SGS-CSTC Standards Technical Services Co., Ltd.
Shenzhen Branch

Appendix E

Plots of SAR Test Result
for SZEM1806005524CR

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH1 Main Antenna for INPAQ antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.947 S/m; ε_r = 52.065; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Main/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.442 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Main/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.033 V/m; Power Drift = -0.10 dB
Peak SAR (extrapolated) = 0.623 W/kg
SAR(1 g) = 0.352 W/kg; SAR(10 g) = 0.172 W/kg
Maximum value of SAR (measured) = 0.476 W/kg
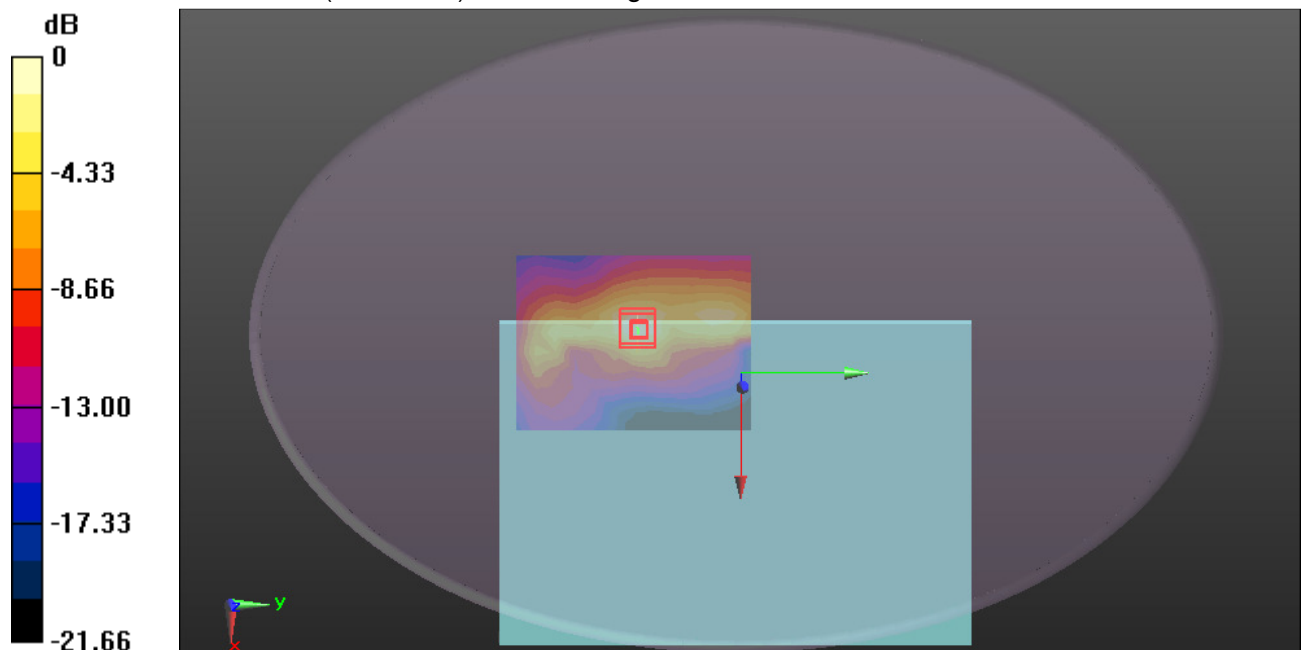
0 dB = 0.476 W/kg = -3.22 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH6 Main Antenna for INPAQ antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.911 S/m; ε_r = 51.562; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Main/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.434 W/kg

WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Main/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm
Reference Value = 10.67 V/m; Power Drift = 0.05 dB
Peak SAR (extrapolated) = 0.612 W/kg
SAR(1 g) = 0.331 W/kg; SAR(10 g) = 0.161 W/kg
Maximum value of SAR (measured) = 0.467 W/kg
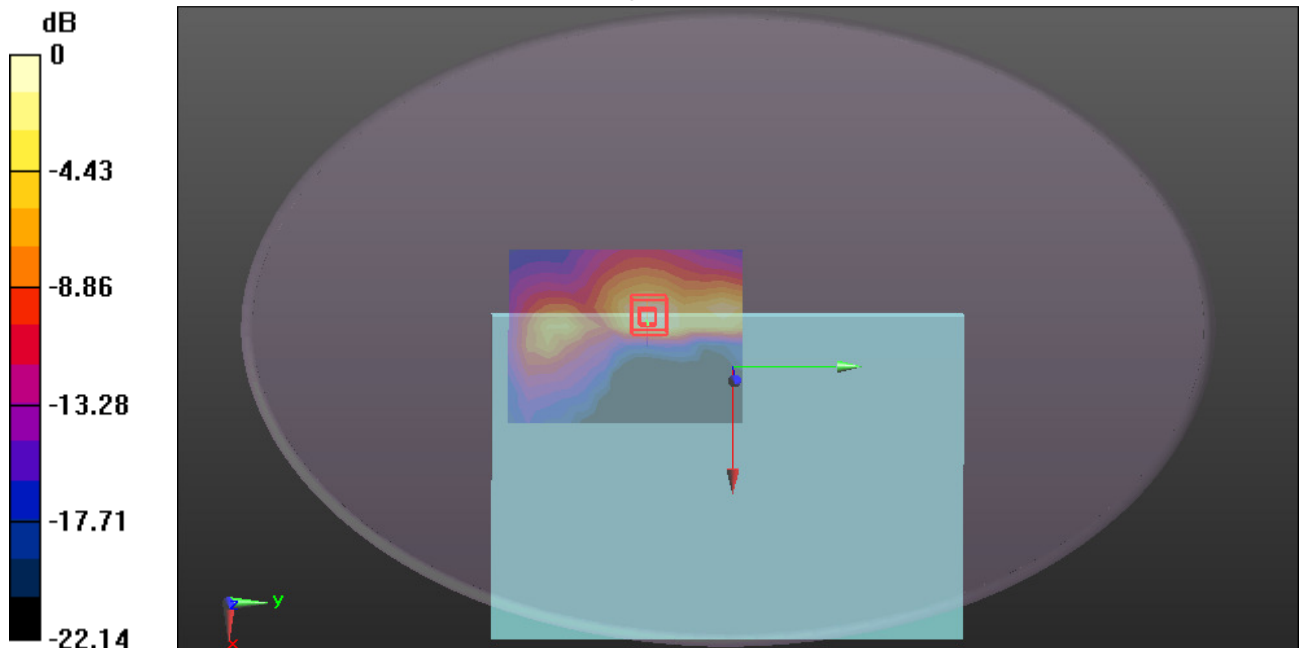
0 dB = 0.467 W/kg = -3.31 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH11 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.94 S/m; $ε_r$ = 51.133; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Main/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.319 W/kg

**WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Main/Zoom Scan (7x7x5)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.03 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 0.467 W/kg

SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.122 W/kg

Maximum value of SAR (measured) = 0.364 W/kg
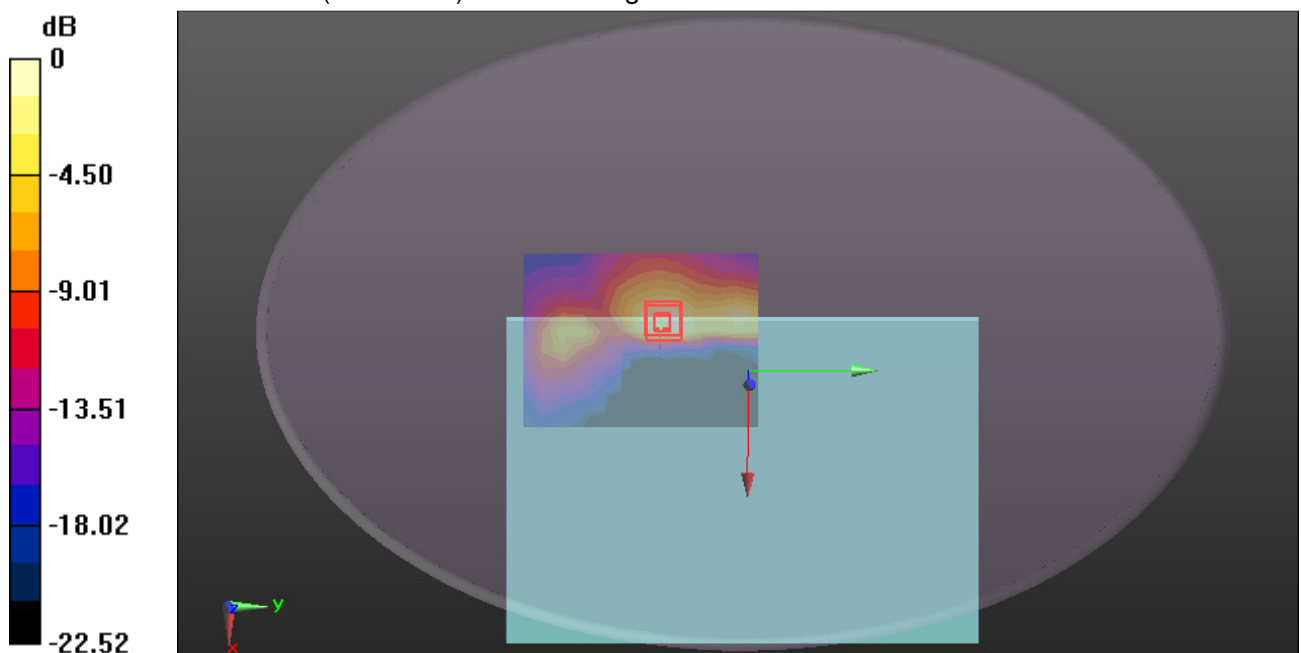
0 dB = 0.364 W/kg = -4.39 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH0 Main Antenna for INPAQ antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 MHz; σ = 1.948 S/m; ε_r = 52.251; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH0 Main Antenna/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0161 W/kg
WiFi 2.4GHz/2.4G Body Bottom CH0 Main Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement
grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.685 V/m; Power Drift = 0.08 dB
Peak SAR (extrapolated) = 0.0240 W/kg
SAR(1 g) = 0.013 W/kg; SAR(10 g) = 0.00587 W/kg
Maximum value of SAR (measured) = 0.0200 W/kg
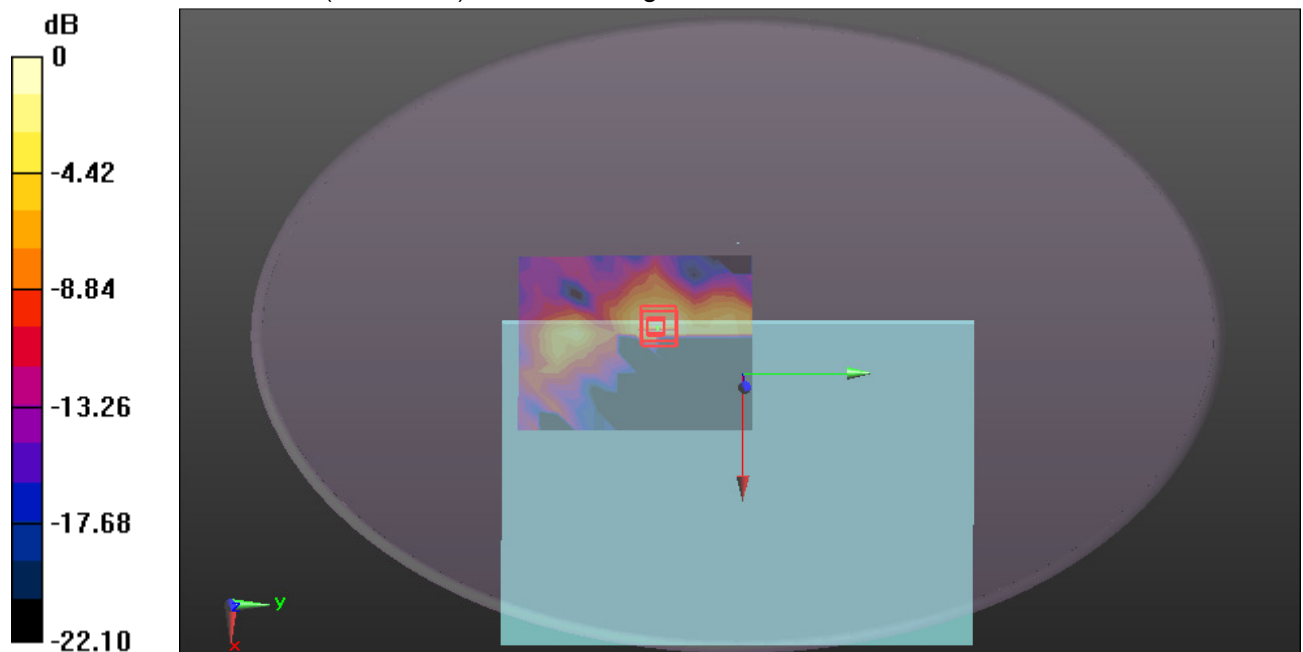
0 dB = 0.0200 W/kg = -16.99 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH39 Main Antenna for INPAQ antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.911 S/m; ε_r = 51.48; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH39 Main Antenna/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0119 W/kg

