



Appendix E

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Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH1 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2412 \text{ MHz}$; $\sigma = 1.94 \text{ S/m}$; $\epsilon_r = 51.139$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Main Antenna/Area Scan (11x16x1): Measurement
 grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.424 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Main Antenna/Zoom Scan (7x7x7)/Cube 0:

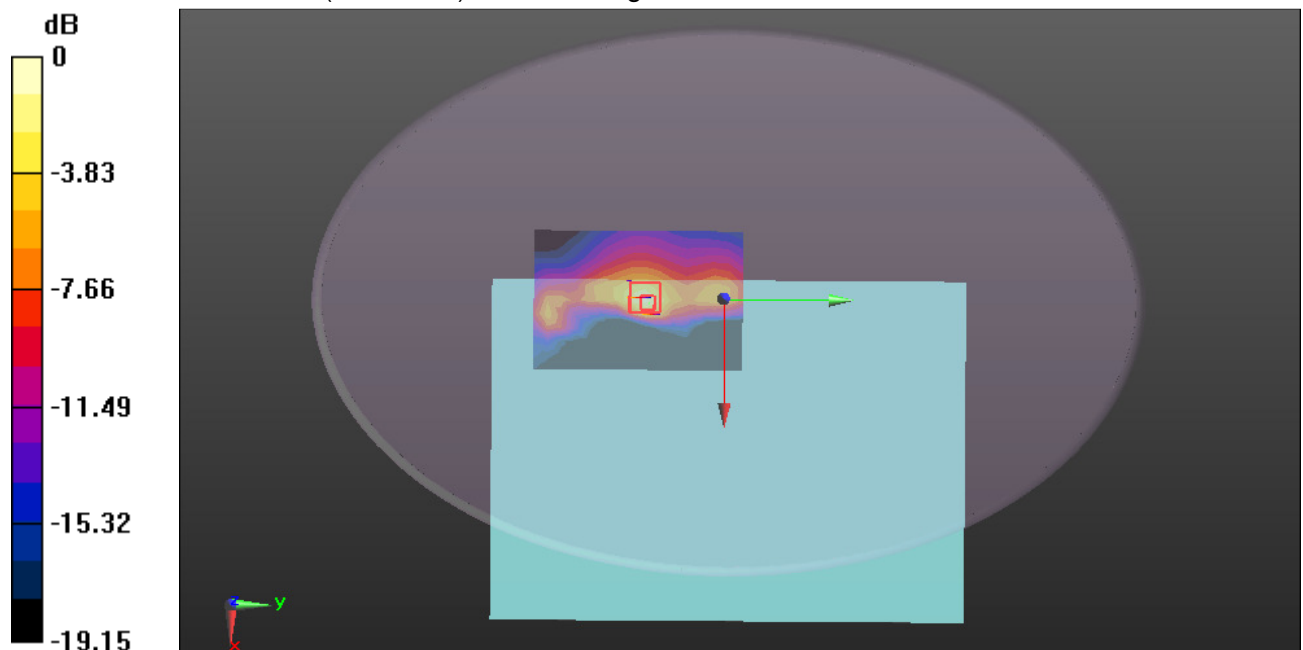
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 7.828 V/m ; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 0.727 W/kg

SAR(1 g) = 0.264 W/kg ; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.491 W/kg



0 dB = 0.491 W/kg = -3.09 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH6 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2437 \text{ MHz}$; $\sigma = 1.959 \text{ S/m}$; $\epsilon_r = 51.125$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Main Antenna/Area Scan (11x16x1): Measurement
 grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.429 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Main Antenna/Zoom Scan (7x7x7)/Cube 0:

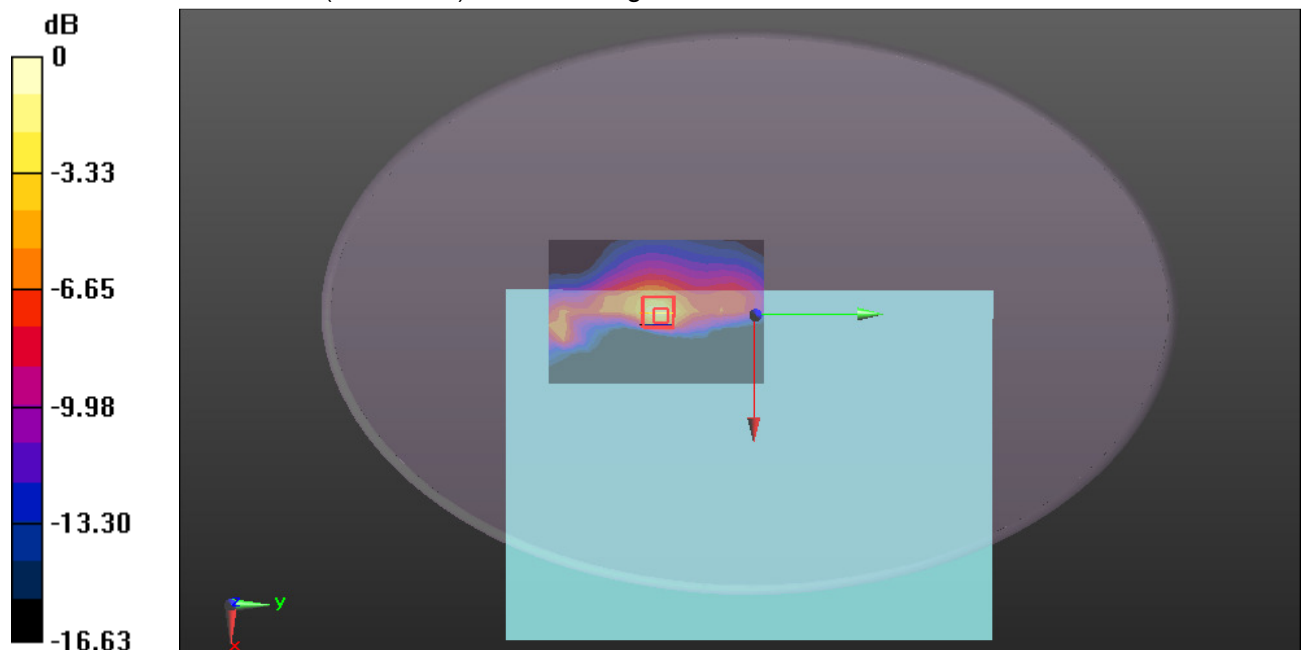
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 6.367 V/m ; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 0.808 W/kg

SAR(1 g) = 0.288 W/kg ; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.543 W/kg



$0 \text{ dB} = 0.543 \text{ W/kg} = -2.65 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH11 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2462 \text{ MHz}$; $\sigma = 1.986 \text{ S/m}$; $\epsilon_r = 50.963$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Main Antenna/Area Scan (11x16x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.592 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Main Antenna/Zoom Scan (7x7x7)/Cube 0:

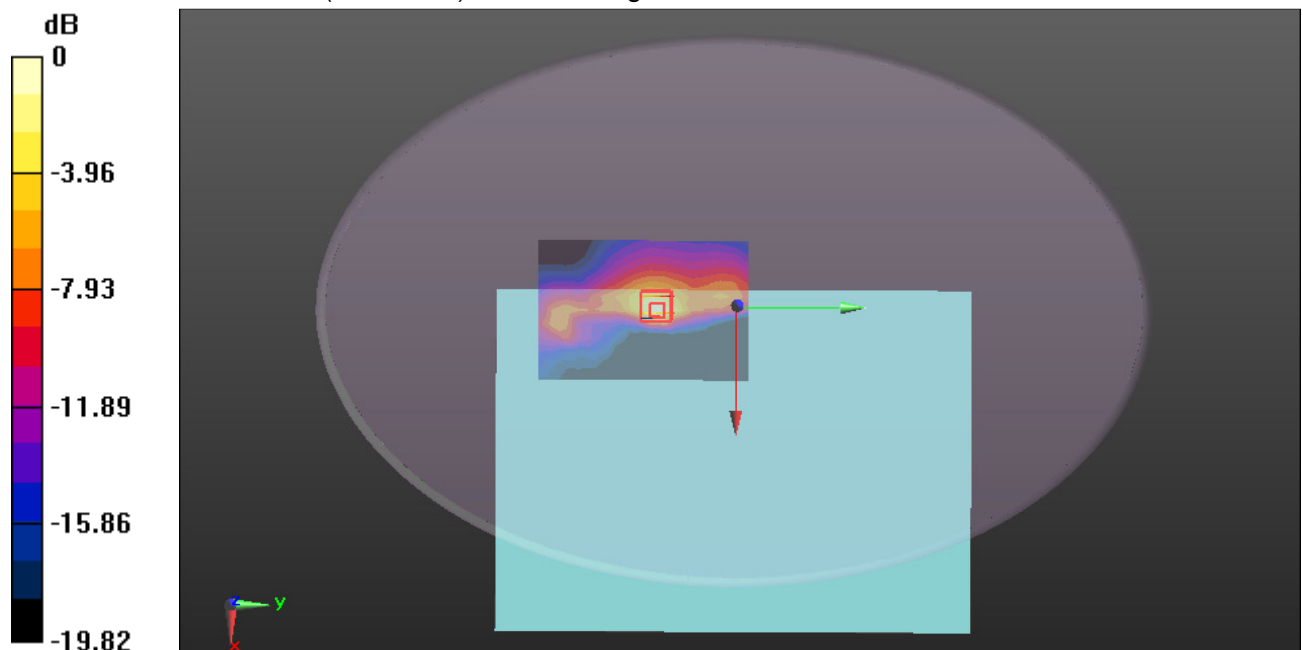
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 6.332 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.976 W/kg

SAR(1 g) = 0.363 W/kg ; SAR(10 g) = 0.167 W/kg

Maximum value of SAR (measured) = 0.676 W/kg



$0 \text{ dB} = 0.676 \text{ W/kg} = -1.70 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH1 Aux Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2412 \text{ MHz}$; $\sigma = 1.94 \text{ S/m}$; $\epsilon_r = 51.139$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Aux Antenna/Area Scan (11x17x1): Measurement
 grid: $dx=10\text{mm}$, $dy=10\text{mm}$

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

WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Aux Antenna/Zoom Scan (7x7x7)/Cube 0:

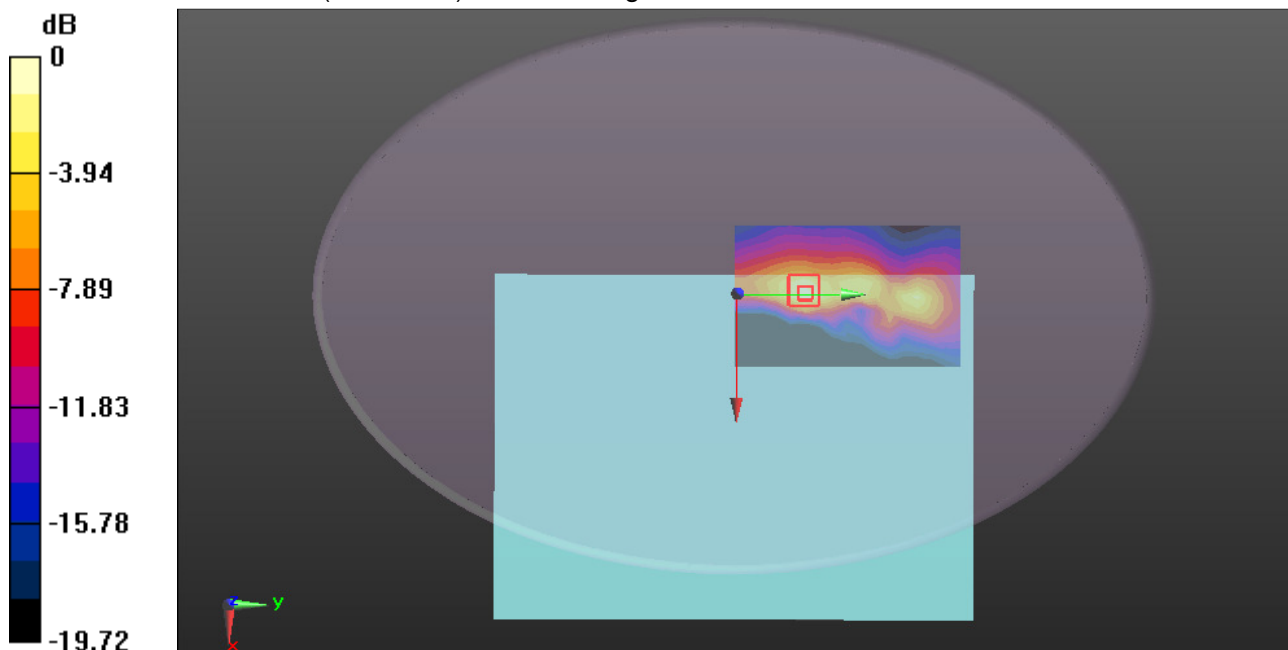
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 5.770 V/m ; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.591 W/kg

SAR(1 g) = 0.241 W/kg ; SAR(10 g) = 0.117 W/kg

Maximum value of SAR (measured) = 0.407 W/kg



$0 \text{ dB} = 0.407 \text{ W/kg} = -3.90 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH6 Aux Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2437 \text{ MHz}$; $\sigma = 1.959 \text{ S/m}$; $\epsilon_r = 51.125$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Aux Antenna/Area Scan (11x17x1): Measurement
 grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.470 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Aux Antenna/Zoom Scan (7x7x7)/Cube 0:

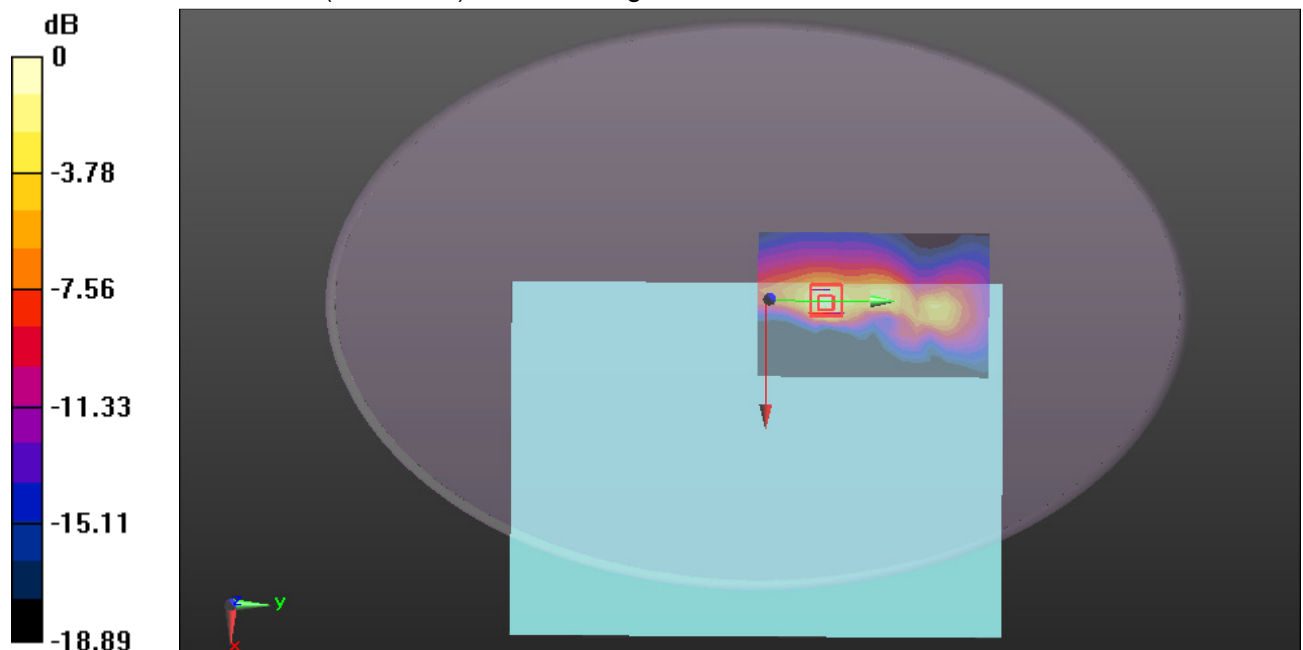
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 5.783 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.716 W/kg

SAR(1 g) = 0.292 W/kg; SAR(10 g) = 0.138 W/kg

Maximum value of SAR (measured) = 0.494 W/kg



0 dB = 0.494 W/kg = -3.06 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH11 Aux Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2462 \text{ MHz}$; $\sigma = 1.986 \text{ S/m}$; $\epsilon_r = 50.963$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Aux Antenna/Area Scan (11x15x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.525 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Aux Antenna/Zoom Scan (7x7x7)/Cube 0:

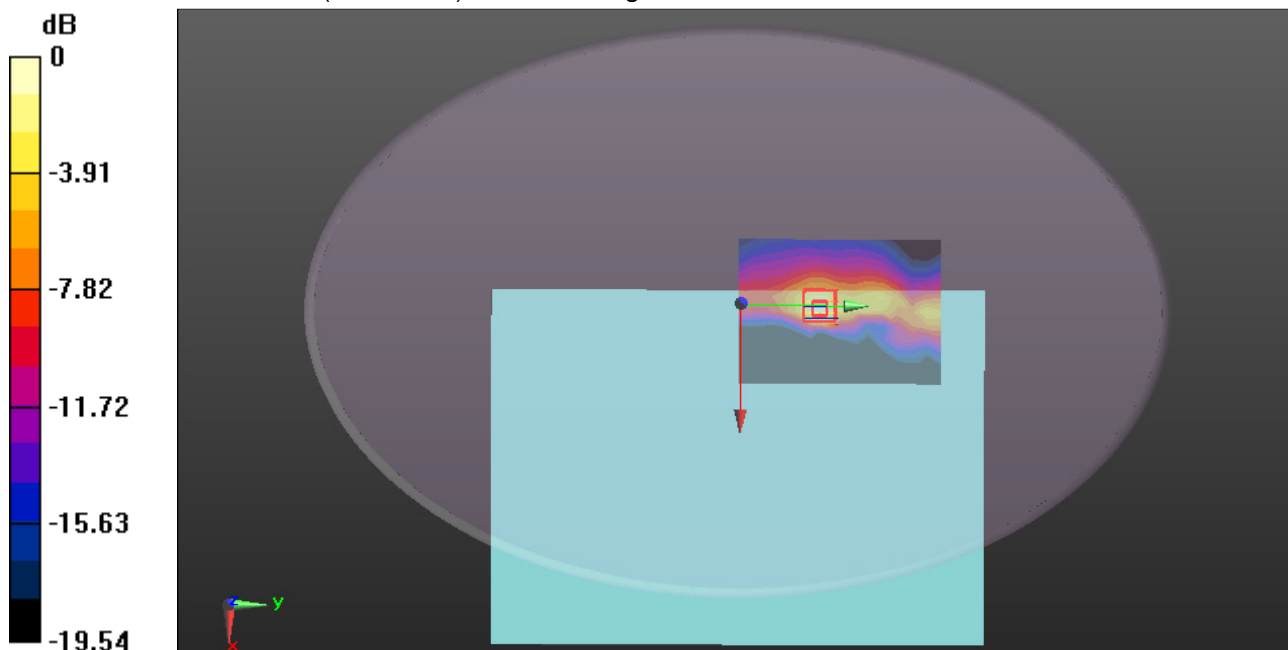
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 5.648 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.852 W/kg

SAR(1 g) = 0.315 W/kg ; SAR(10 g) = 0.147 W/kg

Maximum value of SAR (measured) = 0.567 W/kg



$0 \text{ dB} = 0.567 \text{ W/kg} = -2.46 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

2.4G-Body Bottom CH00 Main Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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 (extrapolated): $f = 2402 \text{ MHz}$; $\sigma = 1.93 \text{ S/m}$; $\epsilon_r = 51.159$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH00 Main Antenna/Area Scan (11x17x1): Measurement grid:
 $dx=10\text{mm}$, $dy=10\text{mm}$

Info: Extrapolated medium parameters used for SAR evaluation.

Maximum value of SAR (measured) = 0.0218 W/kg

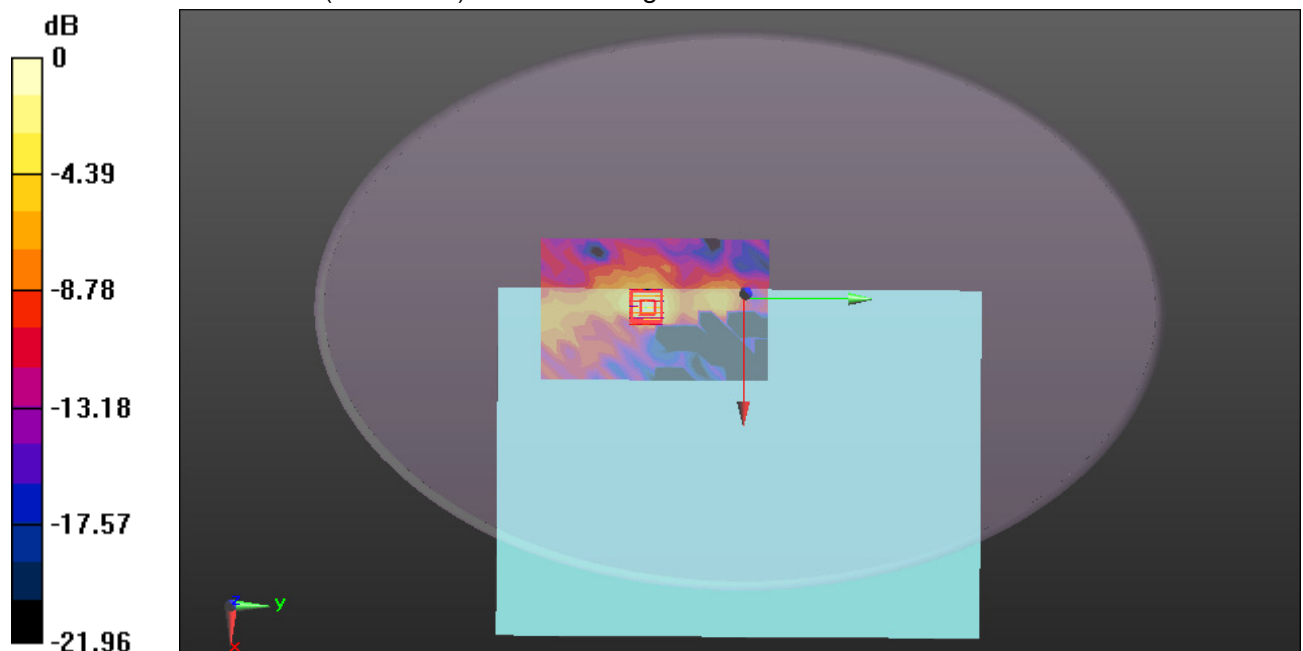
WiFi 2.4GHz/2.4G Body Bottom CH00 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 0.9570 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0340 W/kg

SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00614 W/kg

Maximum value of SAR (measured) = 0.0223 W/kg



0 dB = 0.0223 W/kg = -16.52 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

2.4G-Body Bottom CH39 Main Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2441 \text{ MHz}$; $\sigma = 1.962 \text{ S/m}$; $\epsilon_r = 51.109$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH39 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.0240 W/kg

WiFi 2.4GHz/2.4G Body Bottom CH39 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

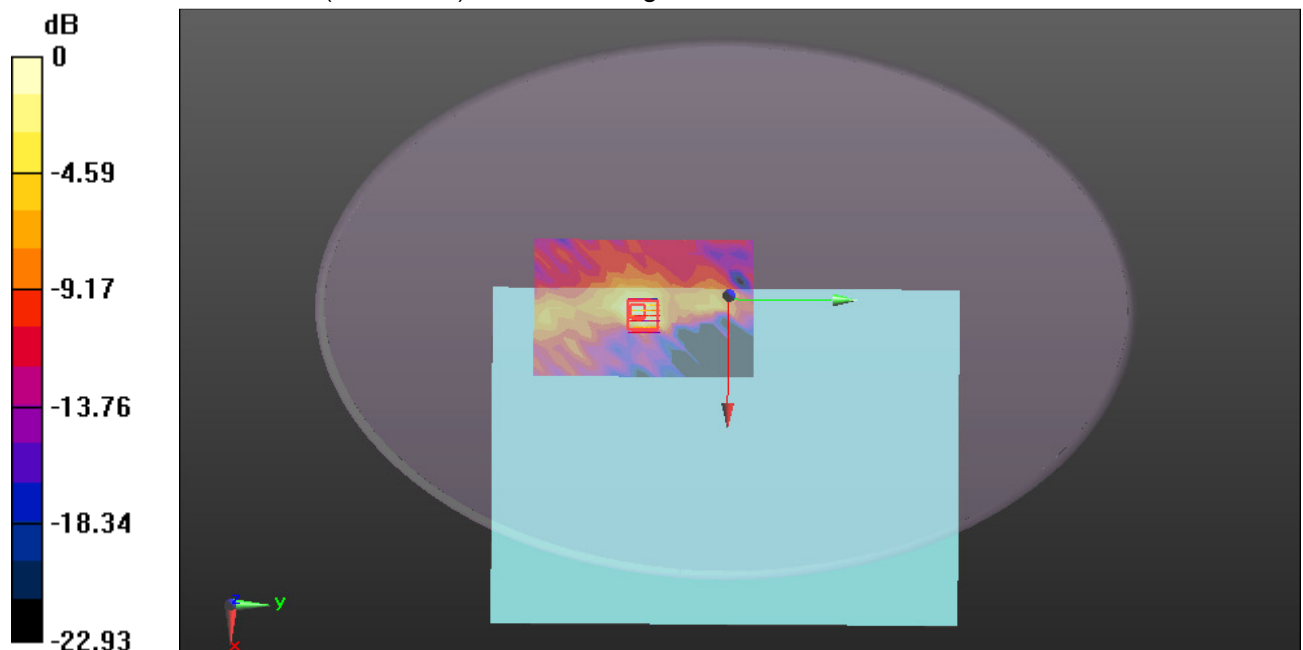
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 1.463 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.0510 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00724 W/kg

Maximum value of SAR (measured) = 0.0289 W/kg



0 dB = 0.0289 W/kg = -15.39 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

2.4G-Body Bottom CH78 Main Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 2.02$ S/m; $\epsilon_r = 50.826$; $\rho = 1000$ kg/m³

Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH78 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.0282 W/kg

WiFi 2.4GHz/2.4G Body Bottom CH78 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

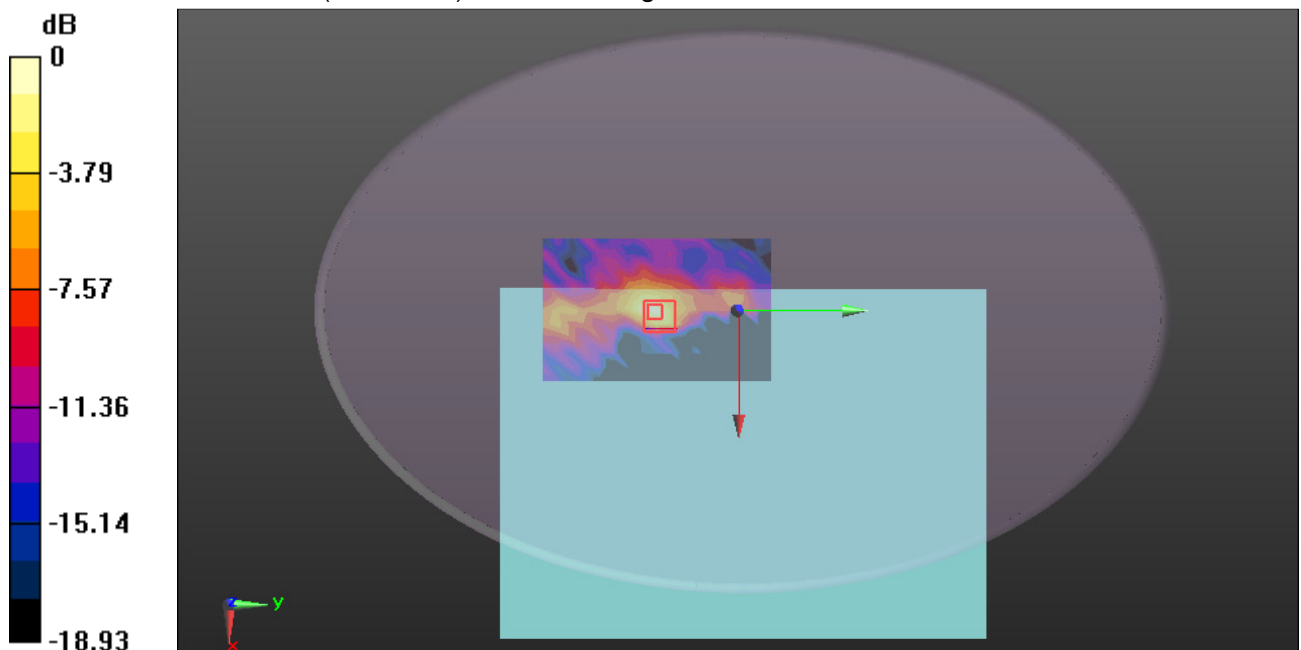
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.426 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.0410 W/kg

