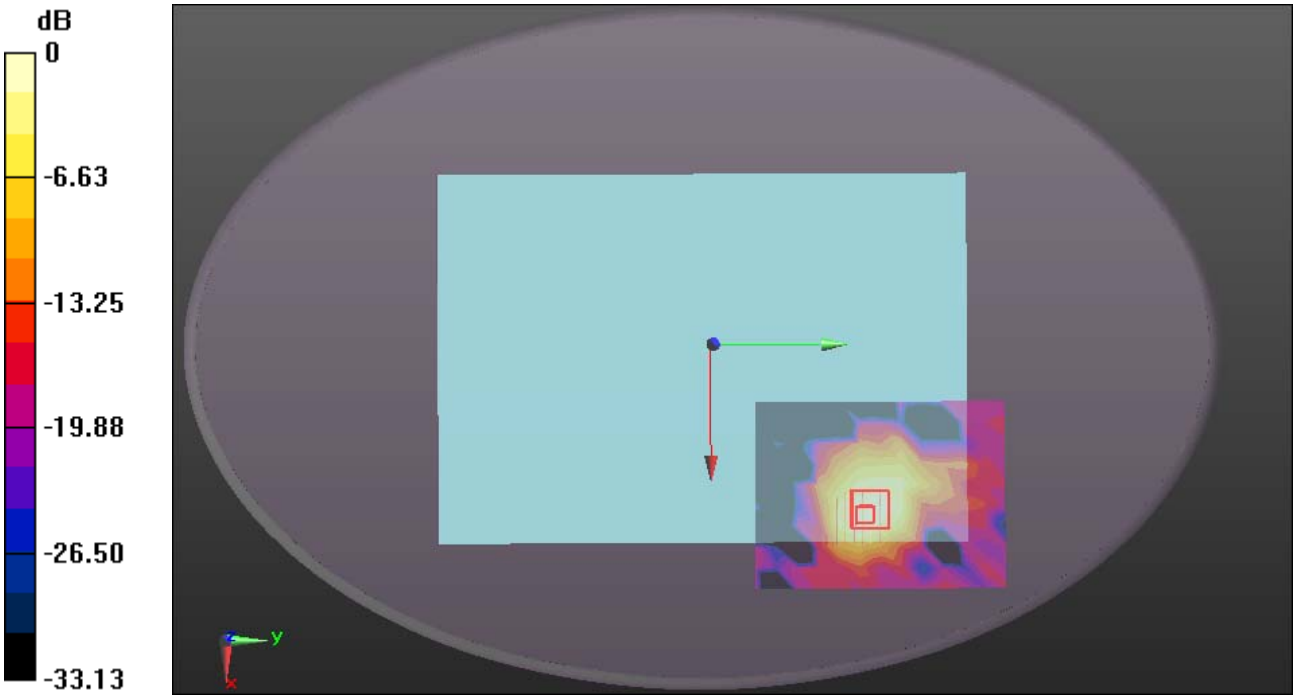


0 dB = 0.739 W/kg = -1.31 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 8/2/2017
2.4GHz -Body Bottom CH00 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, Bluetooth (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2402 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2402 MHz; σ = 1.888 S/m; ε_r = 51.755; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.1, 7.1, 7.1); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/Body Bottom CH00 Chain1/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0502 W/kg
WiFi 2.4GHz/Body Bottom CH00 Chain1/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.023 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.0690 W/kg
SAR(1 g) = 0.037 W/kg; SAR(10 g) = 0.020 W/kg
Maximum value of SAR (measured) = 0.0534 W/kg

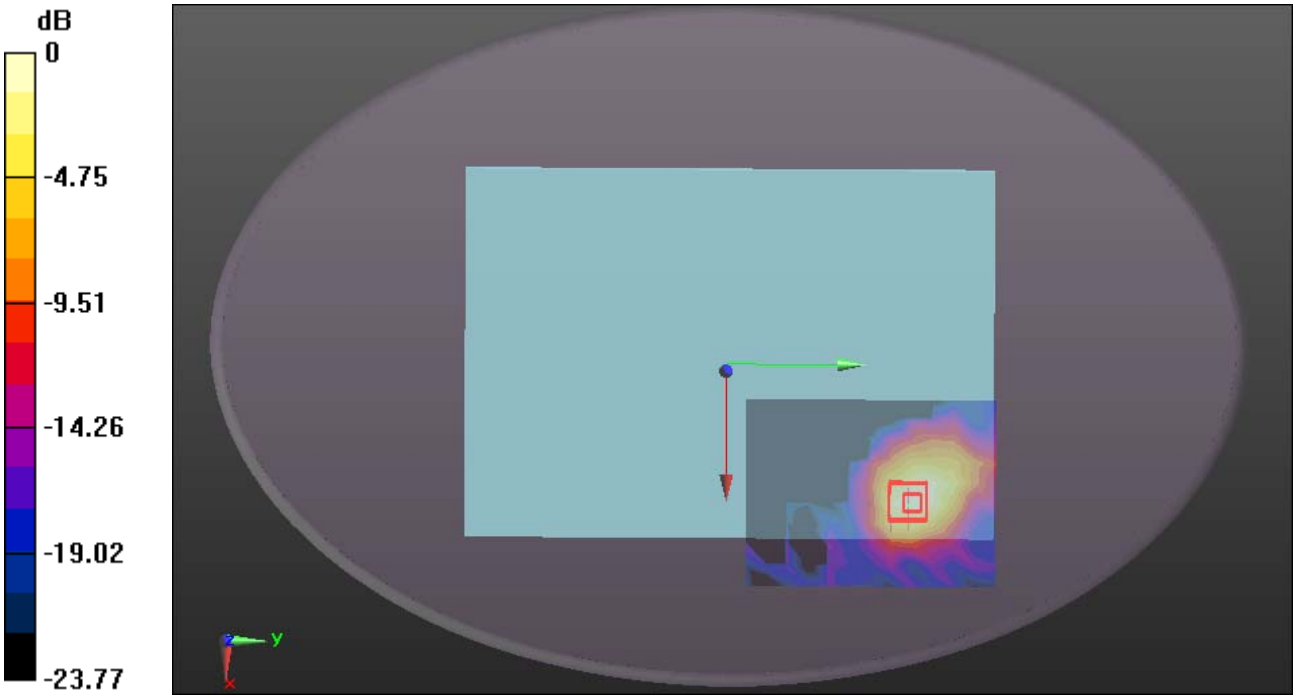


0 dB = 0.0534 W/kg = -12.72 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 8/2/2017
2.4GHz -Body Bottom CH39 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, Bluetooth (0); Communication System Band: ISM 2.4Ghz Band;
Frequency: 2441 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2441 MHz; σ = 1.942 S/m; ε_r = 51.703; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.1, 7.1, 7.1); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/Body Bottom CH39 Chain1/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0601 W/kg
WiFi 2.4GHz/Body Bottom CH39 Chain1/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.562 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 0.0710 W/kg
SAR(1 g) = 0.038 W/kg; SAR(10 g) = 0.019 W/kg
Maximum value of SAR (measured) = 0.0542 W/kg