**WiFi 2.4GHz/2.4G Body Bottom CH39 Main Antenna/Zoom Scan (7x7x7)/Cube 0:** Measurement
grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.408 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 0.0170 W/kg
SAR(1 g) = 0.00832 W/kg; SAR(10 g) = 0.00369 W/kg
Maximum value of SAR (measured) = 0.0126 W/kg
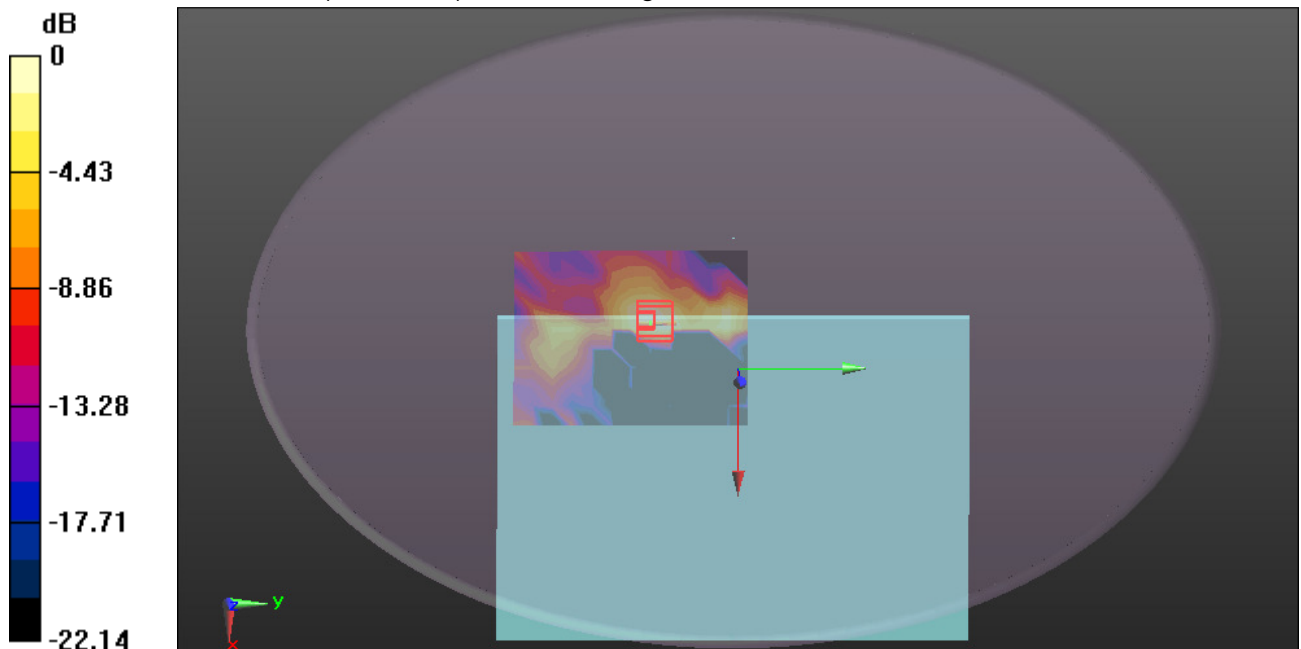
0 dB = 0.0126 W/kg = -19.00 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH78 Main Antenna for INPAQ antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 (extrapolated): f = 2480 MHz; σ = 1.986 S/m; ε_r = 50.934; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH78 Main Antenna/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0101 W/kg
**WiFi 2.4GHz/2.4G Body Bottom CH78 Main Antenna/Zoom Scan (7x7x7)/Cube 0:** Measurement
grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.9930 V/m; Power Drift = 0.06 dB
Peak SAR (extrapolated) = 0.0250 W/kg
SAR(1 g) = 0.0064 W/kg; SAR(10 g) = 0.00232 W/kg
Maximum value of SAR (measured) = 0.0109 W/kg
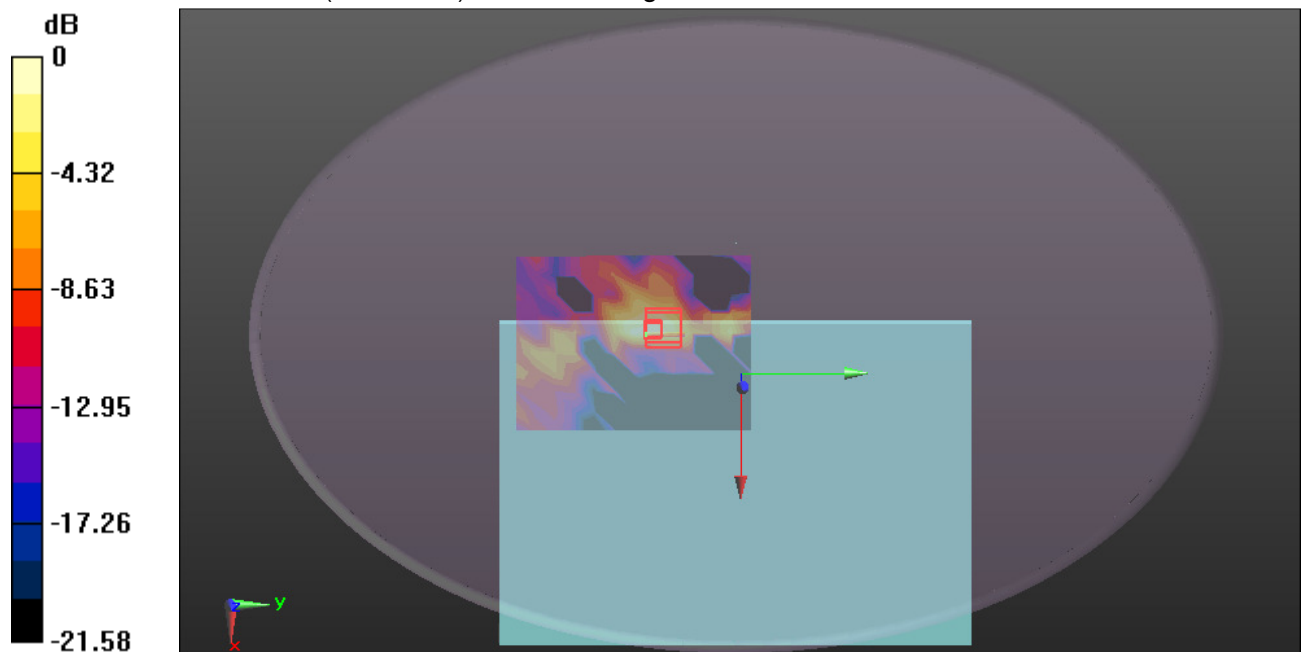
0 dB = 0.0109 W/kg = -19.63 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH52 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.395 S/m; ε_r = 49.159; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH52 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.24 W/kg

WIFI/IEEE802.11a Body Bottom CH52 Main/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 6.162 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 2.84 W/kg

SAR(1 g) = 0.635 W/kg; SAR(10 g) = 0.189 W/kg
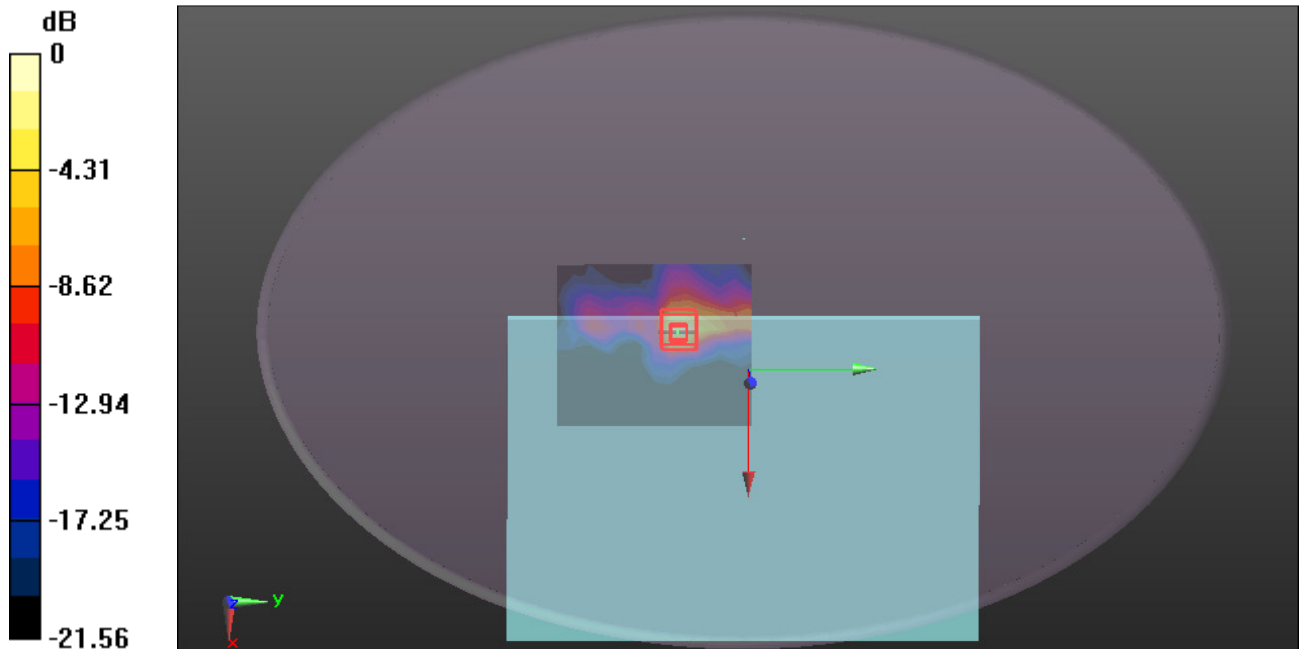
Maximum value of SAR (measured) = 1.52 W/kg