SAR(1 g) = 0.017 W/kg; SAR(10 g) = 0.00679 W/kg

Maximum value of SAR (measured) = 0.0302 W/kg



0 dB = 0.0302 W/kg = -15.20 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH52 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.402$ S/m; $\epsilon_r = 48.609$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH52 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.507 W/kg

WIFI/IEEE802.11a Body Bottom CH52 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

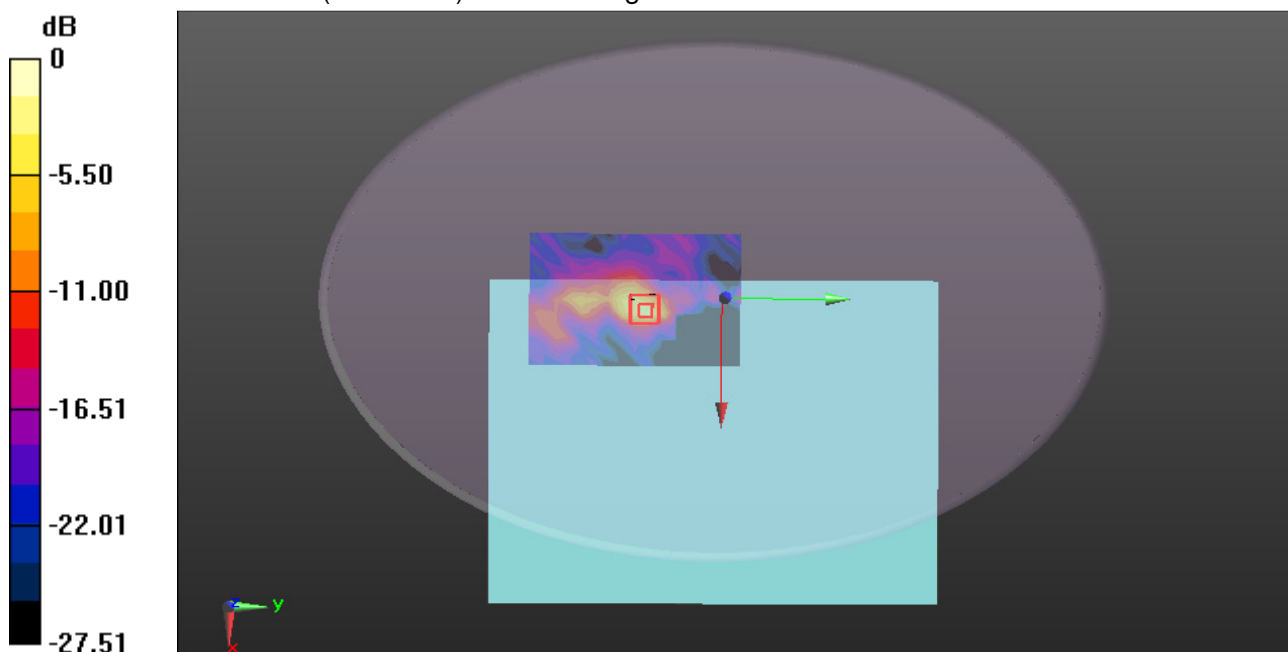
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.478 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 1.20 W/kg

SAR(1 g) = 0.255 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.676 W/kg



0 dB = 0.676 W/kg = -1.70 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH60 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II;

Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 48.544$; $\rho = 1000$ kg/m³

Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH60 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.242 W/kg

WIFI/IEEE802.11a Body Bottom CH60 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

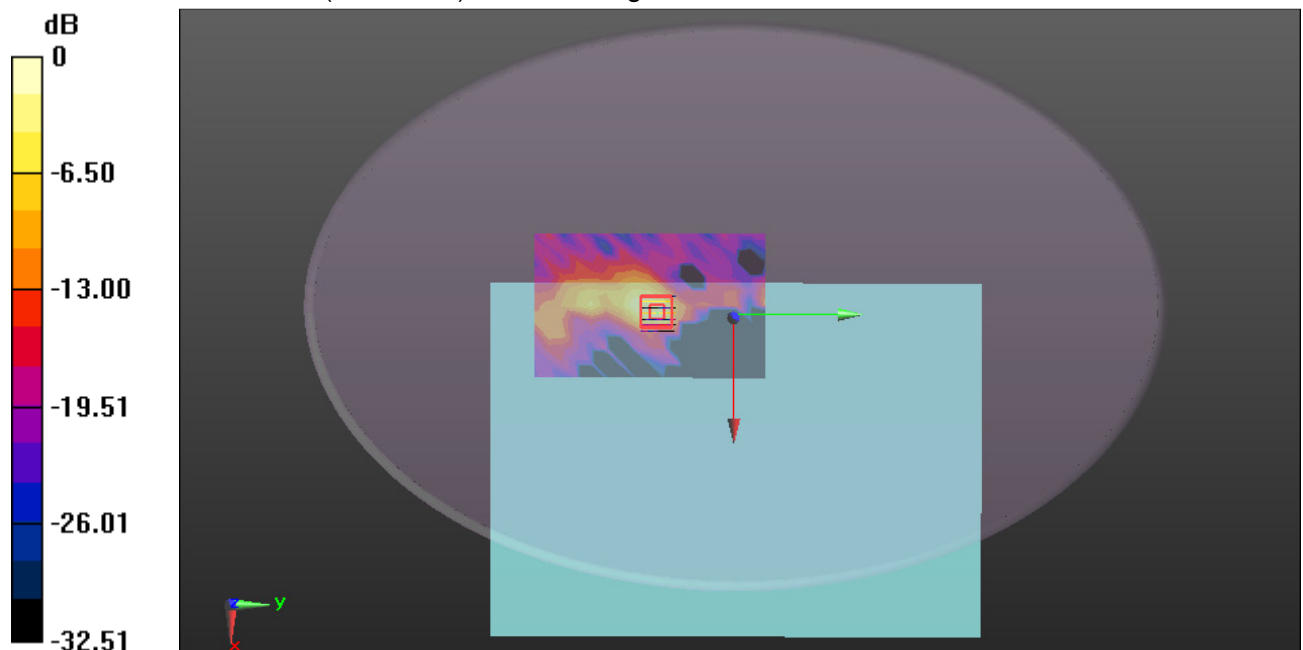
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 0.8590 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.694 W/kg

SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.037 W/kg

Maximum value of SAR (measured) = 0.406 W/kg



0 dB = 0.406 W/kg = -3.91 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH64 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.5$ S/m; $\epsilon_r = 48.528$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.243 W/kg

WIFI/IEEE802.11a Body Bottom CH64 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

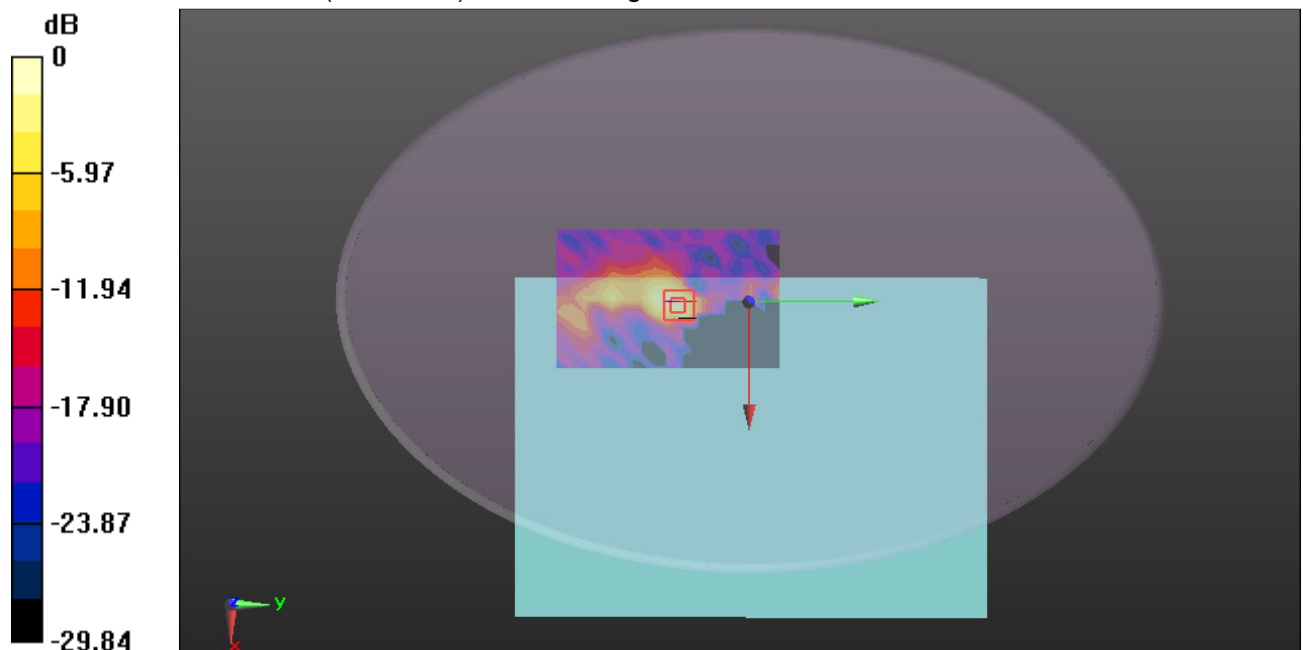
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.185 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.651 W/kg

SAR(1 g) = 0.132 W/kg; SAR(10 g) = 0.033 W/kg

Maximum value of SAR (measured) = 0.374 W/kg



0 dB = 0.374 W/kg = -4.27 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH100 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.766$ S/m; $\epsilon_r = 48.248$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.26, 4.26, 4.26); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH100 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.793 W/kg

WIFI/IEEE802.11a Body Bottom CH100 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

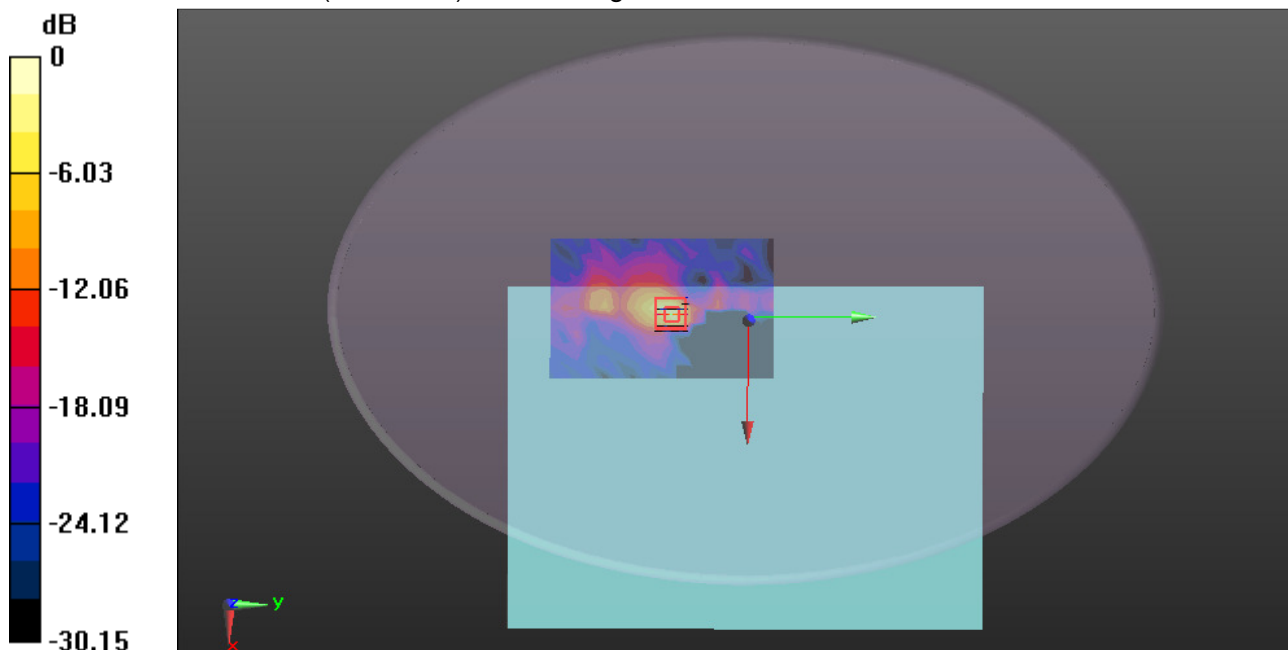
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.821 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 2.53 W/kg

SAR(1 g) = 0.491 W/kg; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 1.42 W/kg



0 dB = 1.42 W/kg = 1.52 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH116 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.883$ S/m; $\epsilon_r = 48.1$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.18, 4.18, 4.18); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH116 Main Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.02 W/kg

WIFI/IEEE802.11a Body Bottom CH116 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

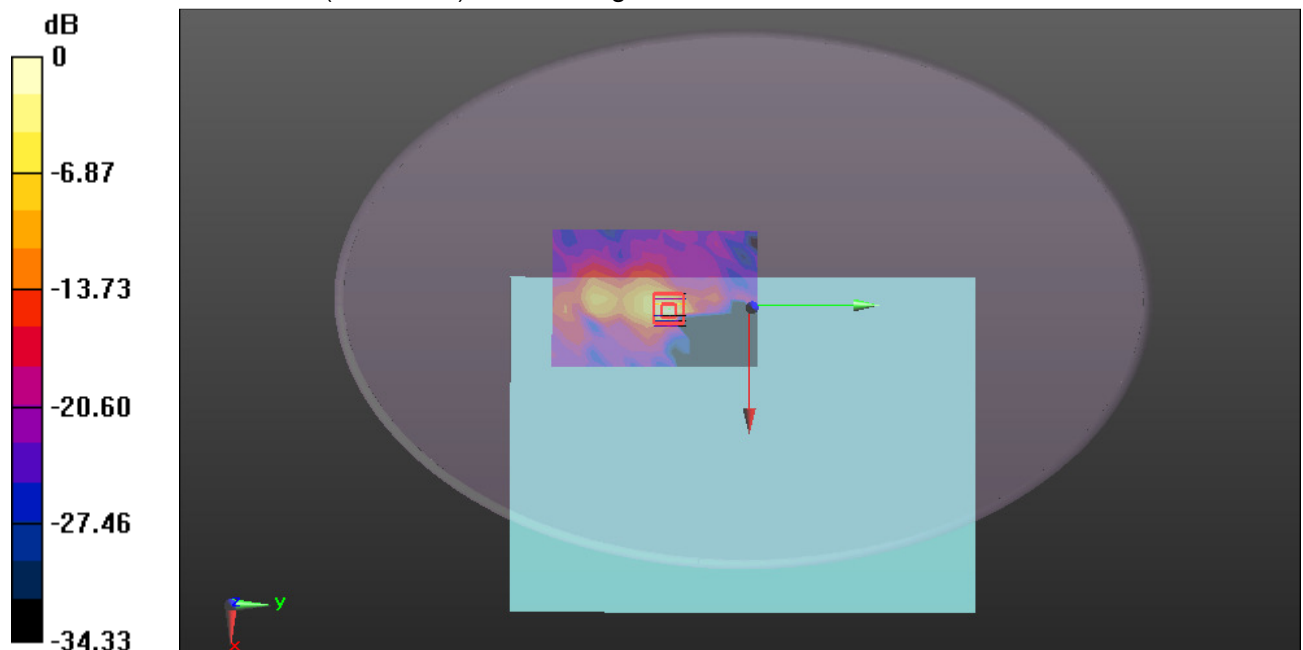
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.516 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 2.54 W/kg