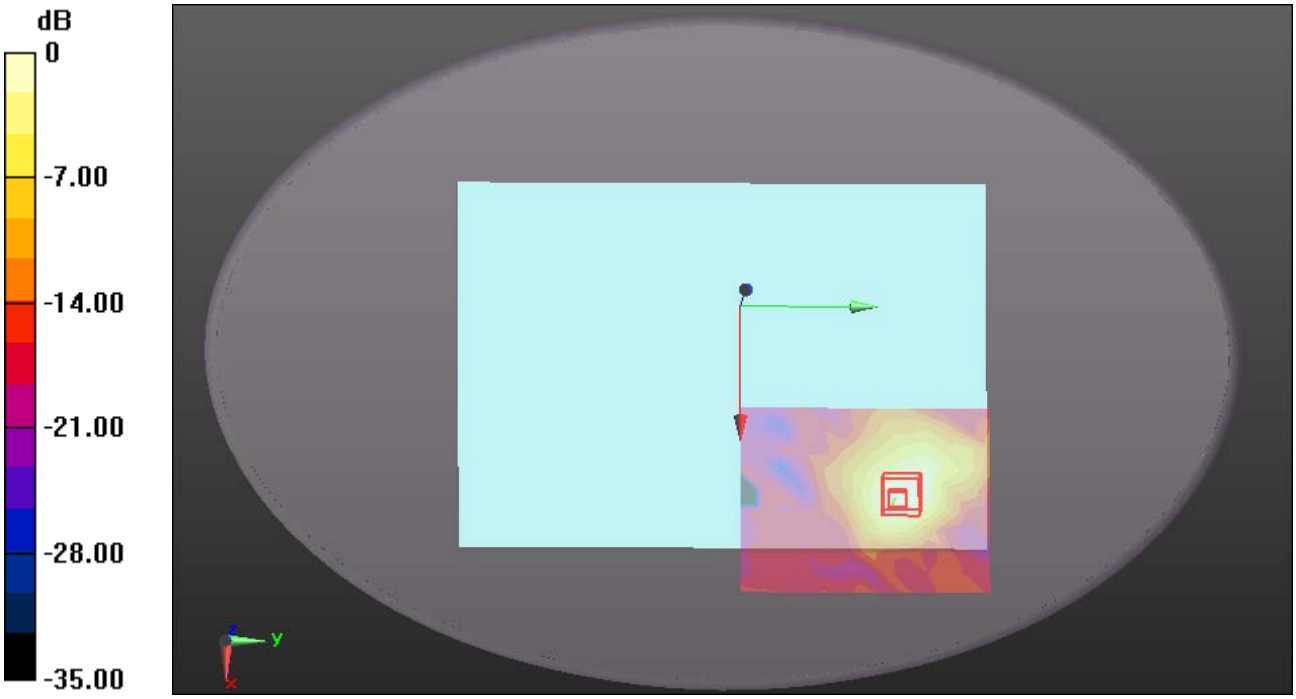


0 dB = 0.0542 W/kg = -12.66 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 8/2/2017
2.4GHz -Body Bottom CH78 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, Bluetooth (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2480 MHz;Duty Cycle: 1:1
Medium parameters used: f = 2480 MHz; σ = 1.976 S/m; ε_r = 51.595; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(7.1, 7.1, 7.1); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/Body Bottom CH78 Chain1/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0541 W/kg
WiFi 2.4GHz/Body Bottom CH78 Chain1/Zoom Scan (7x7x5)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 8.573 V/m; Power Drift = -0.04 dB
Peak SAR (extrapolated) = 0.0820 W/kg
SAR(1 g) = 0.041 W/kg; SAR(10 g) = 0.020 W/kg
Maximum value of SAR (measured) = 0.0601 W/kg