0 dB = 1.52 W/kg = 1.82 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH56 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.414 S/m; ε_r = 49.018; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH56 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.26 W/kg

WIFI/IEEE802.11a Body Bottom CH56 Main/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 6.110 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.88 W/kg

SAR(1 g) = 0.642 W/kg; SAR(10 g) = 0.189 W/kg

Maximum value of SAR (measured) = 1.56 W/kg
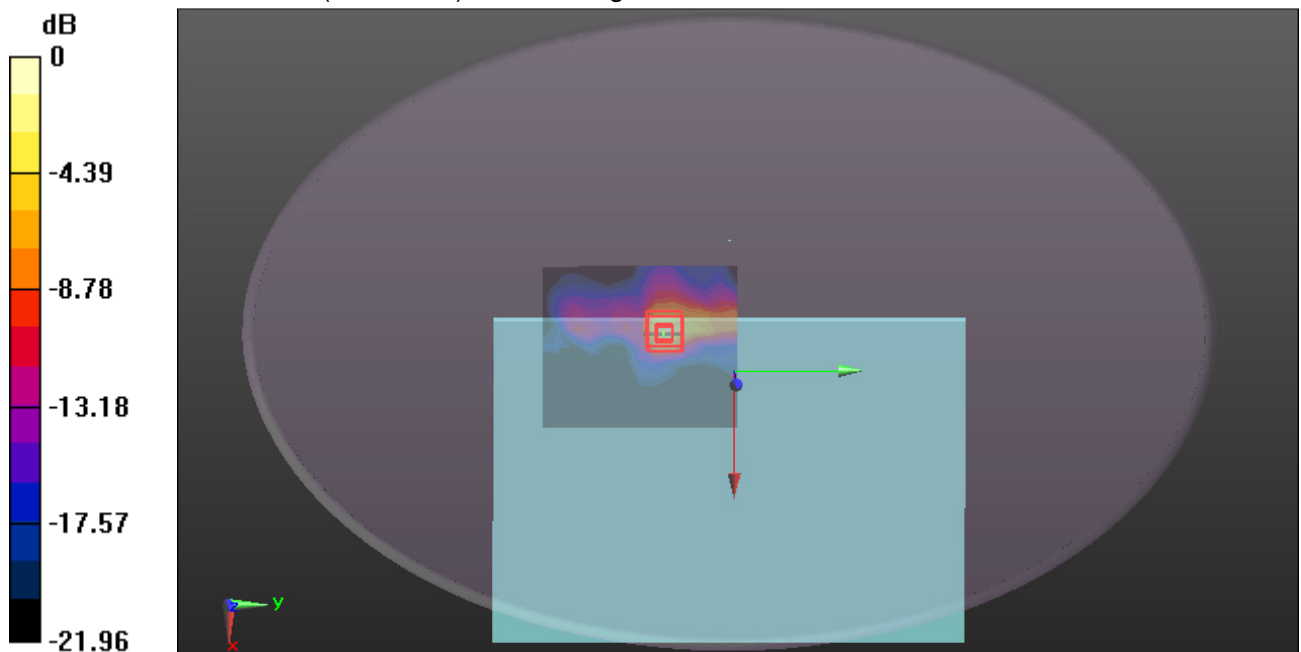
0 dB = 1.56 W/kg = 1.93 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH64 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.506 S/m; ε_r = 48.892; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.78 W/kg

**WIFI/IEEE802.11a Body Bottom CH64 Main/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 6.160 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 3.31 W/kg

SAR(1 g) = 0.734 W/kg; SAR(10 g) = 0.219 W/kg

Maximum value of SAR (measured) = 1.72 W/kg

0 dB = 1.72 W/kg = 2.36 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH100 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.736 S/m; ε_r = 48.803; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH100 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.01 W/kg

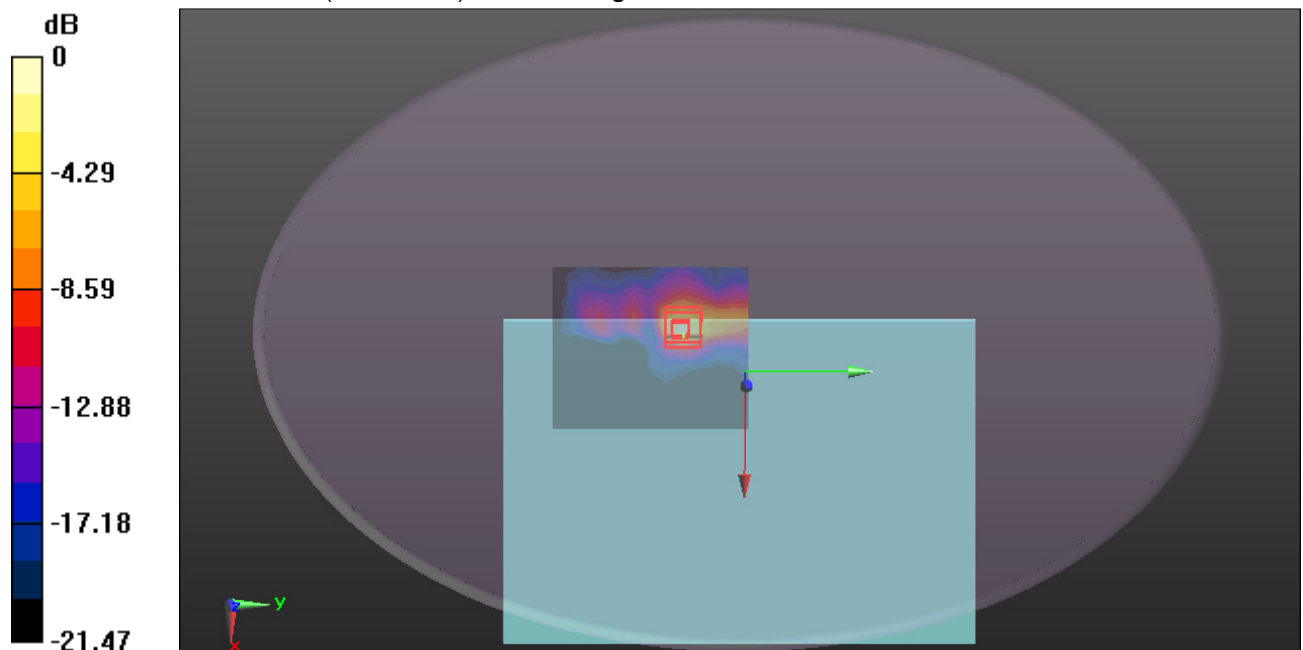**WIFI/IEEE802.11a Body Bottom CH100 Main/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 6.652 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.85 W/kg