SAR(1 g) = 0.485 W/kg; SAR(10 g) = 0.115 W/kg

Maximum value of SAR (measured) = 1.34 W/kg



0 dB = 1.34 W/kg = 1.27 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH144 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III;

Frequency: 5720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5720 \text{ MHz}$; $\sigma = 6.086 \text{ S/m}$; $\epsilon_r = 47.806$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH144 Main Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.611 W/kg

WIFI/IEEE802.11a Body Bottom CH144 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

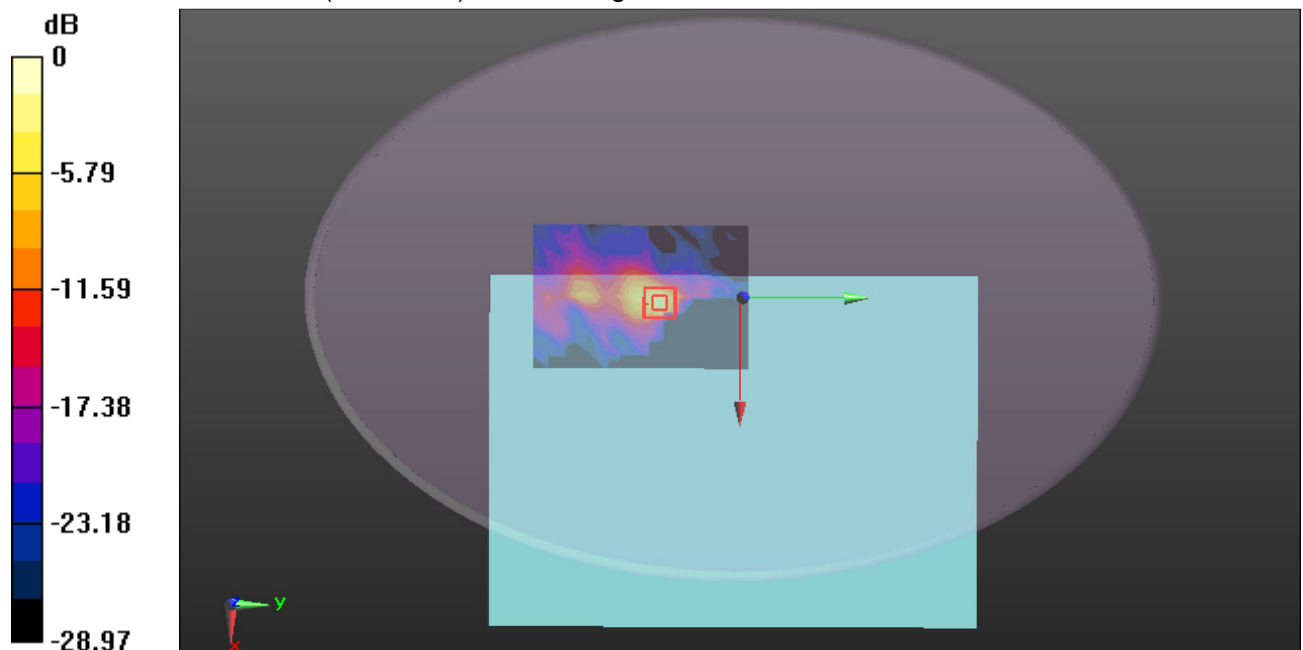
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 0.7330 V/m ; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 1.87 W/kg

SAR(1 g) = 0.348 W/kg ; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 1.00 W/kg



$0 \text{ dB} = 1.00 \text{ W/kg} = 0.00 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH149 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5745 \text{ MHz}$; $\sigma = 6.133 \text{ S/m}$; $\epsilon_r = 47.772$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 2.30 W/kg

WIFI/IEEE802.11a Body Bottom CH149 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

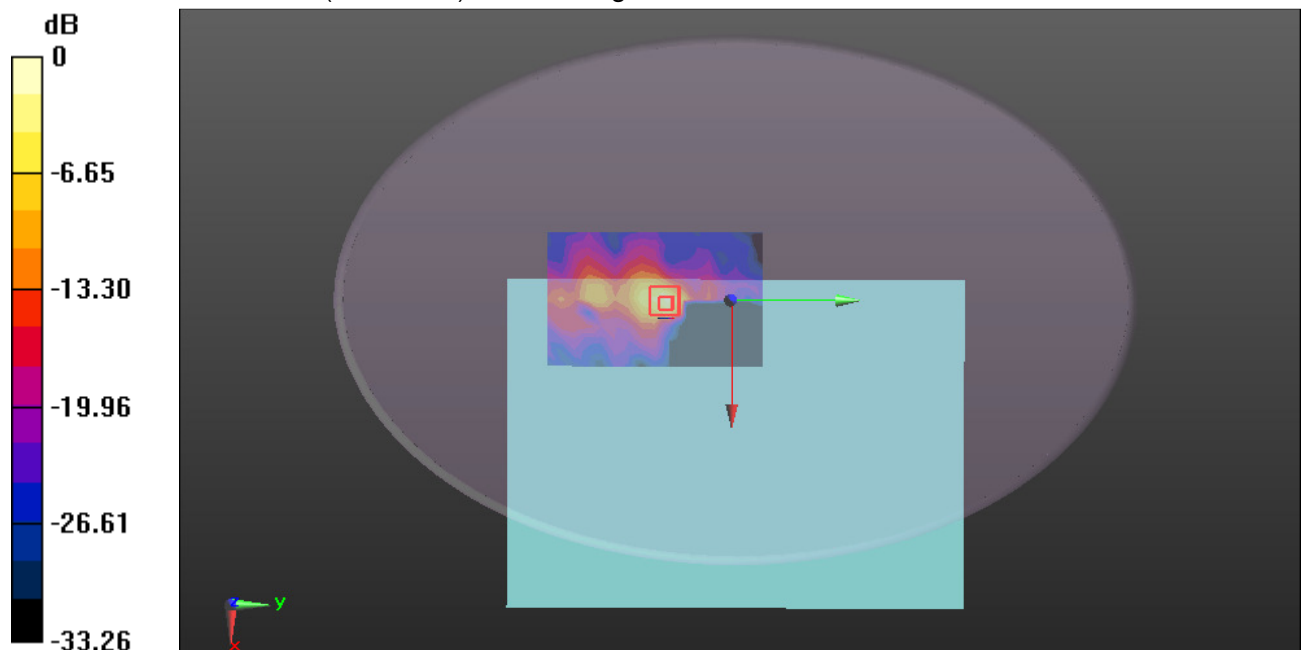
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 1.344 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 5.59 W/kg

SAR(1 g) = 1.03 W/kg ; SAR(10 g) = 0.256 W/kg

Maximum value of SAR (measured) = 2.92 W/kg



$0 \text{ dB} = 2.92 \text{ W/kg} = 4.65 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH157 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5785 \text{ MHz}$; $\sigma = 6.189 \text{ S/m}$; $\epsilon_r = 47.645$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH157 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.86 W/kg

WIFI/IEEE802.11a Body Bottom CH157 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

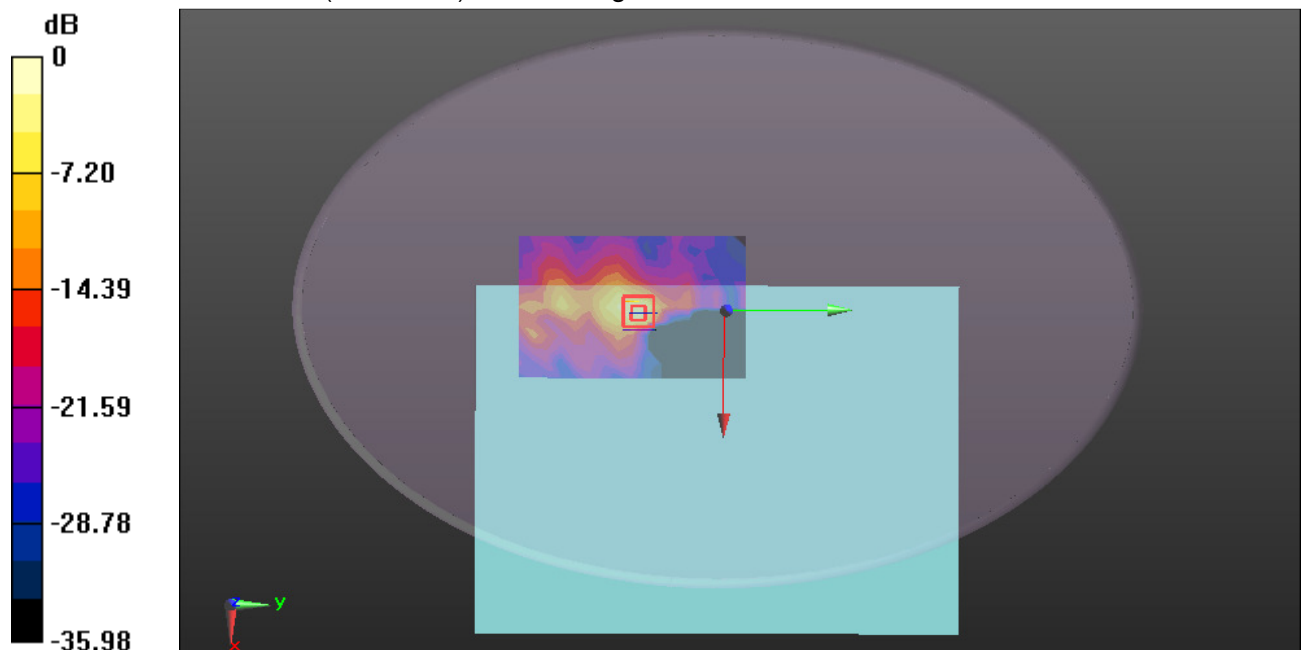
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 1.640 V/m ; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 6.10 W/kg

SAR(1 g) = 1.03 W/kg ; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 3.18 W/kg



$0 \text{ dB} = 3.18 \text{ W/kg} = 5.02 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH165 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 6.249$ S/m; $\epsilon_r = 47.447$; $\rho = 1000$ kg/m³

Room Ambient Temperature: 22°C; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.73 W/kg

WIFI/IEEE802.11a Body Bottom CH165 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

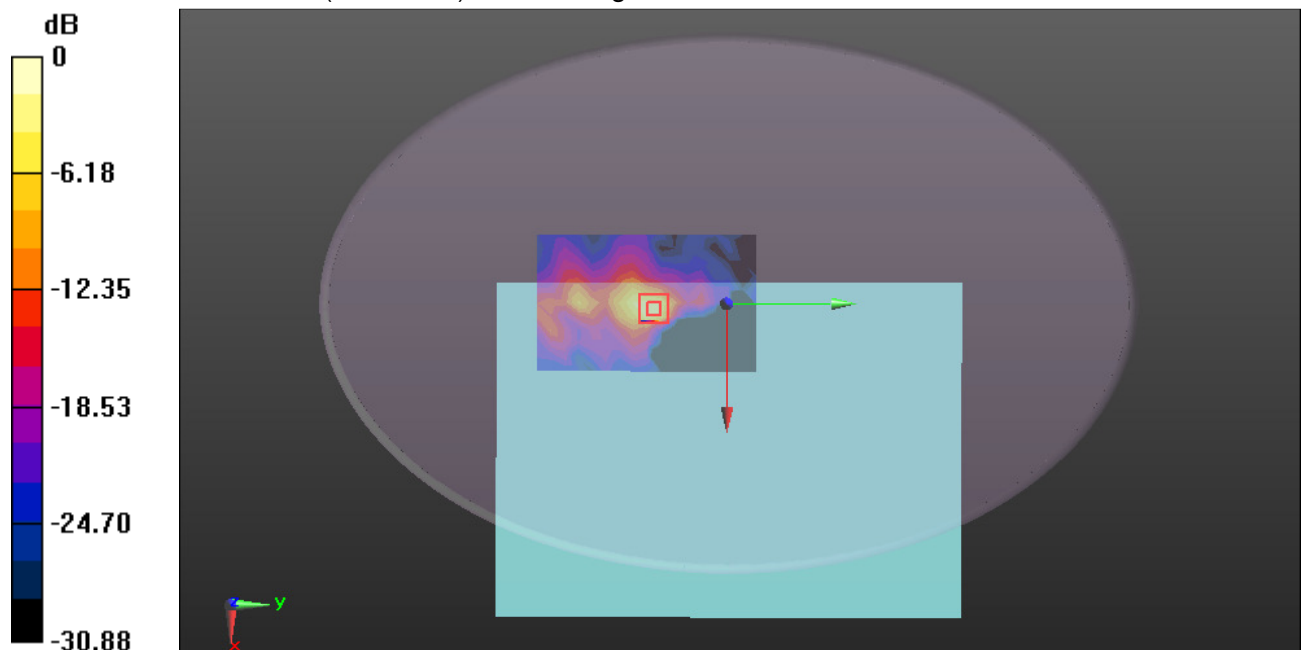
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.529 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 6.68 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.303 W/kg

Maximum value of SAR (measured) = 3.44 W/kg



0 dB = 3.44 W/kg = 5.37 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH52 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.402$ S/m; $\epsilon_r = 48.609$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH52 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.74 W/kg

WIFI/IEEE802.11a Body Bottom CH52 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