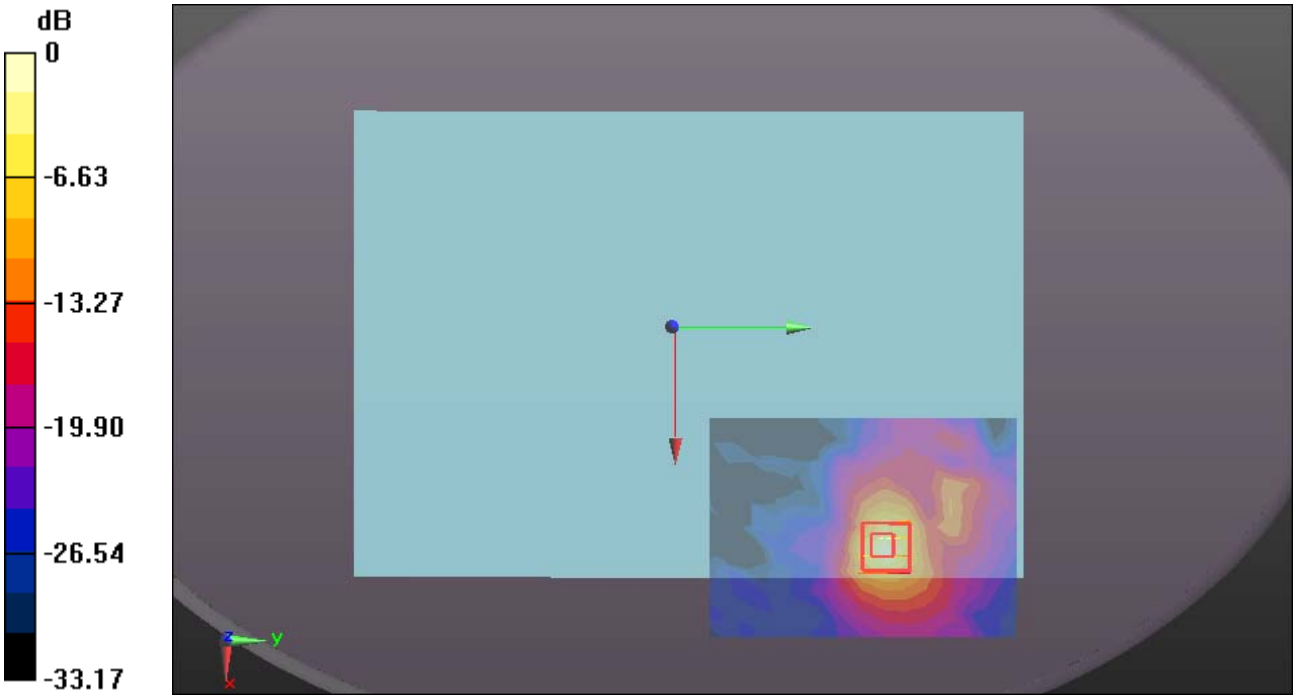


0 dB = 0.0601 W/kg = -12.21 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH52 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II; Frequency: 5260 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5260 MHz; σ = 5.428 S/m; ε_r = 47.424; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.39, 4.39, 4.39); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH52 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.06 W/kg
WIFI/IEEE802.11a Body Bottom CH52 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.518 V/m; Power Drift = 0.07 dB
Peak SAR (extrapolated) = 4.43 W/kg
SAR(1 g) = 0.906 W/kg; SAR(10 g) = 0.252 W/kg
Maximum value of SAR (measured) = 2.28 W/kg

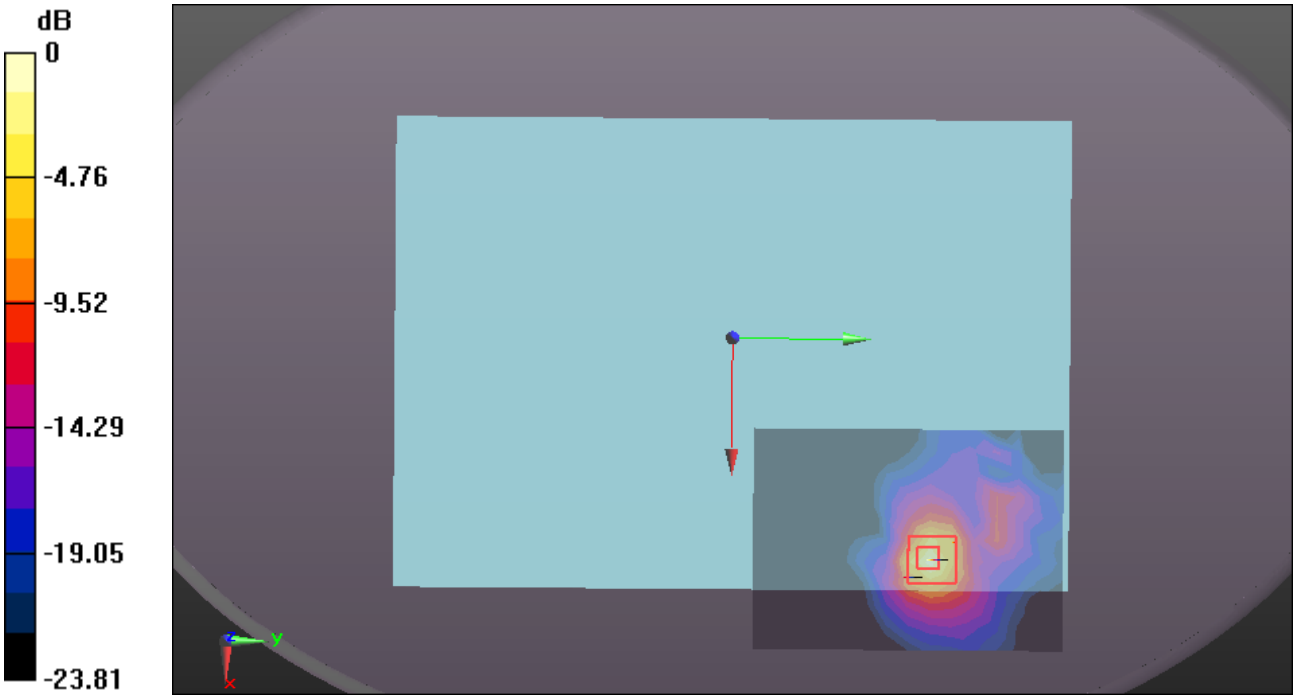


0 dB = 2.28 W/kg = 3.58 dBW/kg

Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH56 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II; Frequency: 5280 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5280 MHz; σ = 5.459 S/m; ε_r = 47.386; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.39, 4.39, 4.39); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH56 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.81 W/kg
WIFI/IEEE802.11a Body Bottom CH56 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.359 V/m; Power Drift = -0.09 dB
Peak SAR (extrapolated) = 6.18 W/kg
SAR(1 g) = 1 W/kg; SAR(10 g) = 0.351 W/kg
Maximum value of SAR (measured) = 3.19 W/kg



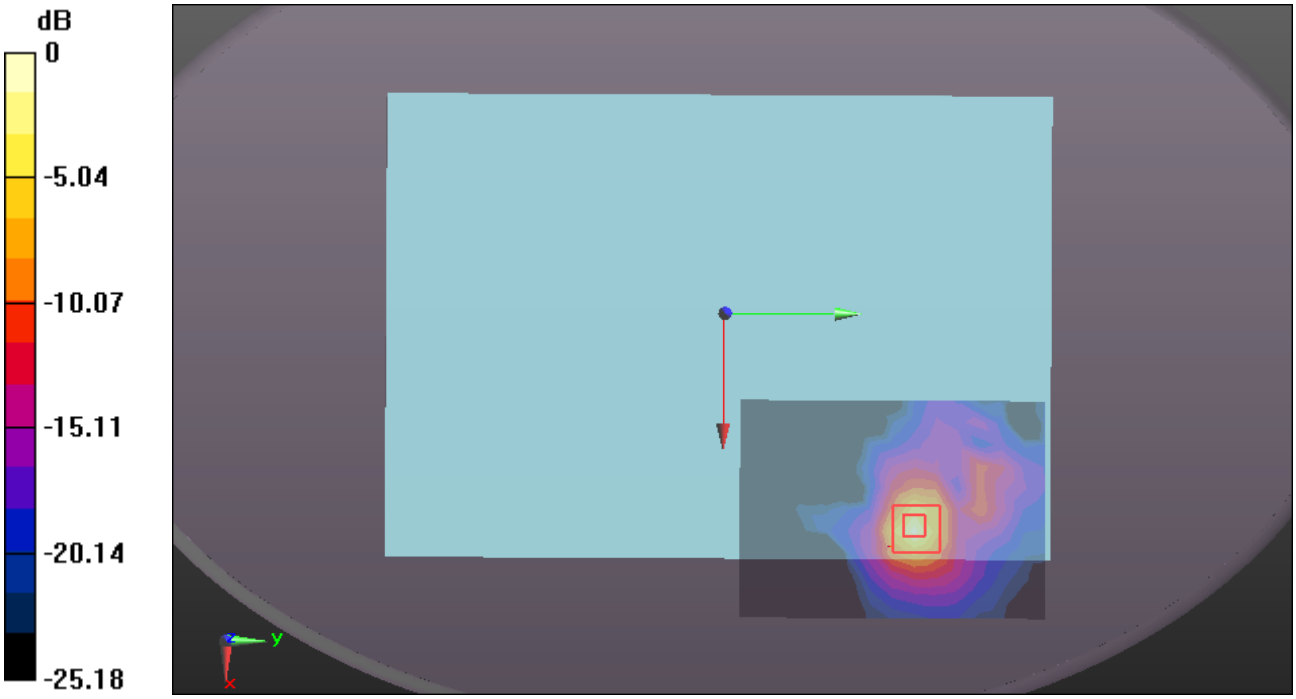
0 dB = 3.19 W/kg = 5.04 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH64 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5320 MHz; σ = 5.512 S/m; ε_r = 47.28; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.39, 4.39, 4.39); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.37 W/kg
WIFI/IEEE802.11a Body Bottom CH64 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.938 V/m; Power Drift = -0.14 dB
Peak SAR (extrapolated) = 5.30 W/kg
SAR(1 g) = 1.06 W/kg; SAR(10 g) = 0.298 W/kg