SAR(1 g) = 0.415 W/kg; SAR(10 g) = 0.137 W/kg
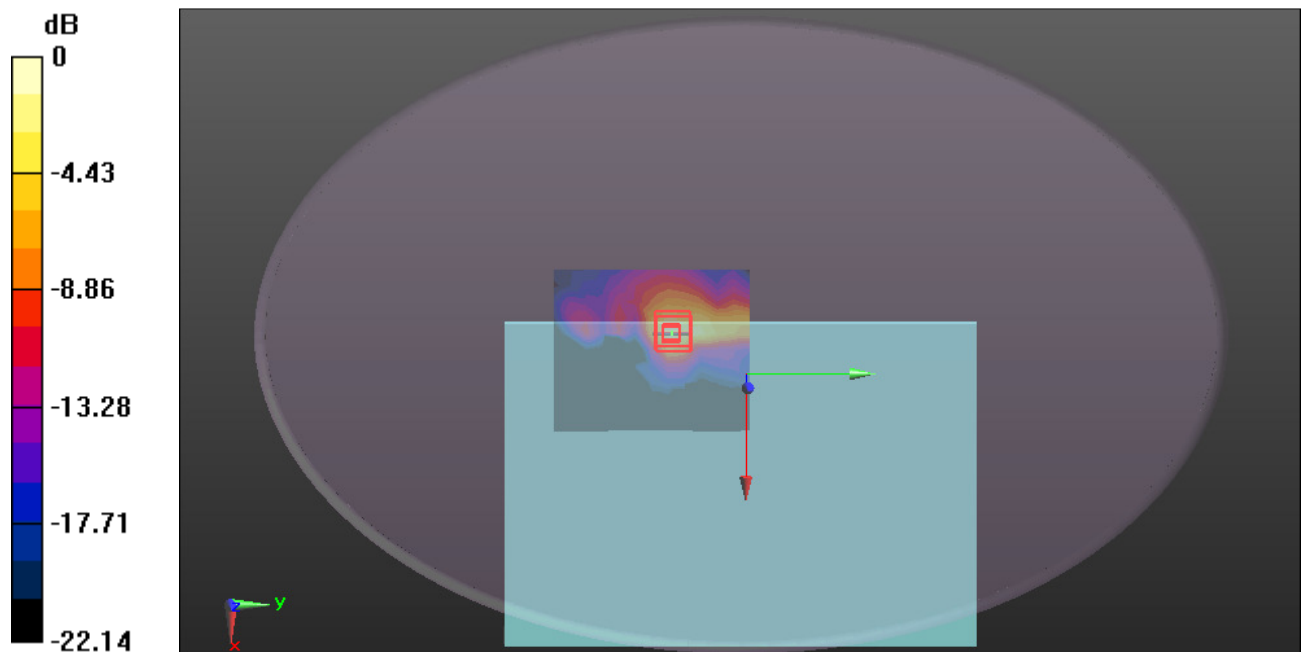
0 dB = 1.01 W/kg = 0.04 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH128 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.608 S/m; ε_r = 48.459; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH128 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.07 W/kg

WIFI/IEEE802.11a Body Bottom CH128 Main/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.087 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 2.55 W/kg

SAR(1 g) = 0.544 W/kg; SAR(10 g) = 0.180 W/kg

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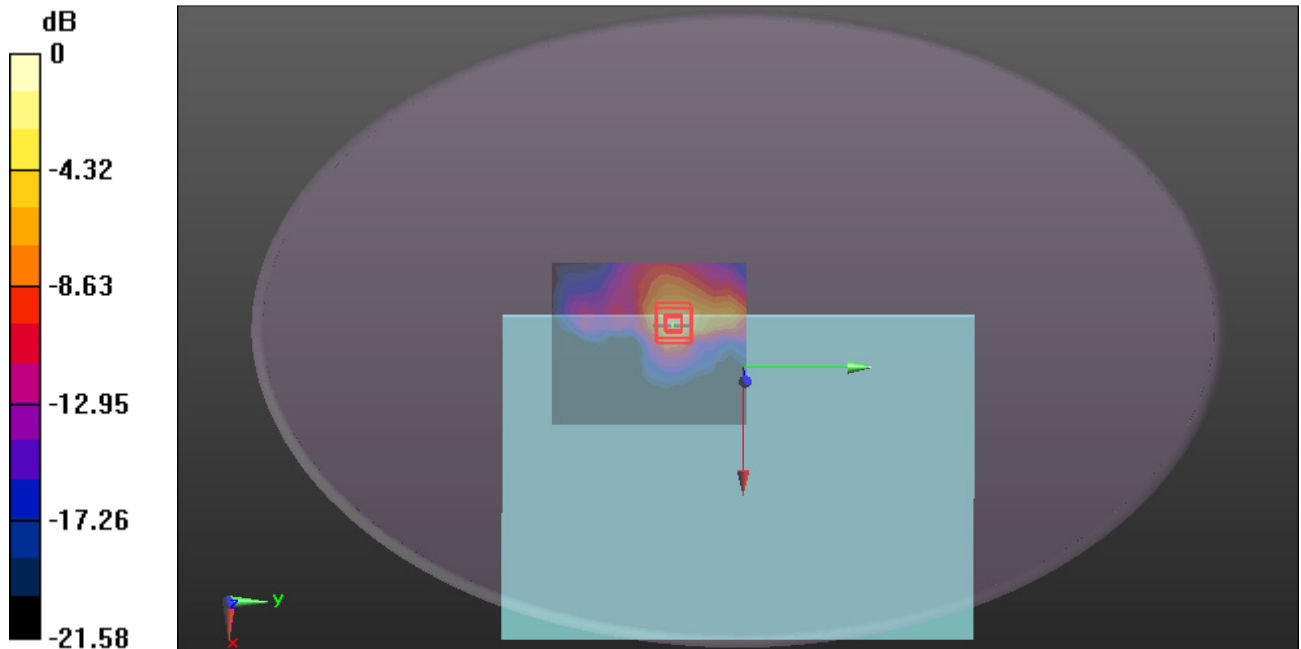
0 dB = 1.37 W/kg = 1.37 dBW/kg