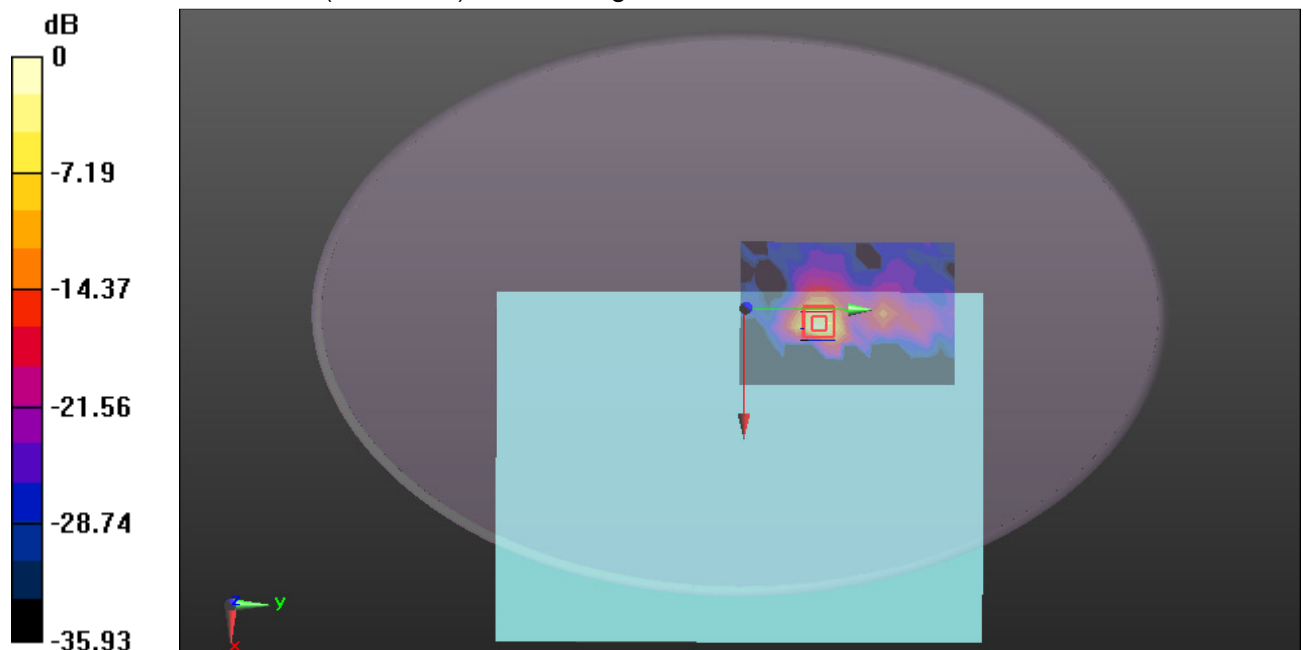
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 0.6050 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 4.36 W/kg

SAR(1 g) = 0.999 W/kg; SAR(10 g) = 0.252 W/kg

Maximum value of SAR (measured) = 2.59 W/kg



0 dB = 2.59 W/kg = 4.13 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH60 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II;

Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 48.544$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH60 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.69 W/kg

WIFI/IEEE802.11a Body Bottom CH60 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

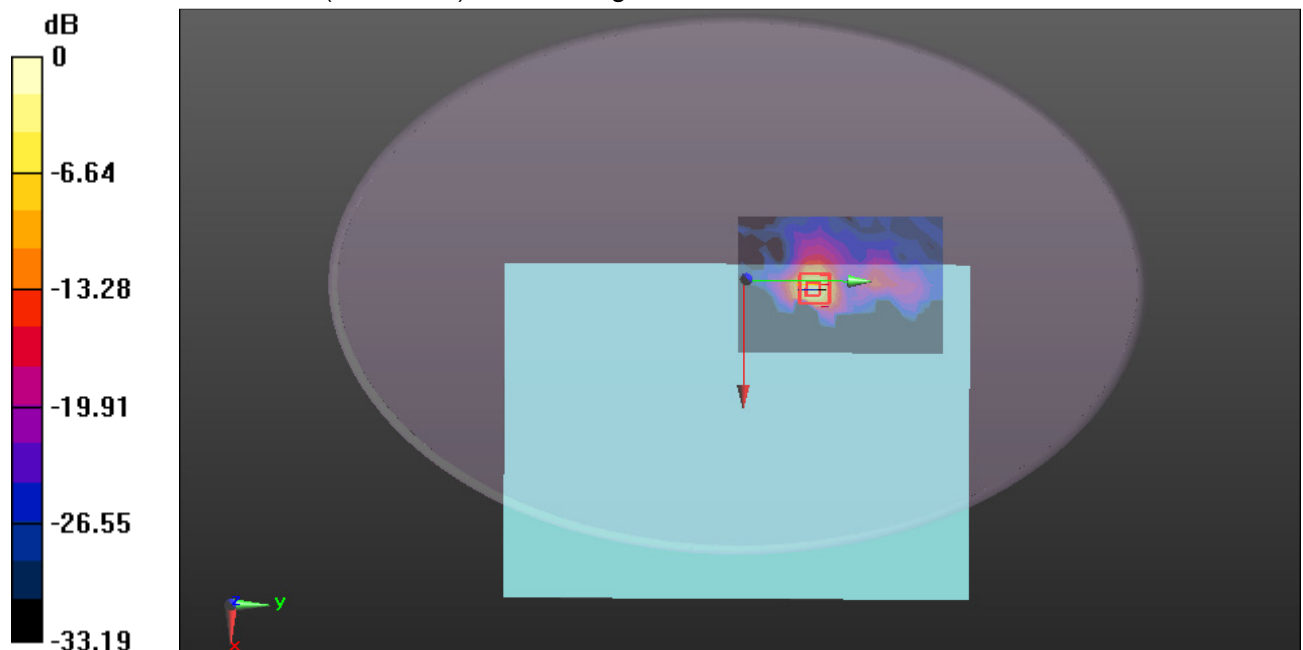
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 7.125 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 4.85 W/kg

SAR(1 g) = 1.08 W/kg; SAR(10 g) = 0.270 W/kg

Maximum value of SAR (measured) = 2.85 W/kg



0 dB = 2.85 W/kg = 4.55 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH64 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.5$ S/m; $\epsilon_r = 48.528$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.37 W/kg

WIFI/IEEE802.11a Body Bottom CH64 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

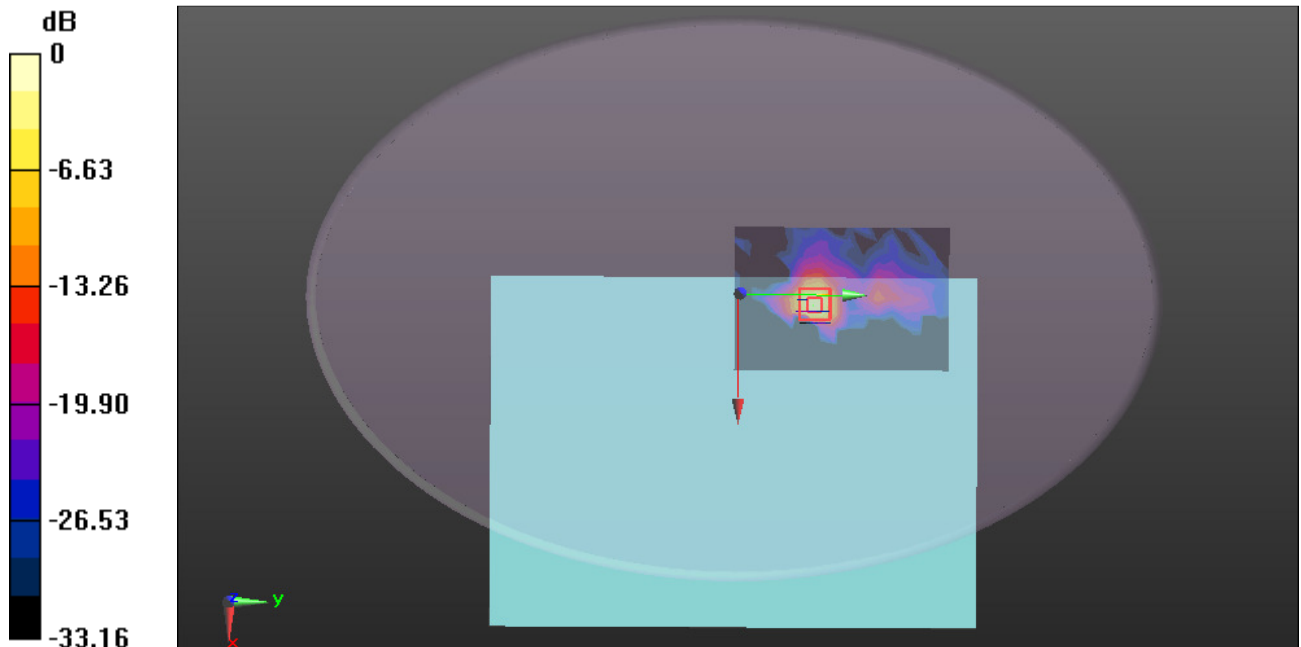
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 6.549 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 4.01 W/kg

SAR(1 g) = 0.892 W/kg; SAR(10 g) = 0.221 W/kg

Maximum value of SAR (measured) = 2.32 W/kg



0 dB = 2.32 W/kg = 3.65 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH100 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.766$ S/m; $\epsilon_r = 48.248$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.26, 4.26, 4.26); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH100 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.85 W/kg

WIFI/IEEE802.11a Body Bottom CH100 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

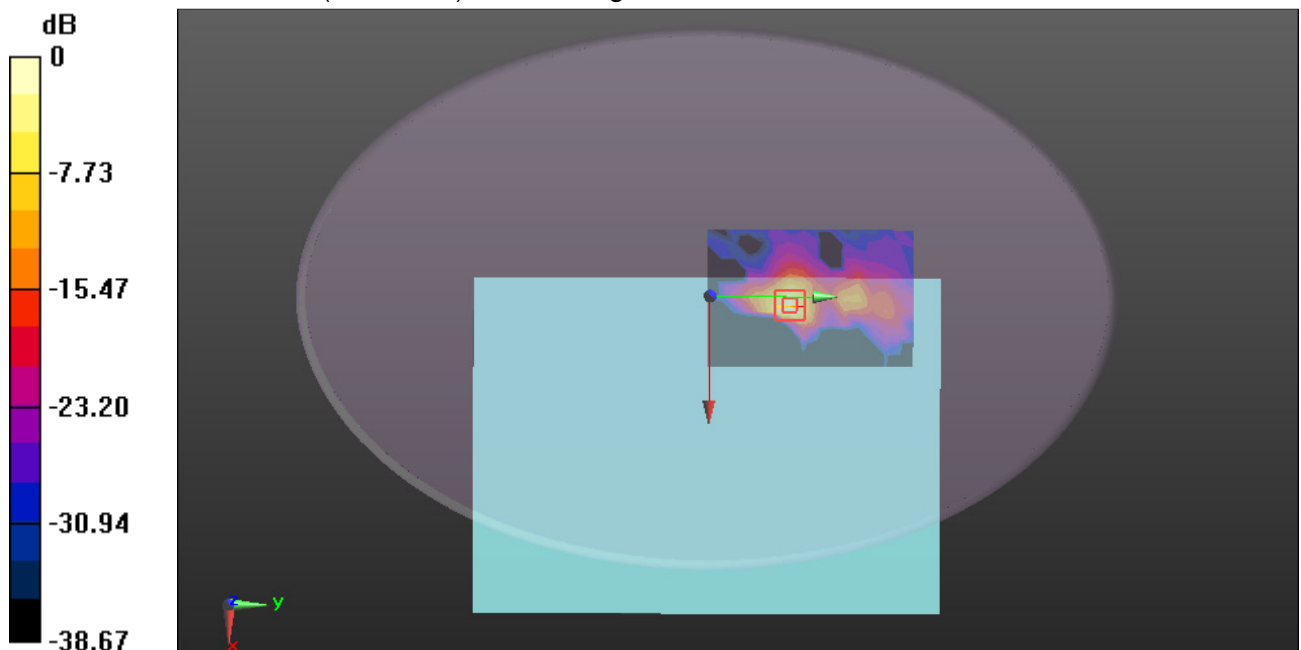
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 5.879 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 4.72 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.273 W/kg

Maximum value of SAR (measured) = 2.76 W/kg



0 dB = 2.76 W/kg = 4.41 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH112 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III;

Frequency: 5560 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5560$ MHz; $\sigma = 5.852$ S/m; $\epsilon_r = 48.094$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.18, 4.18, 4.18); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH112 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.45 W/kg

WIFI/IEEE802.11a Body Bottom CH112 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

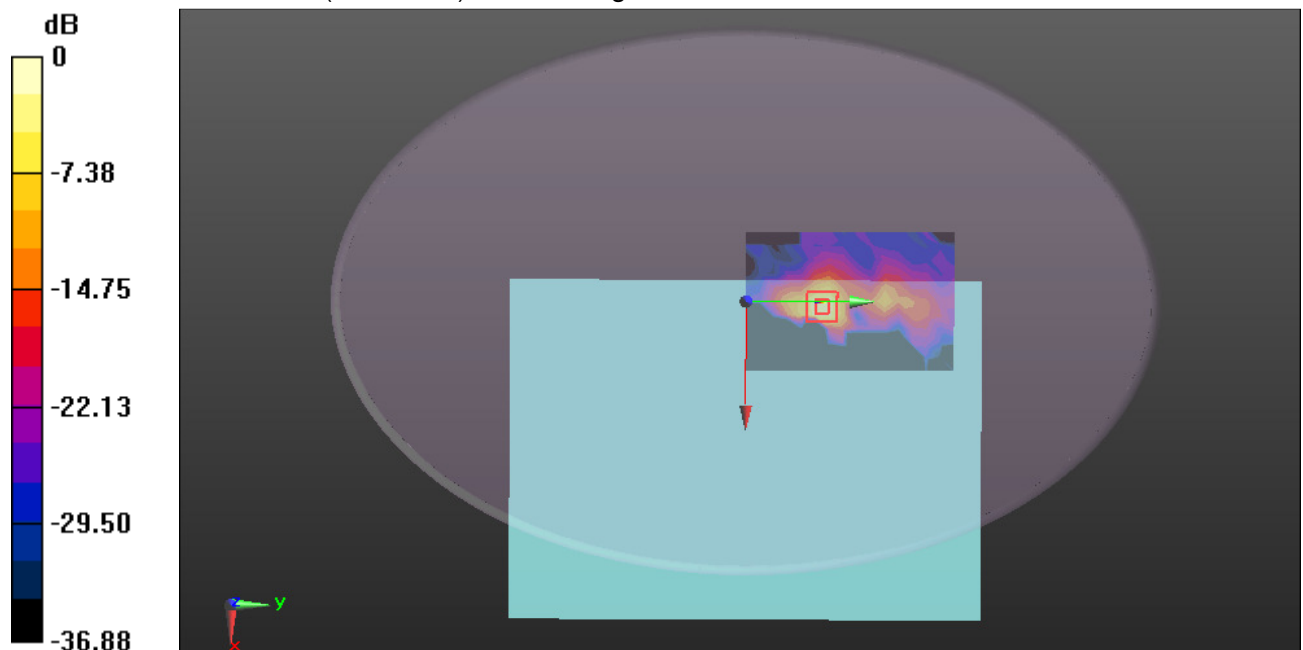
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 5.715 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 4.56 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.263 W/kg

Maximum value of SAR (measured) = 2.64 W/kg



0 dB = 2.64 W/kg = 4.22 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH144 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III;