Maximum value of SAR (measured) = 2.78 W/kg



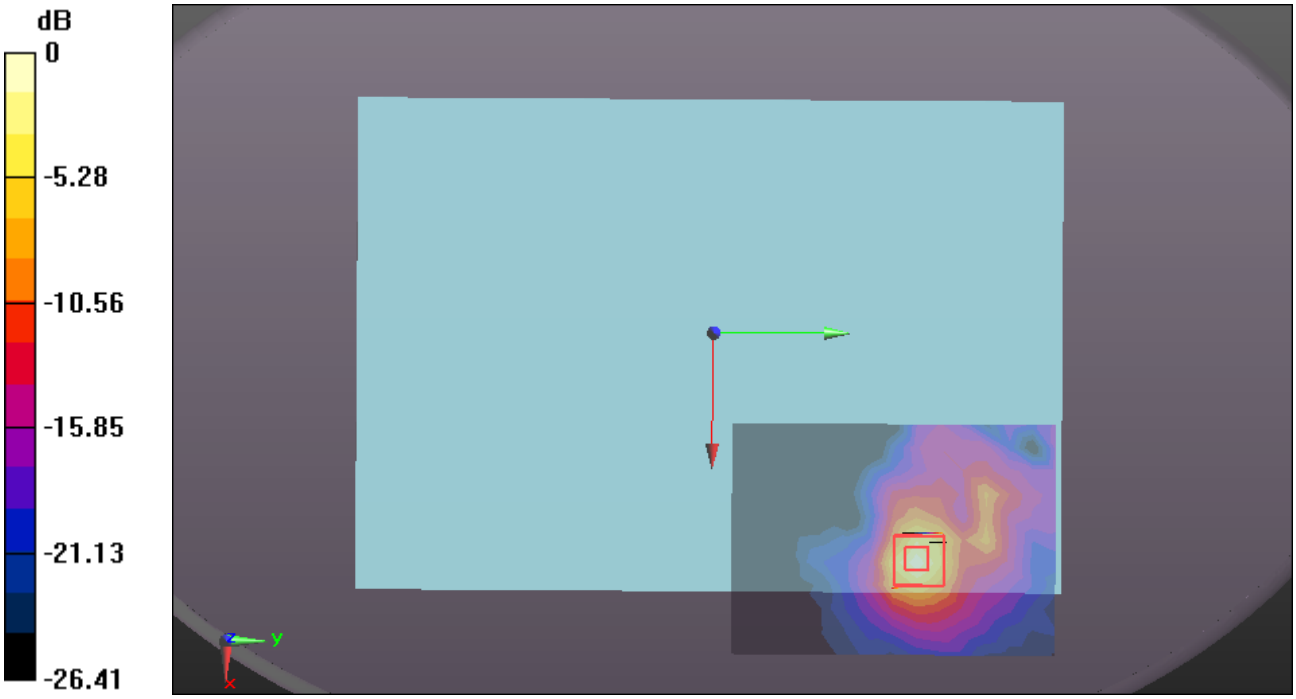
0 dB = 2.78 W/kg = 4.44 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH100 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III; Frequency: 5500 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5500 MHz; σ = 5.77 S/m; ε_r = 46.856; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(3.94, 3.94, 3.94); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH100 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.33 W/kg

WIFI/IEEE802.11a Body Bottom CH100 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 8.054 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 4.77 W/kg
SAR(1 g) = 0.996 W/kg; SAR(10 g) = 0.296 W/kg
Maximum value of SAR (measured) = 2.51 W/kg



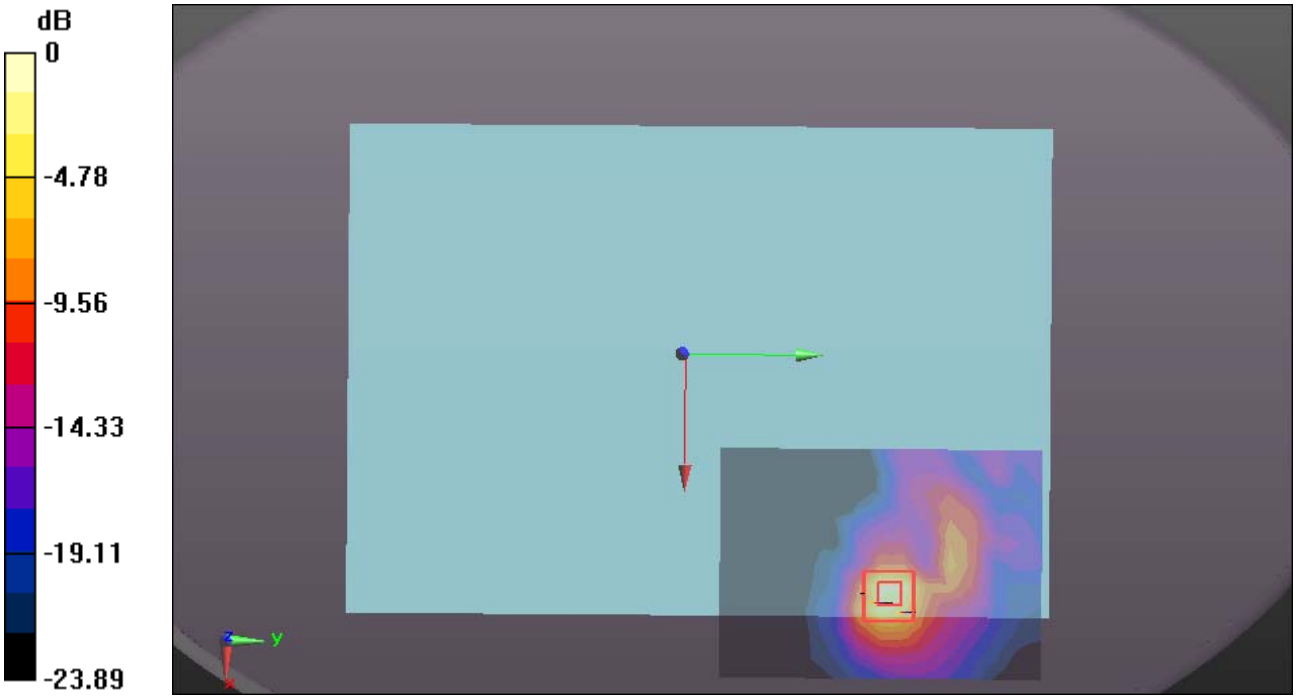
0 dB = 2.51 W/kg = 4.00 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH116 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III; Frequency: 5580 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5580 MHz; σ = 5.894 S/m; ε_r = 46.684; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(3.8, 3.8, 3.8); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH116 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.42 W/kg
WIFI/IEEE802.11a Body Bottom CH116 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.526 V/m; Power Drift = 0.09 dB
Peak SAR (extrapolated) = 5.74 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.355 W/kg