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH144 Main Antenna for INPAQ antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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; σ = 6.044 S/m; ε_r = 48.093; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH144 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.35 W/kg
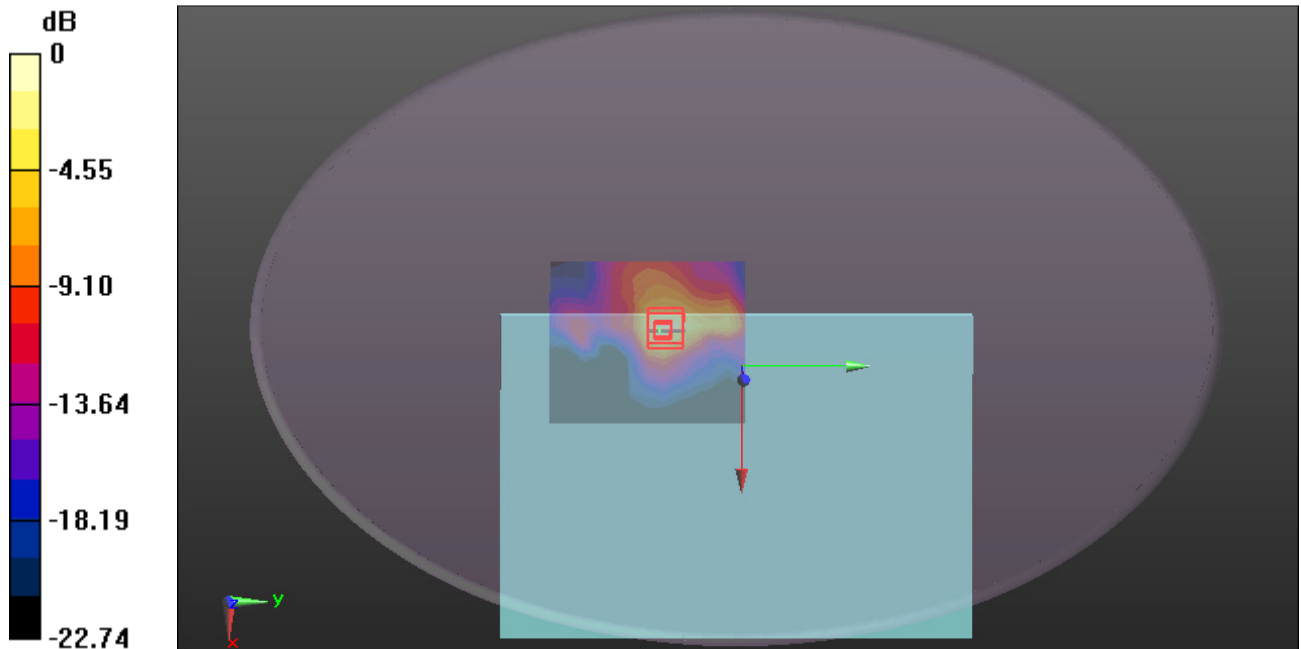**WIFI/IEEE802.11a Body Bottom CH144 Main/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 6.180 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 2.73 W/kg
SAR(1 g) = 0.571 W/kg; SAR(10 g) = 0.194 W/kg
Maximum value of SAR (measured) = 1.42 W/kg

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

Test Laboratory: Compliance Certification Services Inc.　　　　Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH149 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.099 S/m; ε_r = 48.088; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.07 W/kg

WIFI/IEEE802.11a Body Bottom CH149 Main/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 5.322 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 2.90 W/kg

SAR(1 g) = 0.600 W/kg; SAR(10 g) = 0.199 W/kg

Maximum value of SAR (measured) = 1.52 W/kg

0 dB = 1.52 W/kg = 1.82 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH157 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.142 S/m; ε_r = 47.99; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH157 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.04 W/kg

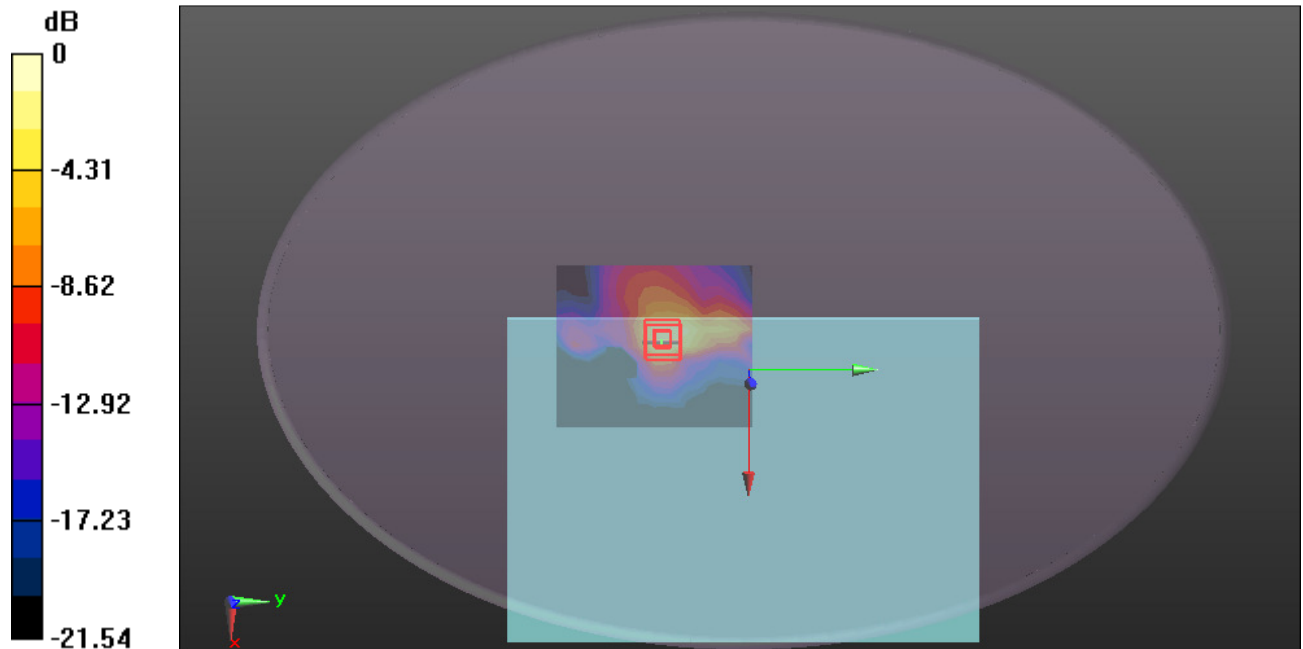**WIFI/IEEE802.11a Body Bottom CH157 Main/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 8.123 V/m; Power Drift = -0.05 dB

Peak SAR (extrapolated) = 2.28 W/kg

SAR(1 g) = 0.462 W/kg; SAR(10 g) = 0.156 W/kg

Maximum value of SAR (measured) = 1.18 W/kg

0 dB = 1.18 W/kg = 0.72 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH165 Main Antenna for INPAQ antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.207 S/m; ε_r = 47.759; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.06 W/kg