Frequency: 5720 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5720$ MHz; $\sigma = 6.086$ S/m; $\epsilon_r = 47.806$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH144 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 1.31 W/kg

WIFI/IEEE802.11a Body Bottom CH144 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

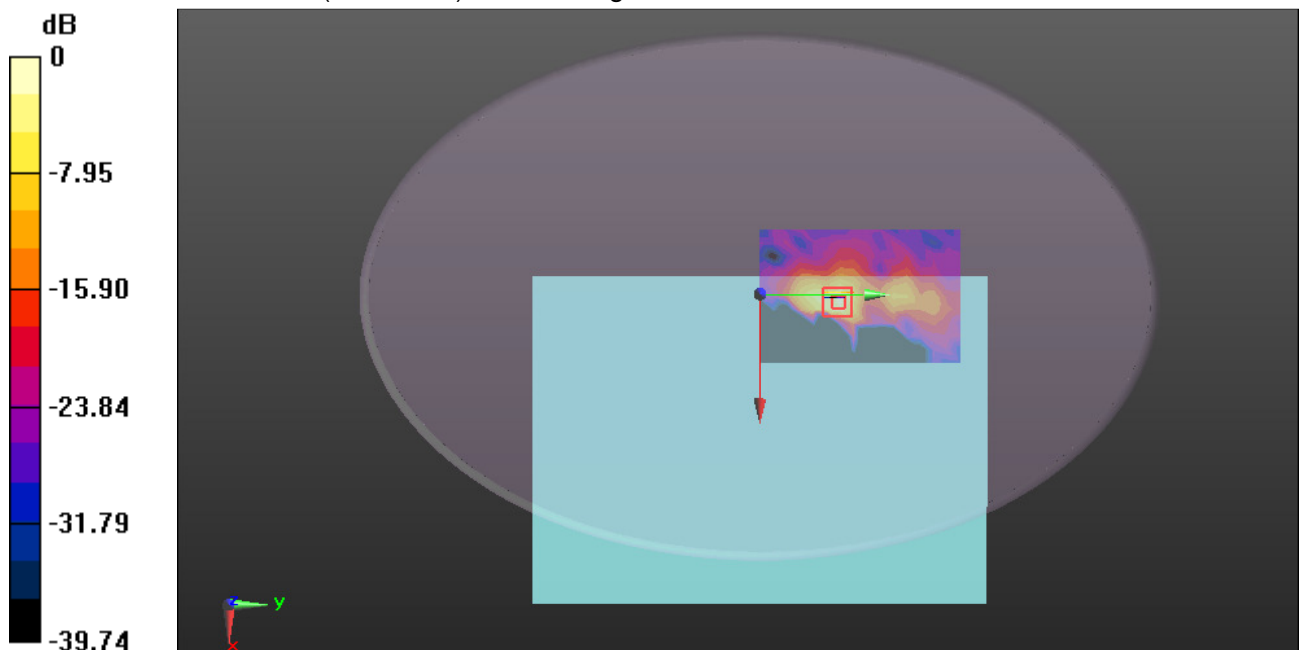
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 1.179 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 3.05 W/kg

SAR(1 g) = 0.652 W/kg; SAR(10 g) = 0.174 W/kg

Maximum value of SAR (measured) = 1.71 W/kg



0 dB = 1.71 W/kg = 2.33 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH149 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5745 \text{ MHz}$; $\sigma = 6.133 \text{ S/m}$; $\epsilon_r = 47.772$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Aux Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 2.32 W/kg

WIFI/IEEE802.11a Body Bottom CH149 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

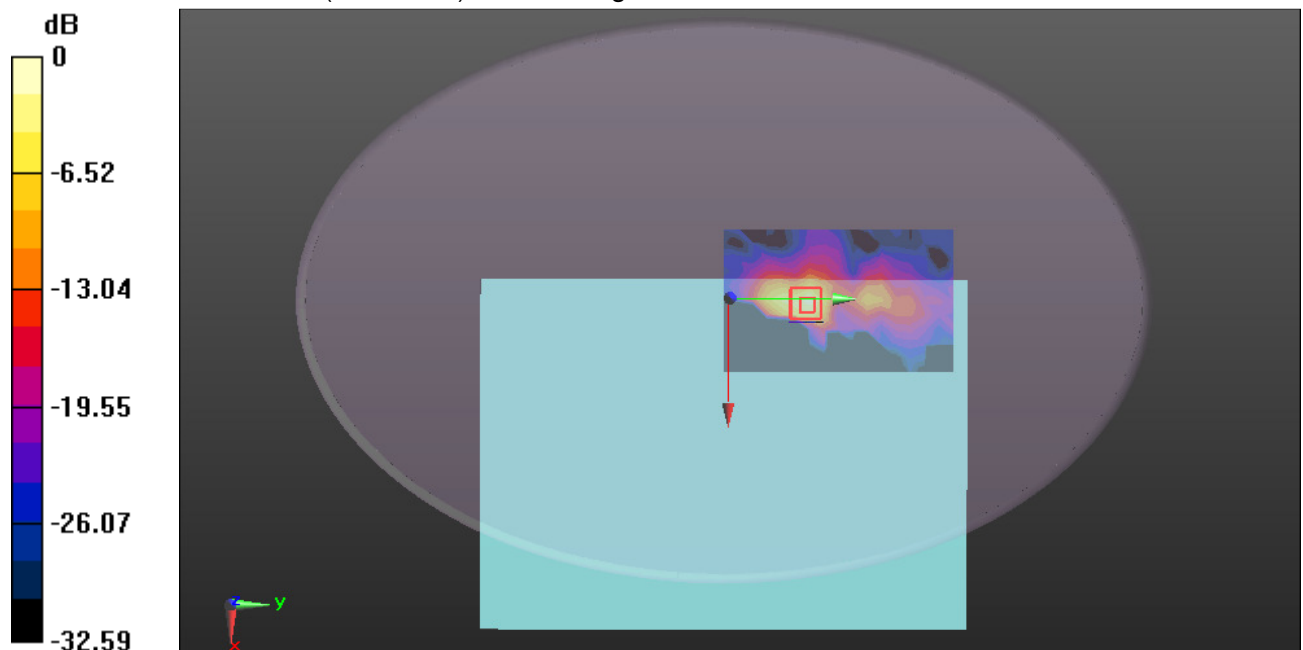
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 3.625 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 5.09 W/kg

SAR(1 g) = 1.06 W/kg ; SAR(10 g) = 0.289 W/kg

Maximum value of SAR (measured) = 2.81 W/kg



$0 \text{ dB} = 2.81 \text{ W/kg} = 4.49 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH157 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5785 \text{ MHz}$; $\sigma = 6.189 \text{ S/m}$; $\epsilon_r = 47.645$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH157 Aux Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 2.10 W/kg

WIFI/IEEE802.11a Body Bottom CH157 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

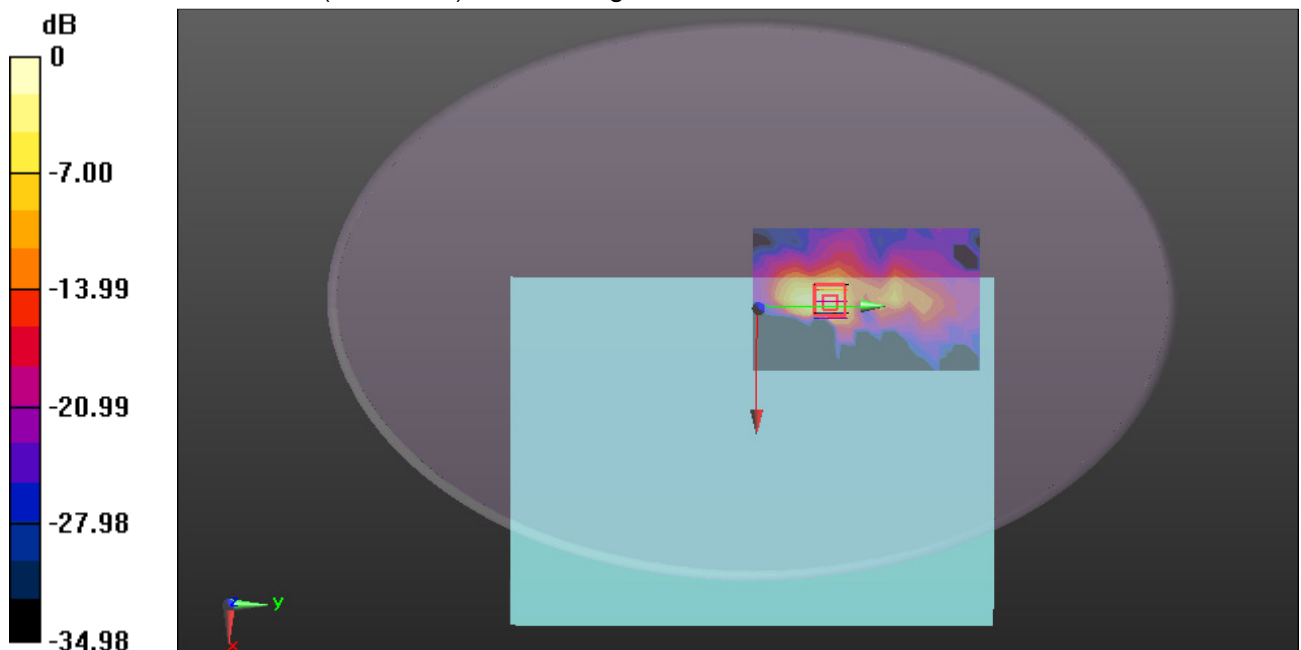
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 3.481 V/m ; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 4.63 W/kg

SAR(1 g) = 0.979 W/kg ; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 2.47 W/kg



$0 \text{ dB} = 2.47 \text{ W/kg} = 3.93 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH165 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5825 \text{ MHz}$; $\sigma = 6.249 \text{ S/m}$; $\epsilon_r = 47.447$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Aux Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 2.33 W/kg

WIFI/IEEE802.11a Body Bottom CH165 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

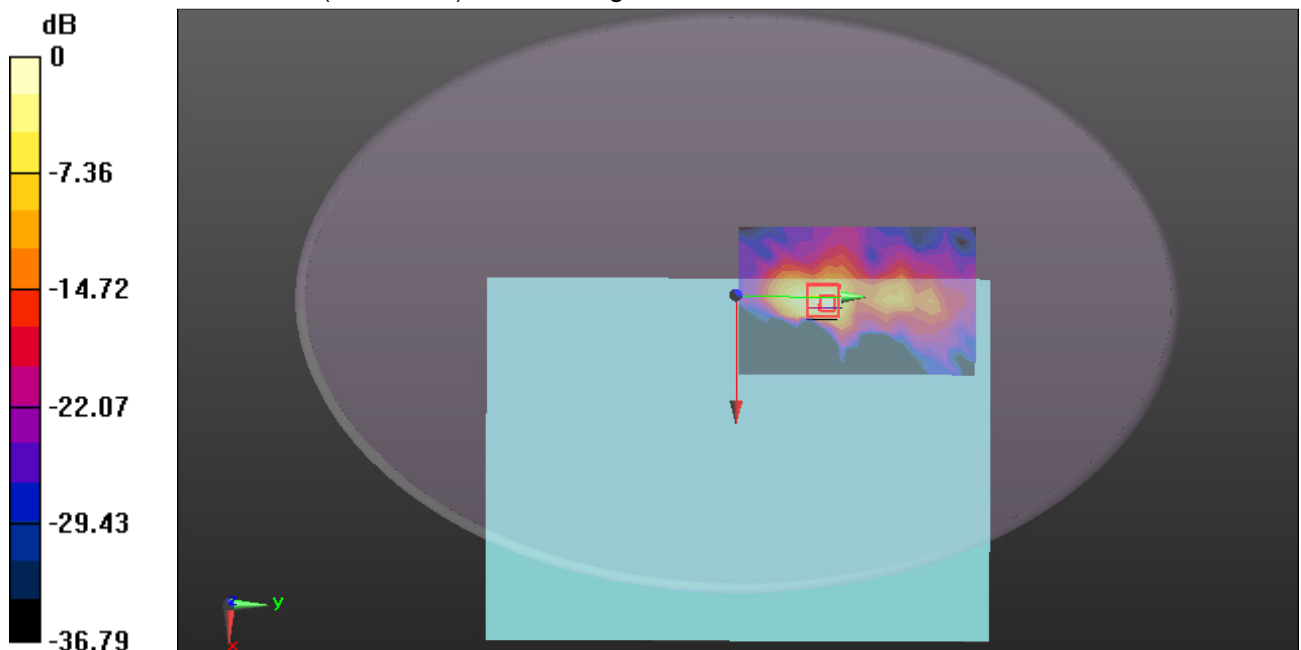
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 1.6920 V/m ; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 4.51 W/kg

SAR(1 g) = 0.950 W/kg ; SAR(10 g) = 0.278 W/kg

Maximum value of SAR (measured) = 2.37 W/kg



$0 \text{ dB} = 2.37 \text{ W/kg} = 3.75 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH11 Main Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2462 \text{ MHz}$; $\sigma = 1.986 \text{ S/m}$; $\epsilon_r = 50.963$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Main Antenna/Area Scan (11x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.556 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Main Antenna/Zoom Scan (7x7x7)/Cube 0:

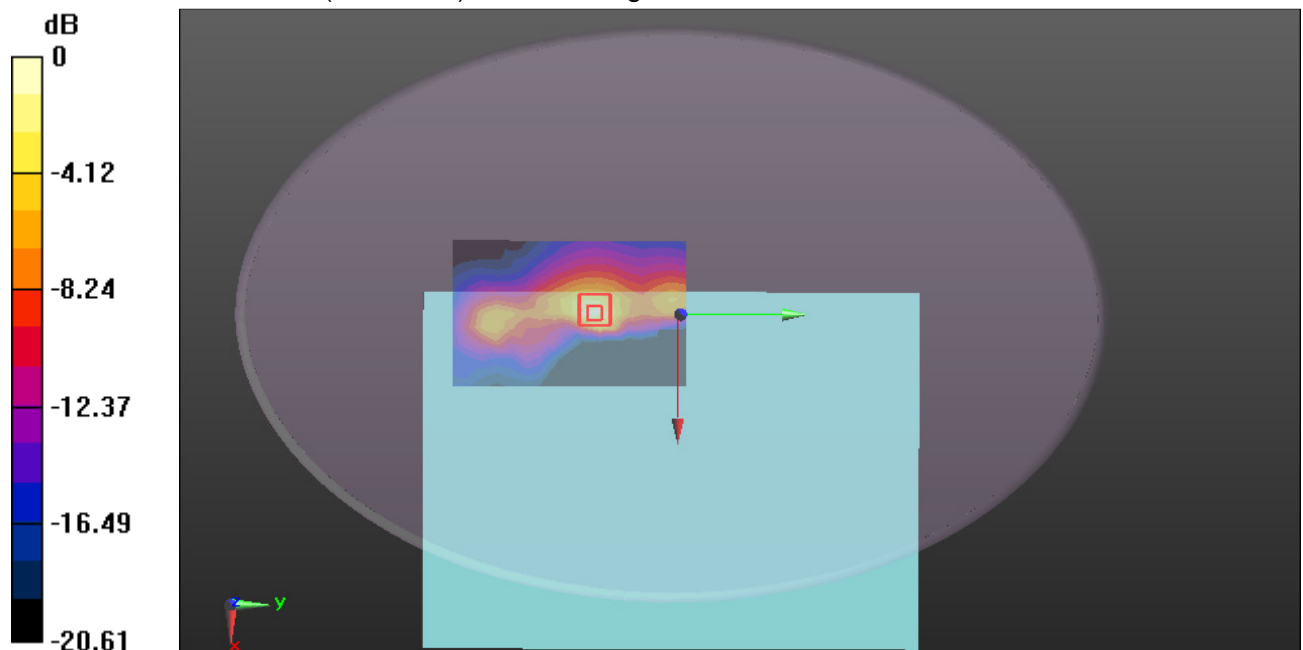
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 8.130 V/m ; Power Drift = 0.17 dB