Maximum value of SAR (measured) = 2.97 W/kg



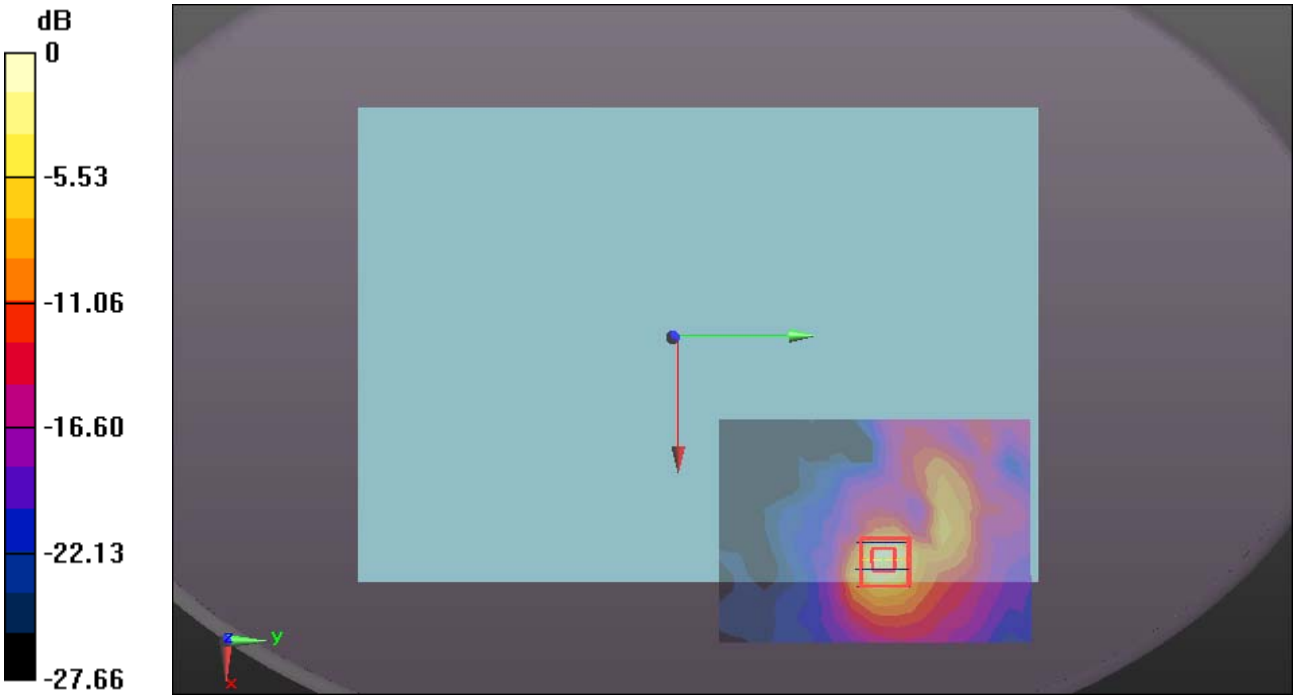
0 dB = 2.97 W/kg = 4.73 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH128 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III; Frequency: 5640 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5640 MHz; σ = 5.99 S/m; ε_r = 46.534; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(3.8, 3.8, 3.8); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH128 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.17 W/kg
WIFI/IEEE802.11a Body Bottom CH128 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 8.547 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 5.52 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.341 W/kg

Maximum value of SAR (measured) = 2.80 W/kg



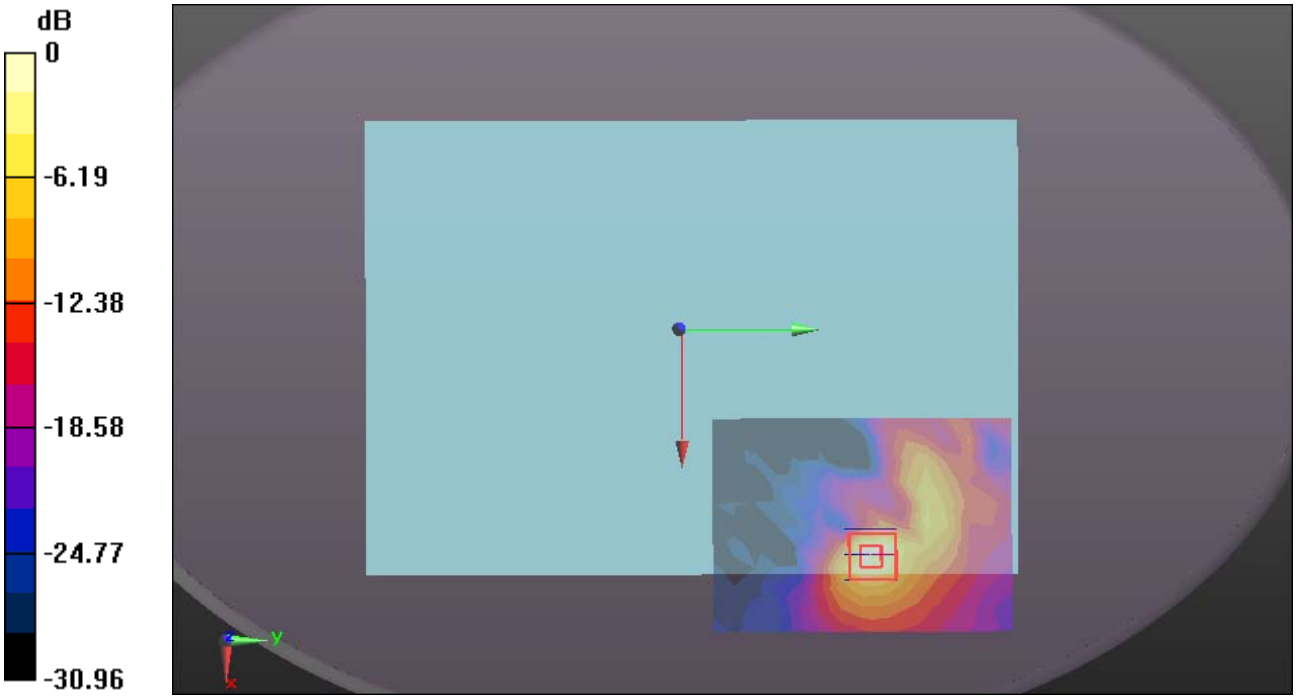
0 dB = 2.80 W/kg = 4.47 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH149 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band IV;
Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5745 MHz; σ = 6.146 S/m; ε_r = 46.319; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.04, 4.04, 4.04); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.99 W/kg
WIFI/IEEE802.11a Body Bottom CH149 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.7110 V/m; Power Drift = 0.17 dB
Peak SAR (extrapolated) = 5.14 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.323 W/kg