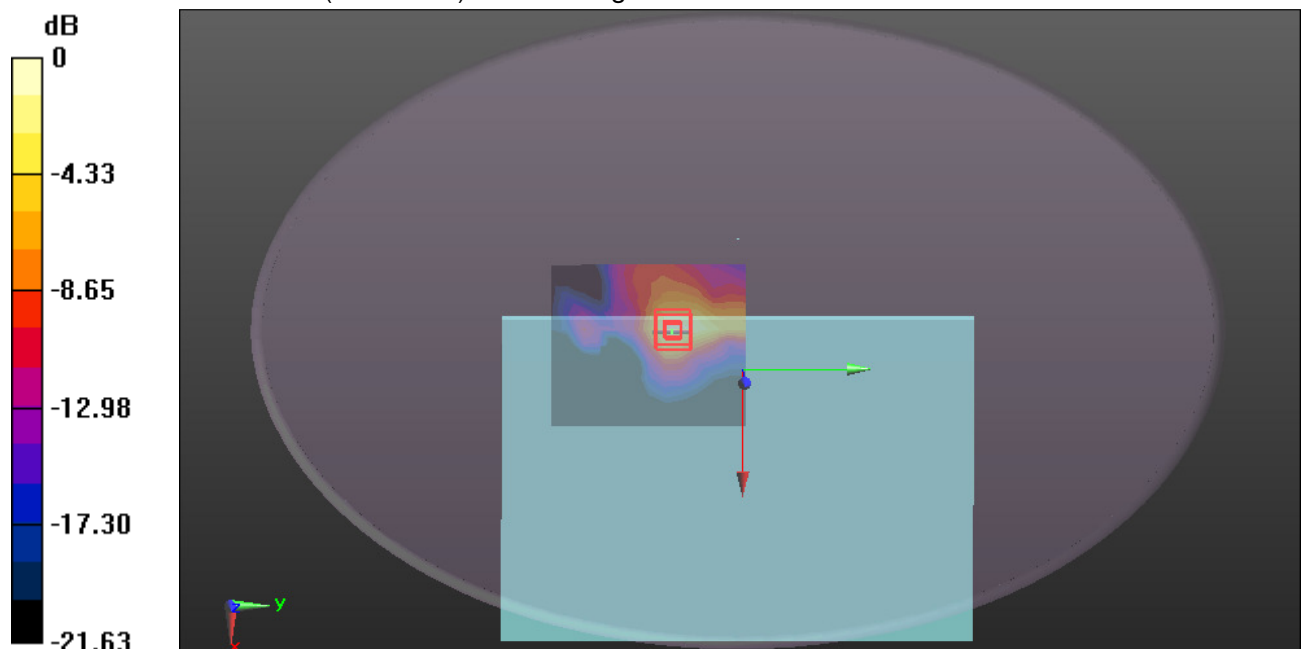**WIFI/IEEE802.11a Body Bottom CH165 Main/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
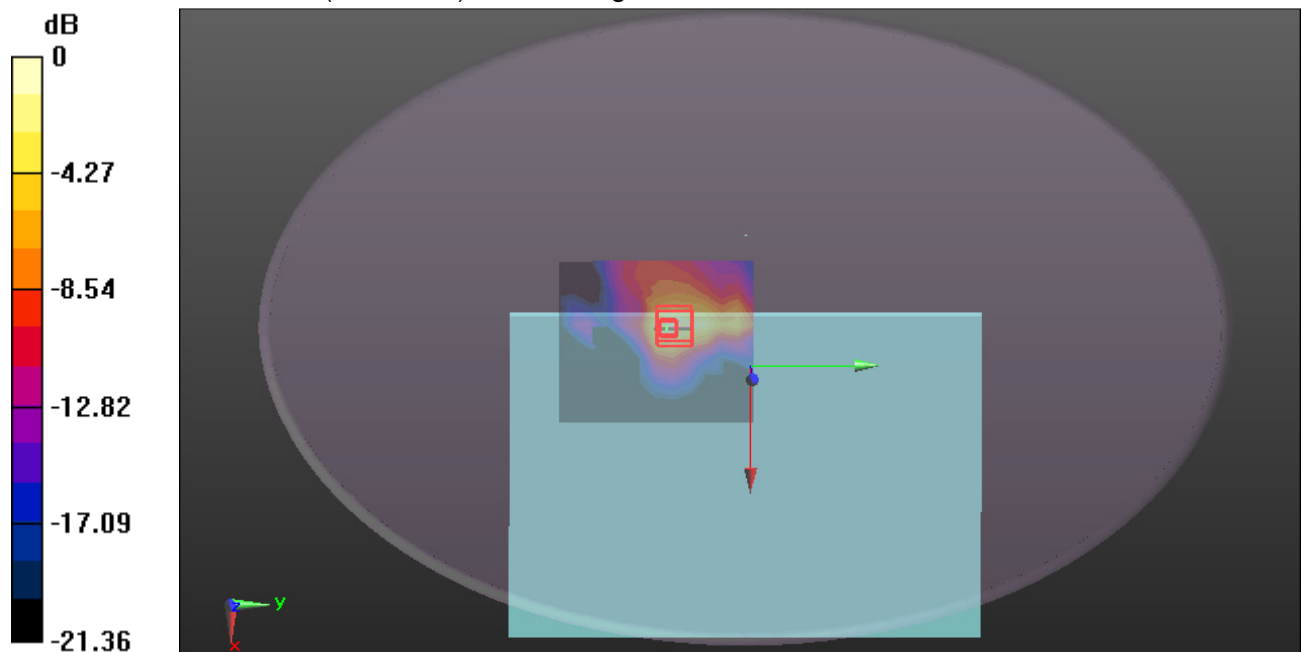
Reference Value = 6.815 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 2.31 W/kg

SAR(1 g) = 0.465 W/kg; SAR(10 g) = 0.158 W/kg

Maximum value of SAR (measured) = 1.17 W/kg

0 dB = 1.17 W/kg = 0.68 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH1 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.947 S/m; ε_r = 52.065; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Aux/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.522 W/kg
WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Aux/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.723 V/m; Power Drift = 0.11 dB
Peak SAR (extrapolated) = 0.811 W/kg
SAR(1 g) = 0.398 W/kg; SAR(10 g) = 0.177 W/kg
Maximum value of SAR (measured) = 0.586 W/kg
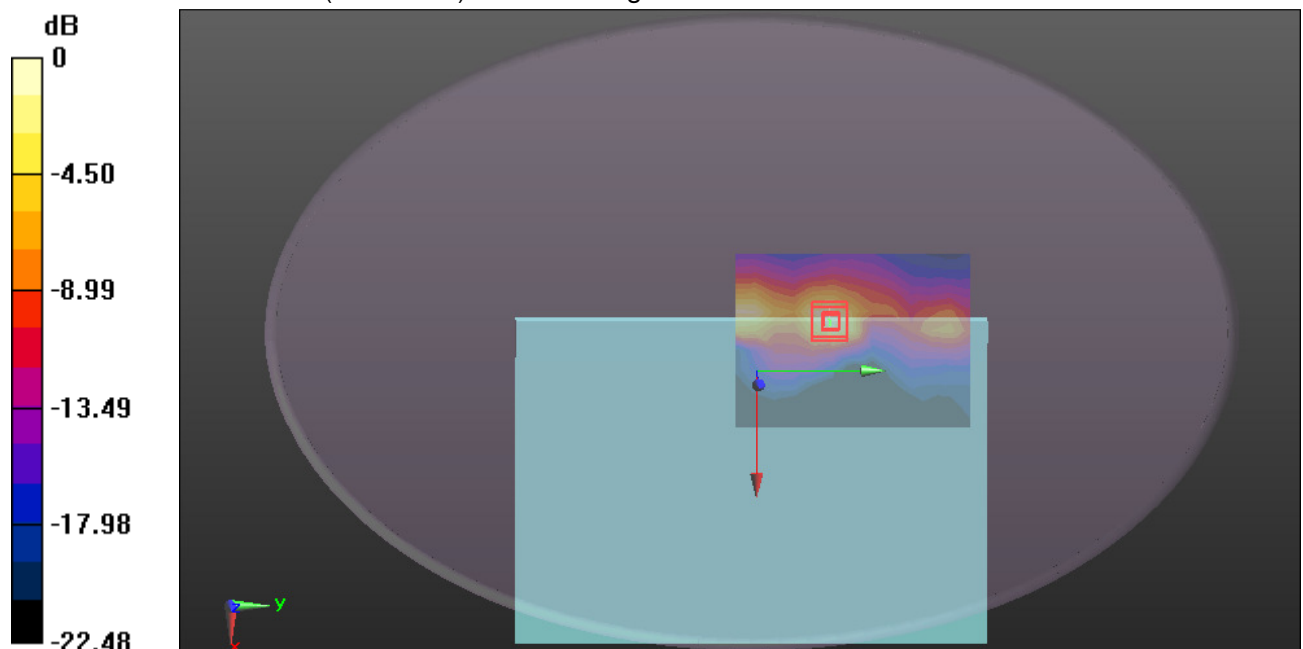
0 dB = 0.586 W/kg = -2.32 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH6 Aux Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.911 S/m; ε_r = 51.562; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Aux/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.487 W/kg