Peak SAR (extrapolated) = 0.844 W/kg

SAR(1 g) = 0.352 W/kg ; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 0.618 W/kg



$0 \text{ dB} = 0.618 \text{ W/kg} = -2.09 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

WIFI 802.11 b-Body Bottom CH11 Aux Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 1.986$ S/m; $\epsilon_r = 50.963$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Aux Antenna/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 0.365 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Aux Antenna/Zoom Scan (7x7x7)/Cube 0:

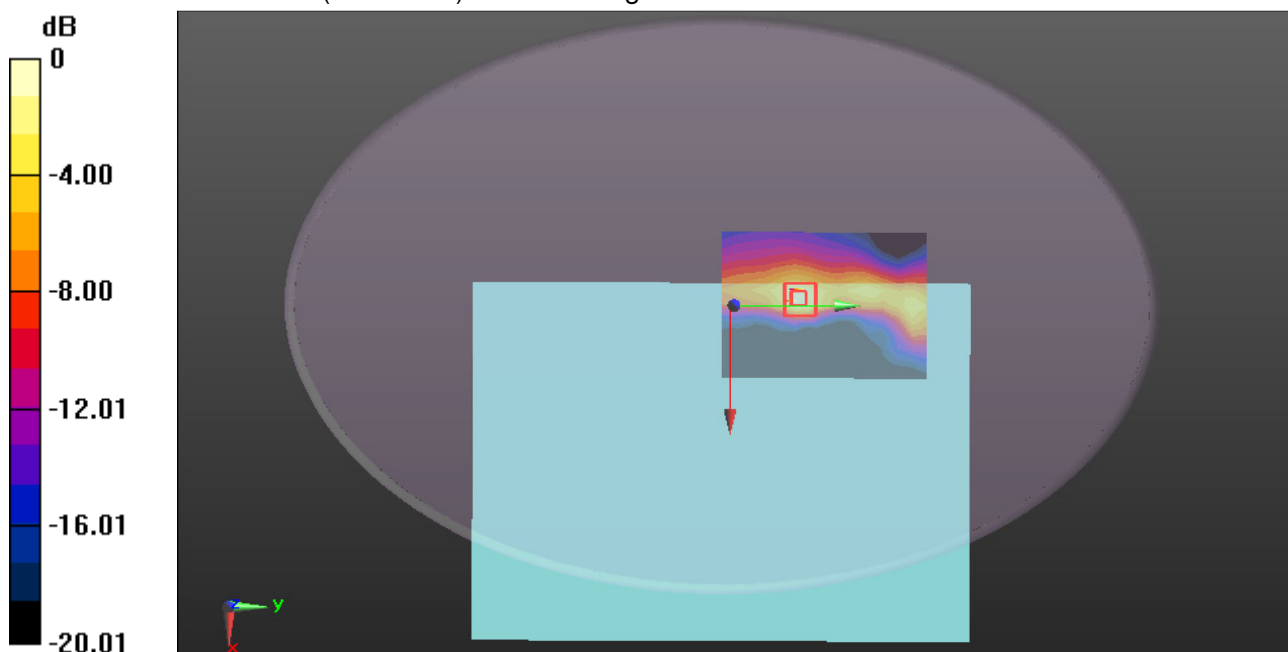
Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.693 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.586 W/kg

SAR(1 g) = 0.265 W/kg; SAR(10 g) = 0.119 W/kg

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



0 dB = 0.441 W/kg = -3.56 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/4/2018

2.4G-Body Bottom CH78 Main Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 2480 \text{ MHz}$; $\sigma = 2.02 \text{ S/m}$; $\epsilon_r = 50.826$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH78 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 0.0161 W/kg

WiFi 2.4GHz/2.4G Body Bottom CH78 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

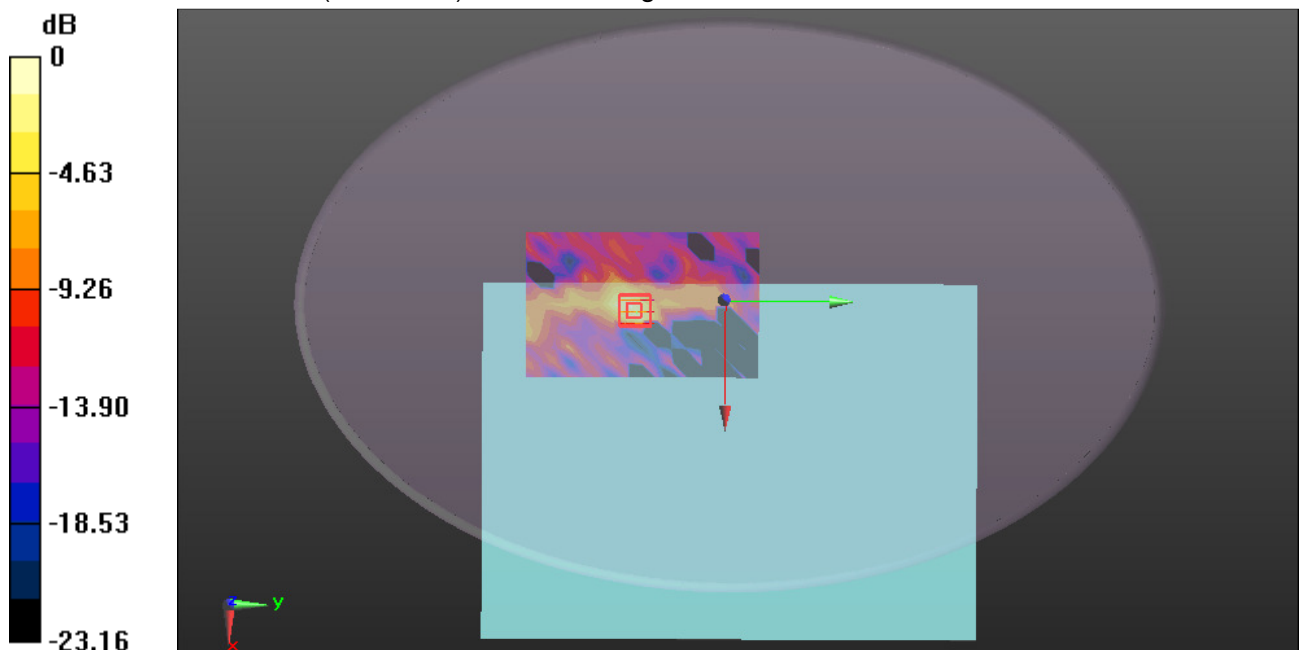
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 0.3420 V/m ; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0310 W/kg

SAR(1 g) = 0.011 W/kg ; SAR(10 g) = 0.00394 W/kg

Maximum value of SAR (measured) = 0.0205 W/kg



$0 \text{ dB} = 0.0205 \text{ W/kg} = -16.88 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH165 Main Antenna South Star Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5825 \text{ MHz}$; $\sigma = 6.249 \text{ S/m}$; $\epsilon_r = 47.447$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Main Antenna/Area Scan (11x17x1): Measurement grid:

$dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.73 W/kg

WIFI/IEEE802.11a Body Bottom CH165 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

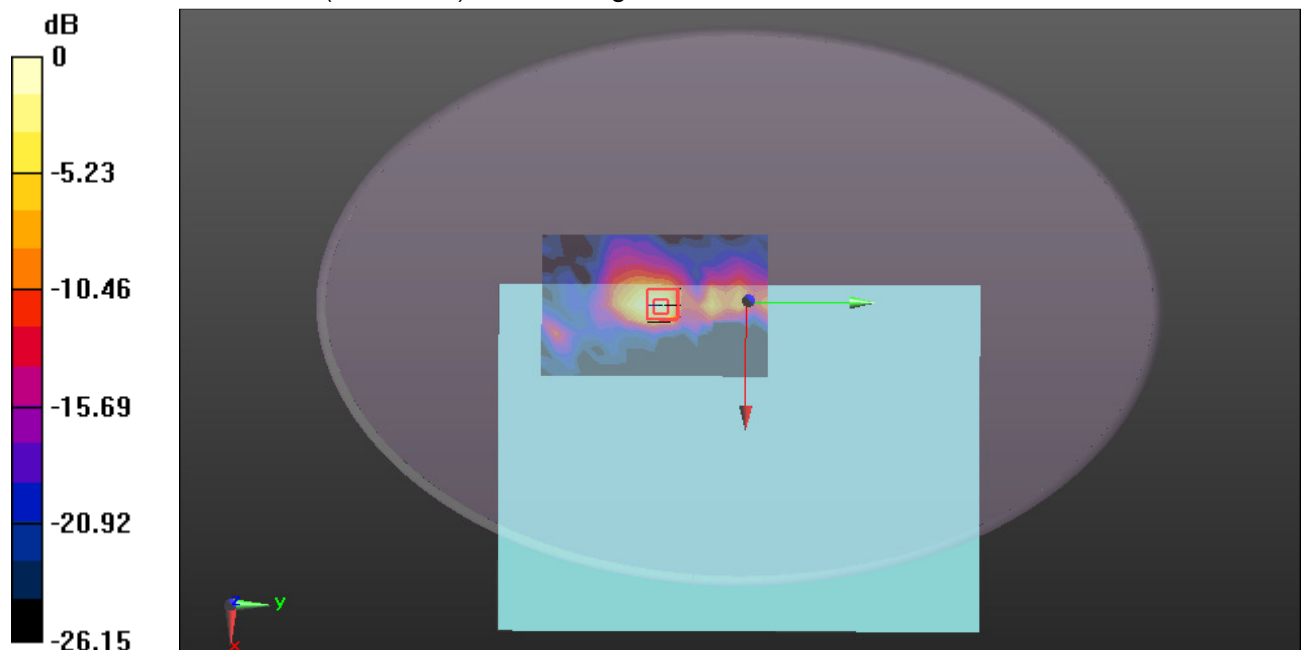
grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 7.612 V/m ; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 3.85 W/kg

SAR(1 g) = 0.828 W/kg ; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 2.02 W/kg



$0 \text{ dB} = 2.02 \text{ W/kg} = 3.05 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH60 Aux Antenna INPAQ Ant

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II;

Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 48.544$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH60 Aux Antenna/Area Scan (11x16x1): Measurement grid:

$dx=10$ mm, $dy=10$ mm

Maximum value of SAR (measured) = 0.210 W/kg

WIFI/IEEE802.11a Body Bottom CH60 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement

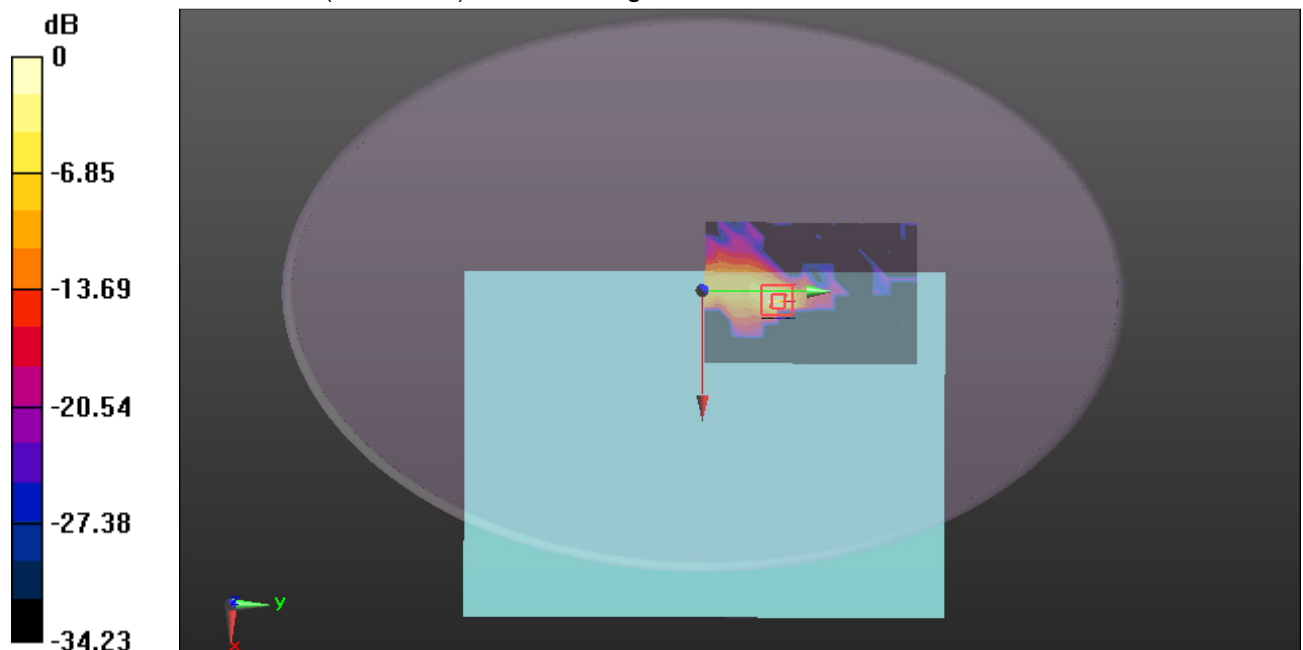
grid: $dx=4$ mm, $dy=4$ mm, $dz=1.4$ mm

Reference Value = 3.476 V/m; Power Drift = 0.18 dB

Peak SAR (extrapolated) = 0.548 W/kg

SAR(1 g) = 0.120 W/kg; SAR(10 g) = 0.027 W/kg

Maximum value of SAR (measured) = 0.352 W/kg



0 dB = 0.352 W/kg = -4.53 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH165 Main Antenna INPAQ Ant repeat