Maximum value of SAR (measured) = 2.65 W/kg



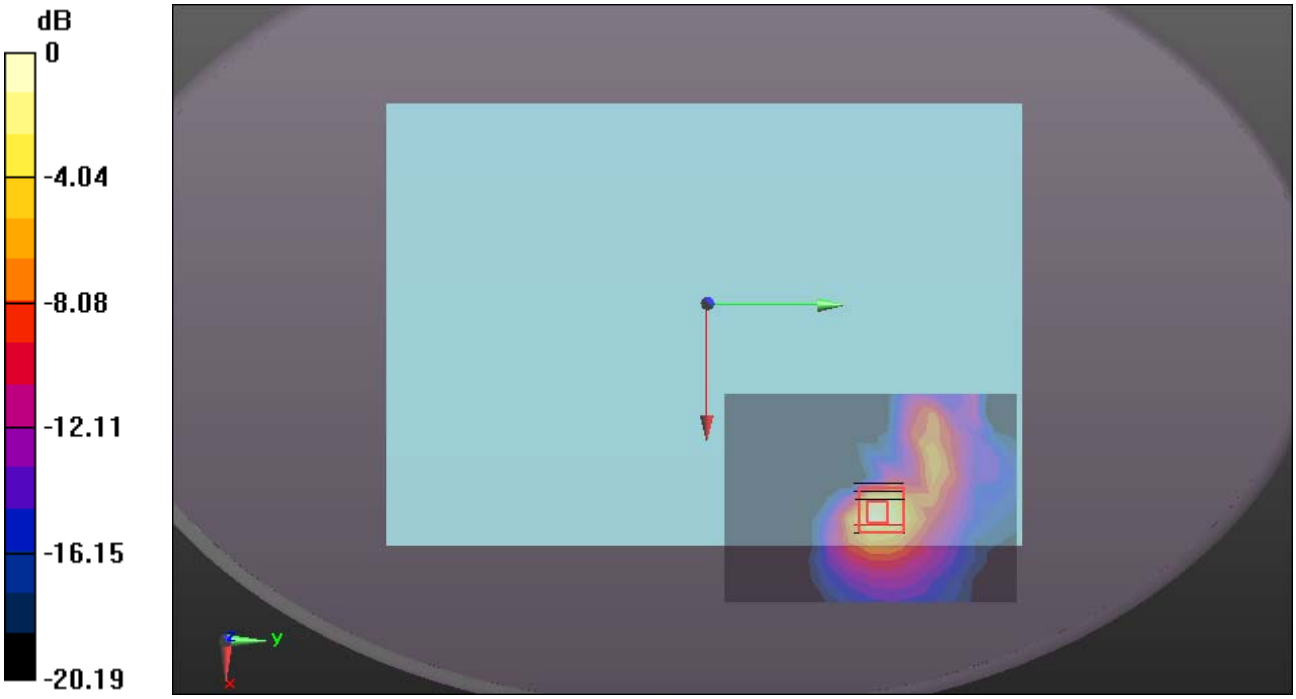
0 dB = 2.65 W/kg = 4.23 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH157 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band IV;
Frequency: 5785 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5785 MHz; σ = 6.216 S/m; ε_r = 46.225; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.04, 4.04, 4.04); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH157 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.82 W/kg
WIFI/IEEE802.11a Body Bottom CH157 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.6550 V/m; Power Drift = 0.04 dB
Peak SAR (extrapolated) = 4.16 W/kg
SAR(1 g) = 0.870 W/kg; SAR(10 g) = 0.265 W/kg