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5825 \text{ MHz}$; $\sigma = 6.249 \text{ S/m}$; $\epsilon_r = 47.447$; $\rho = 1000 \text{ kg/m}^3$

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 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Main Antenna repeat/Area Scan (11x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.70 W/kg

WIFI/IEEE802.11a Body Bottom CH165 Main Antenna repeat/Zoom Scan (7x7x7)/Cube 0:

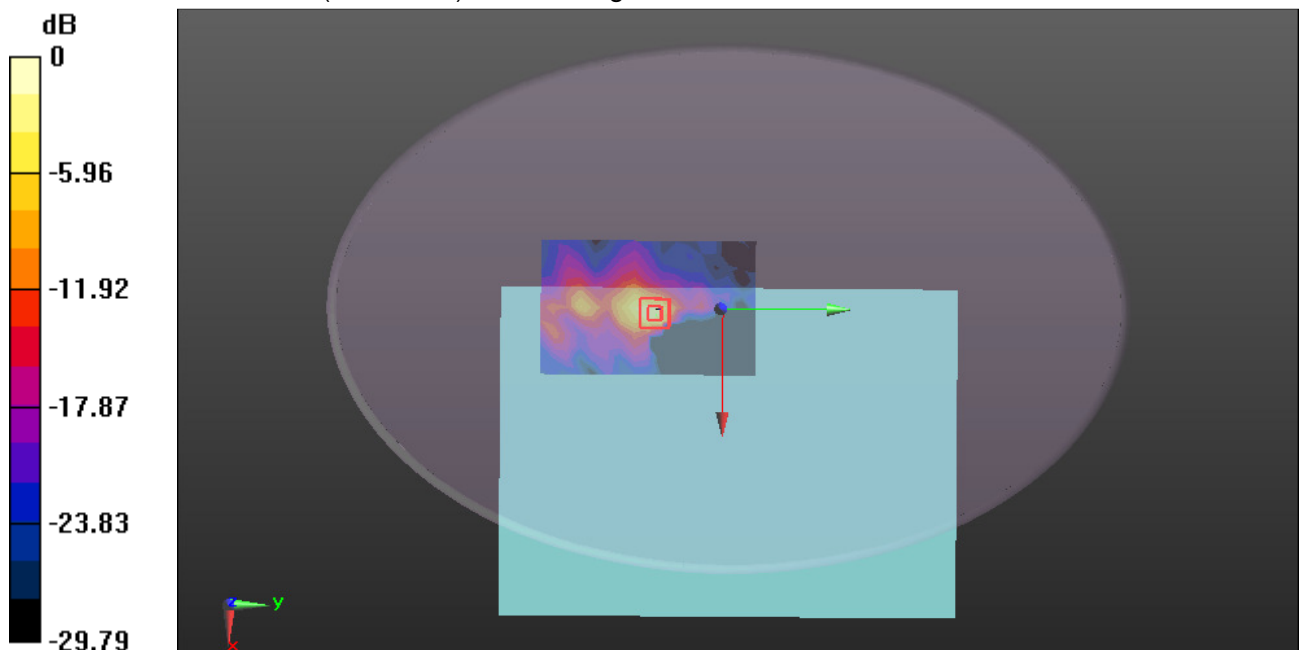
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 1.056 V/m ; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 6.66 W/kg

SAR(1 g) = 1.07 W/kg ; SAR(10 g) = 0.303 W/kg

Maximum value of SAR (measured) = 3.45 W/kg



$0 \text{ dB} = 3.45 \text{ W/kg} = 5.38 \text{ dBW/kg}$

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH60 Aux Antenna South Star Ant repeat

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band II;

Frequency: 5300 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5300$ MHz; $\sigma = 5.472$ S/m; $\epsilon_r = 48.544$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.67, 4.67, 4.67); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH60 Aux Antenna repeat/Area Scan (11x16x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.53 W/kg

WIFI/IEEE802.11a Body Bottom CH60 Aux Antenna repeat/Zoom Scan (7x7x7)/Cube 0:

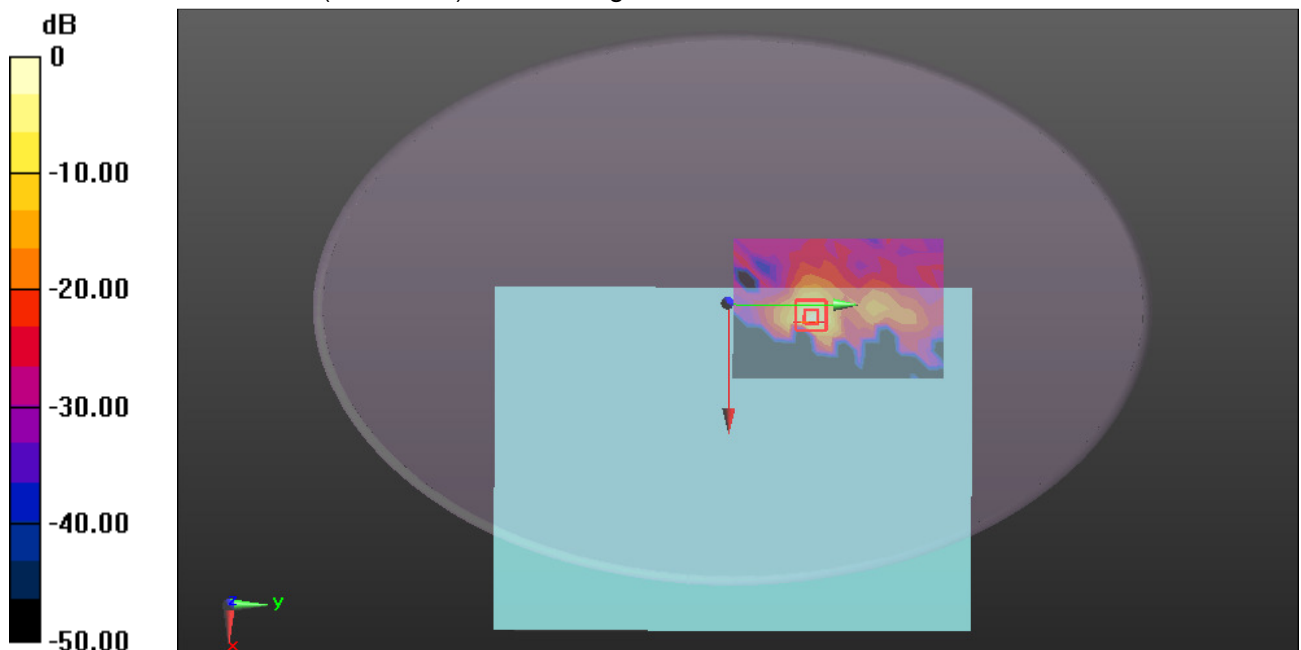
Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.156 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 4.32 W/kg

SAR(1 g) = 0.989 W/kg; SAR(10 g) = 0.237 W/kg

Maximum value of SAR (measured) = 2.52 W/kg



0 dB = 2.52 W/kg = 4.01 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH100 Aux Antenna South Star Ant repeat

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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; $\sigma = 5.766$ S/m; $\epsilon_r = 48.248$; $\rho = 1000$ kg/m³

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 - SN3798; ConvF(4.26, 4.26, 4.26); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH100 Aux Antenna repeat/Area Scan (11x16x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.30 W/kg

WIFI/IEEE802.11a Body Bottom CH100 Aux Antenna repeat/Zoom Scan (7x7x7)/Cube 0:

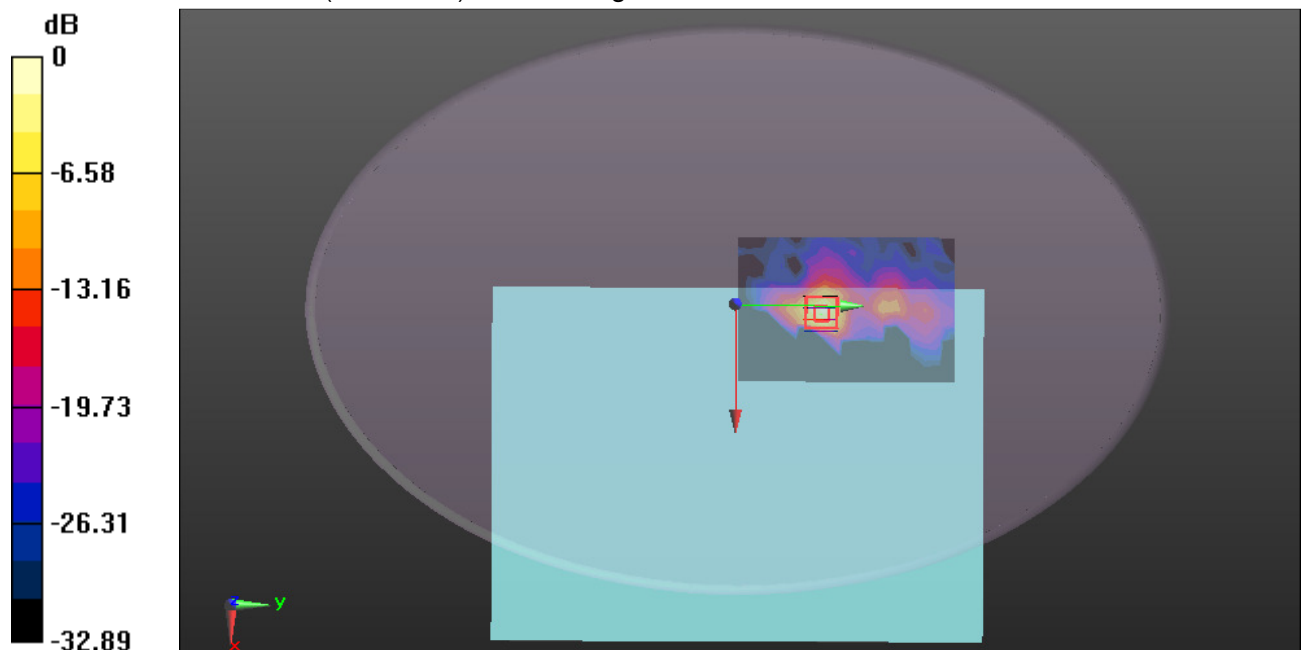
Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.987 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 4.93 W/kg

SAR(1 g) = 1.09 W/kg; SAR(10 g) = 0.282 W/kg

Maximum value of SAR (measured) = 2.85 W/kg



0 dB = 2.85 W/kg = 4.55 dBW/kg

Test Laboratory: Compliance Certification Services Inc.

Date: 6/5/2018

WIFI 802.11 a-Body Bottom CH149 Aux Antenna South Star Ant repeat

DUT: Notebook Computer; Type: Lenovo ideapad 130S-14IGM;81KU; 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: $f = 5745 \text{ MHz}$; $\sigma = 6.133 \text{ S/m}$; $\epsilon_r = 47.772$; $\rho = 1000 \text{ kg/m}^3$

Room Ambient Temperature: 22°C ; Liquid Temperature: 21.5°C

Phantom section: Flat Section

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

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(4.45, 4.45, 4.45); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- Phantom: ELI v4.0; Type: QDOVA001BB; Serial: TP:1102
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Aux Antenna repeat/Area Scan (11x17x1): Measurement grid: $dx=10\text{mm}$, $dy=10\text{mm}$

Maximum value of SAR (measured) = 1.90 W/kg

WIFI/IEEE802.11a Body Bottom CH149 Aux Antenna repeat/Zoom Scan (7x7x7)/Cube 0:

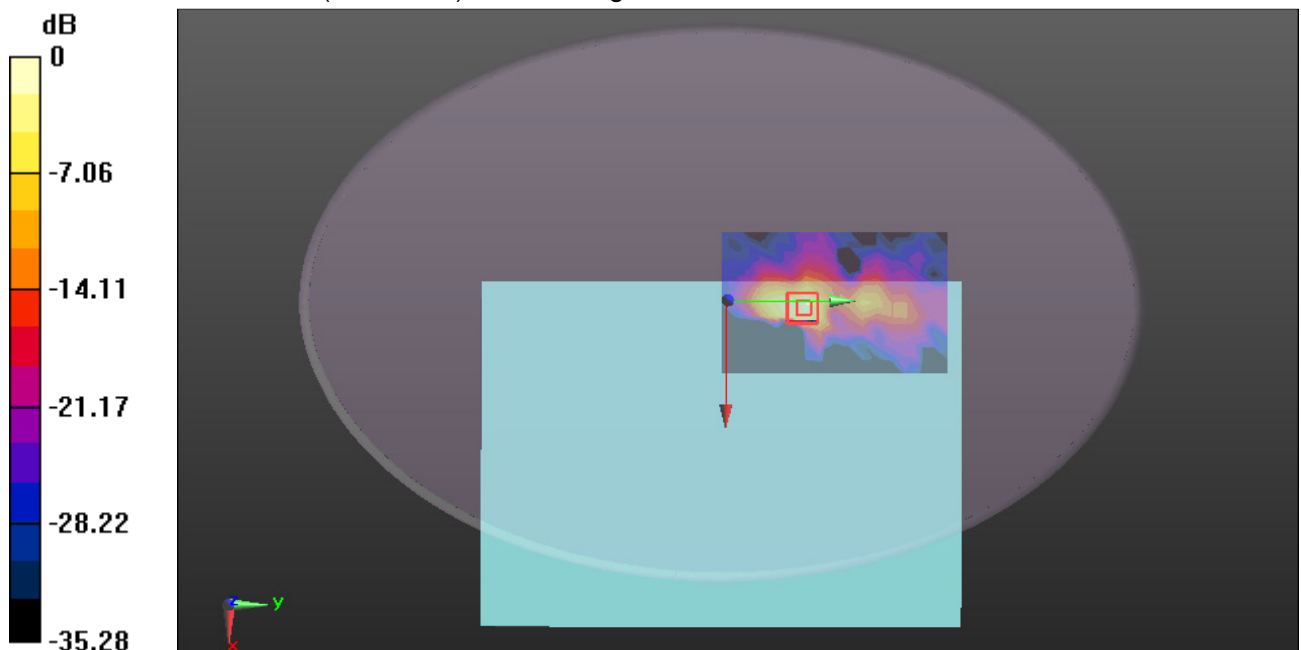
Measurement grid: $dx=4\text{mm}$, $dy=4\text{mm}$, $dz=1.4\text{mm}$

Reference Value = 2.5240 V/m ; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 4.60 W/kg

SAR(1 g) = 0.999 W/kg ; SAR(10 g) = 0.275 W/kg

Maximum value of SAR (measured) = 2.58 W/kg



0 dB = 2.58 W/kg = 4.12 dBW/kg