Maximum value of SAR (measured) = 2.13 W/kg



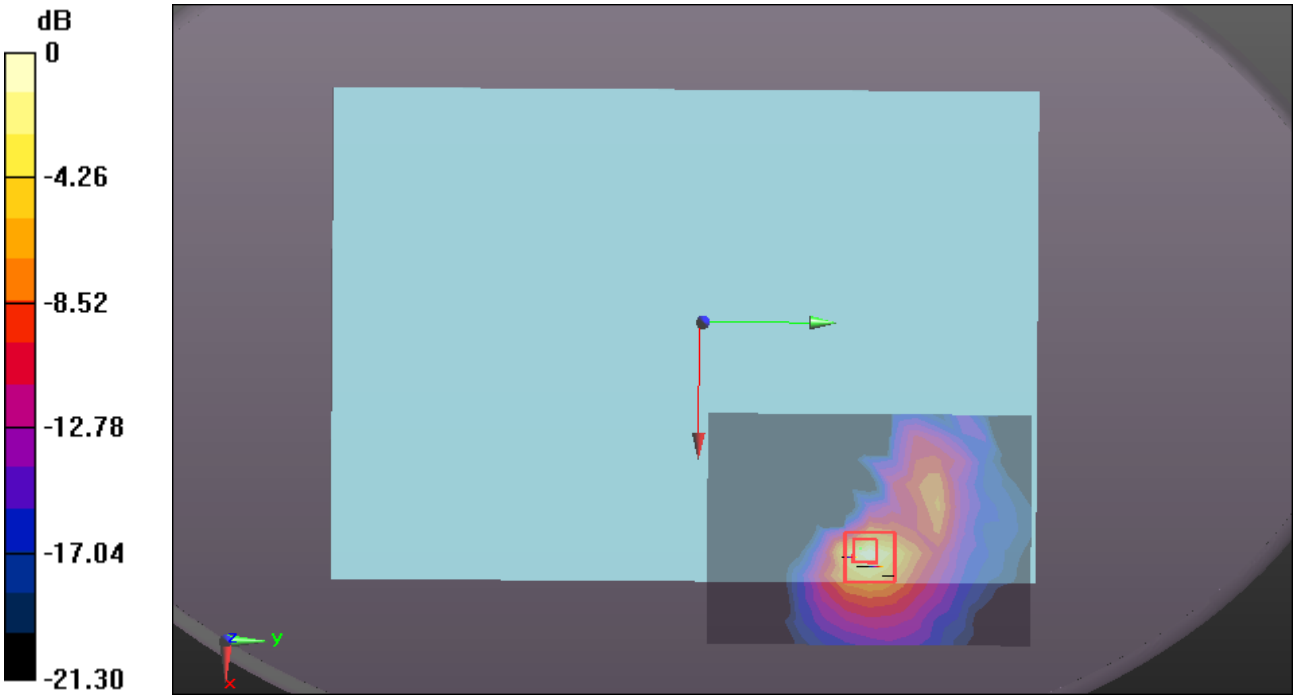
0 dB = 2.13 W/kg = 3.28 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH165 Chain1
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band IV;
Frequency: 5825 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5825 MHz; σ = 6.286 S/m; ε_r = 46.145; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.04, 4.04, 4.04); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Chain1 /Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.30 W/kg

WIFI/IEEE802.11a Body Bottom CH165 Chain1 /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 7.154 V/m; Power Drift = -0.13 dB
Peak SAR (extrapolated) = 4.65 W/kg
SAR(1 g) = 0.943 W/kg; SAR(10 g) = 0.292 W/kg
Maximum value of SAR (measured) = 2.39 W/kg



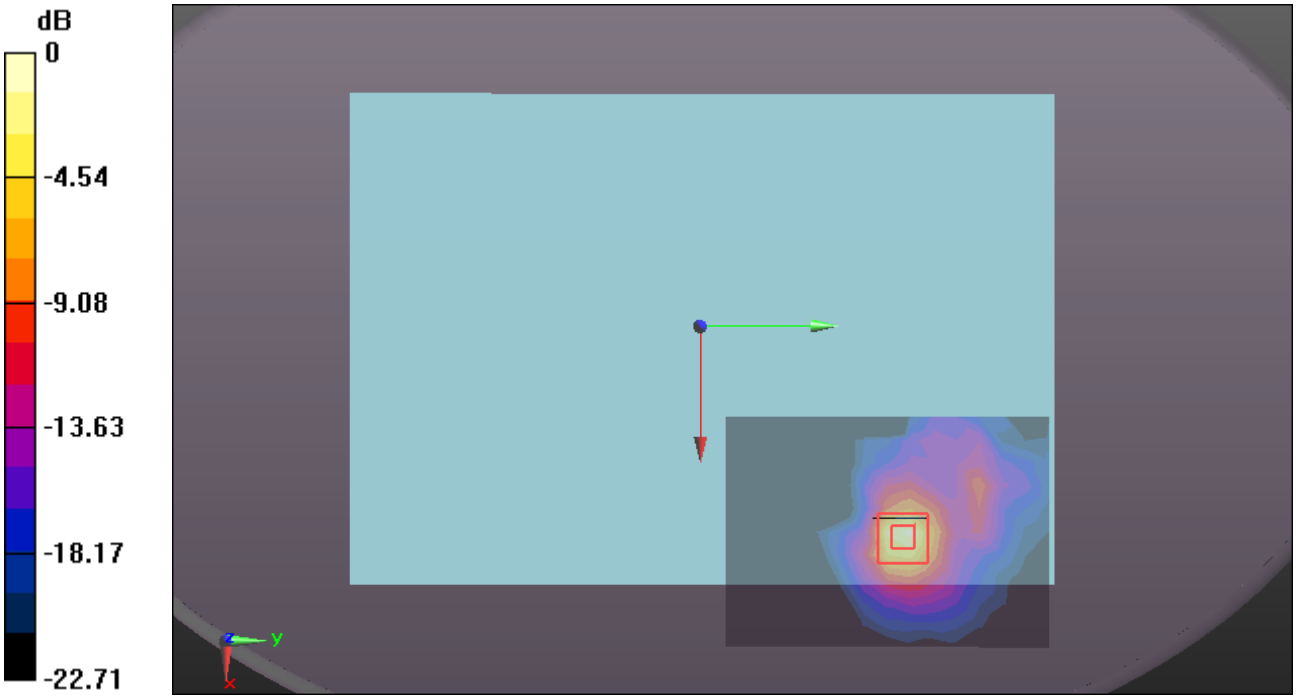
0 dB = 2.39 W/kg = 3.78 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH64 Chain1 repeat
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II; Frequency: 5320 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5320 MHz; σ = 5.512 S/m; ε_r = 47.28; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.39, 4.39, 4.39); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Chain1 repeat/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.35 W/kg
WIFI/IEEE802.11a Body Bottom CH64 Chain1 repeat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.217 V/m; Power Drift = -0.07 dB
Peak SAR (extrapolated) = 5.17 W/kg
SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.315 W/kg

Maximum value of SAR (measured) = 2.80 W/kg



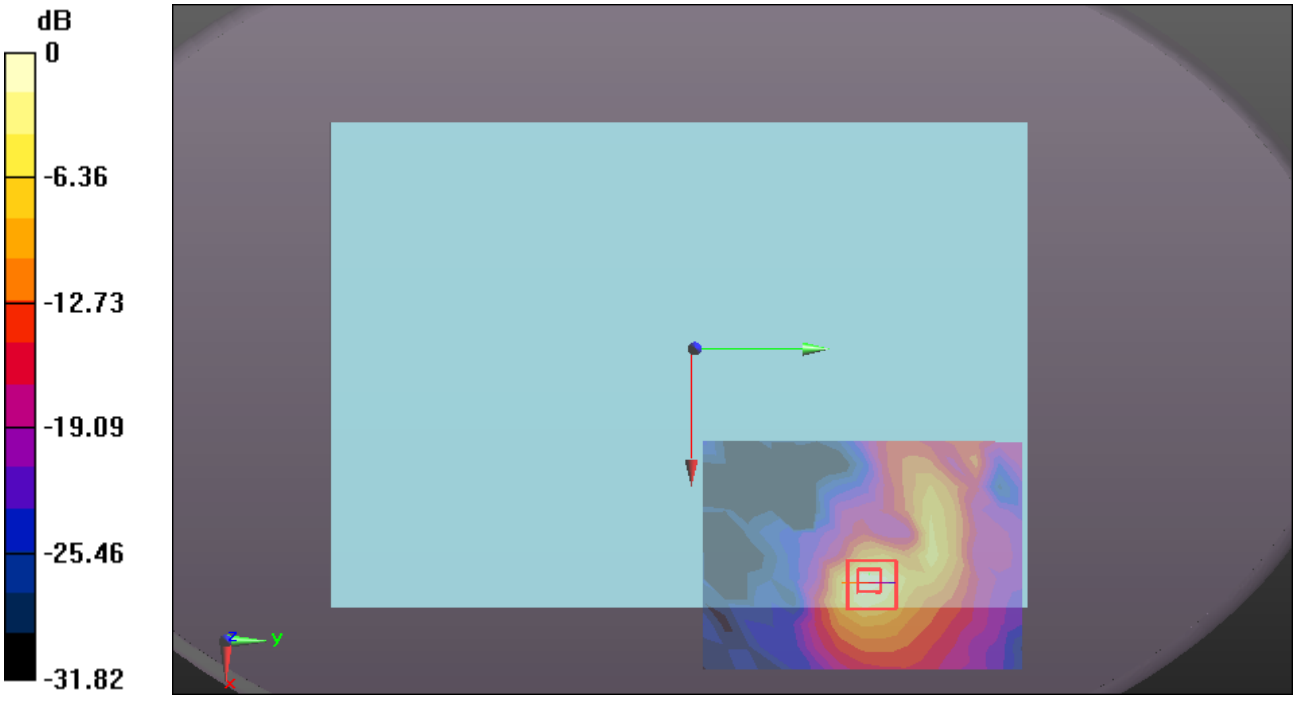
0 dB = 2.80 W/kg = 4.47 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH128 Chain1 repeat
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III; Frequency: 5640 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5640 MHz; σ = 5.99 S/m; ε_r = 46.534; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(3.8, 3.8, 3.8); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH128 Chain1 repeat/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.42 W/kg
WIFI/IEEE802.11a Body Bottom CH128 Chain1 repeat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 5.289 V/m; Power Drift = -0.08 dB
Peak SAR (extrapolated) = 4.93 W/kg
SAR(1 g) = 1.03 W/kg; SAR(10 g) = 0.318 W/kg

Maximum value of SAR (measured) = 2.46 W/kg

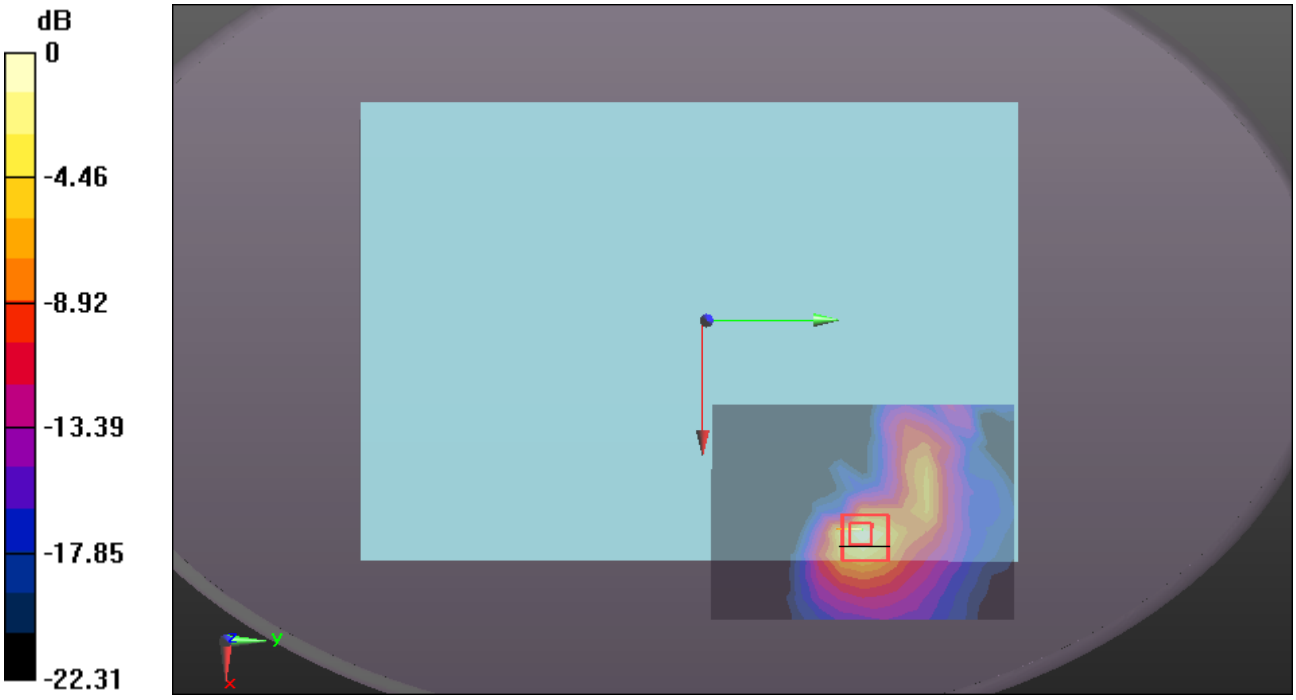


0 dB = 2.46 W/kg = 3.91 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 7/24/2017
WIFI 802.11 a-Body Bottom CH149 Chain1 repeat
DUT: Notebookt Computer; Type: Lenovo ideapad 320S-13IKB; Serial: N/A
Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band IV; Frequency: 5745 MHz;Duty Cycle: 1:1
Medium parameters used: f = 5745 MHz; σ = 6.146 S/m; ε_r = 46.319; ρ = 1000 kg/m^3
Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C
Phantom section: Flat Section
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2007)
DASY Configuration:

- Probe: EX3DV4 - SN3820; ConvF(4.04, 4.04, 4.04); Calibrated: 6/27/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn905; Calibrated: 6/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Chain1 repeat/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.87 W/kg
WIFI/IEEE802.11a Body Bottom CH149 Chain1 repeat/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.214 V/m; Power Drift = 0.01 dB
Peak SAR (extrapolated) = 5.50 W/kg
SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.370 W/kg
Maximum value of SAR (measured) = 2.86 W/kg



0 dB = 2.86 W/kg = 4.56 dBW/kg