**WiFi 2.4GHz/IEEE802.11b Body Bottom CH6 Aux/Zoom Scan (7x7x5)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.26 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.732 W/kg

SAR(1 g) = 0.360 W/kg; SAR(10 g) = 0.162 W/kg

Maximum value of SAR (measured) = 0.524 W/kg
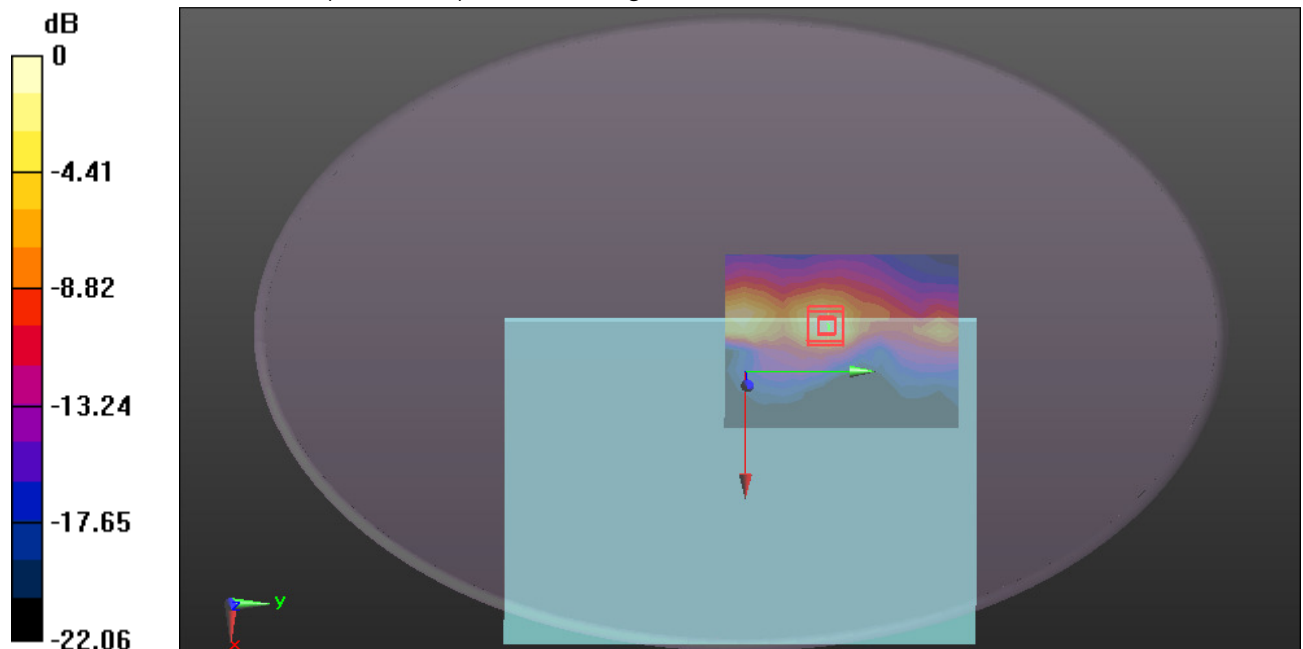
0 dB = 0.524 W/kg = -2.81 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH11 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.94 S/m; ε_r = 51.133; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Aux/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.360 W/kg

**WiFi 2.4GHz/IEEE802.11b Body Bottom CH11 Aux/Zoom Scan (7x7x5)/Cube 0:** Measurement grid: dx=5mm, dy=5mm, dz=5mm
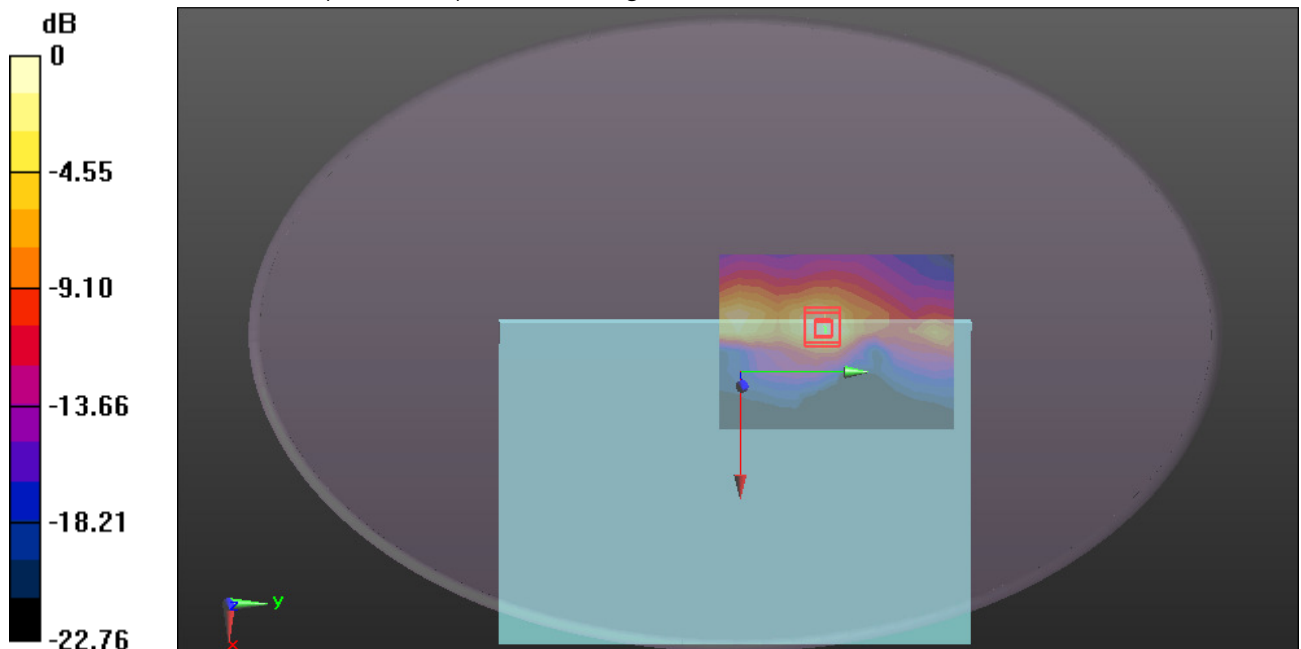
Reference Value = 10.46 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.508 W/kg

SAR(1 g) = 0.252 W/kg; SAR(10 g) = 0.116 W/kg

Maximum value of SAR (measured) = 0.368 W/kg

0 dB = 0.368 W/kg = -4.34 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH0 Aux Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 MHz; σ = 1.948 S/m; ε_r = 52.251; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH0 Aux Antenna/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.0284 W/kg

WiFi 2.4GHz/2.4G Body Bottom CH0 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement grid:
dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.062 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 0.0430 W/kg
SAR(1 g) = 0.014 W/kg; SAR(10 g) = 0.00677 W/kg
Maximum value of SAR (measured) = 0.0340 W/kg

0 dB = 0.0340 W/kg = -14.69 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH39 Aux Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.911 S/m; ε_r = 51.48; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH39 Aux Antenna/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0239 W/kg

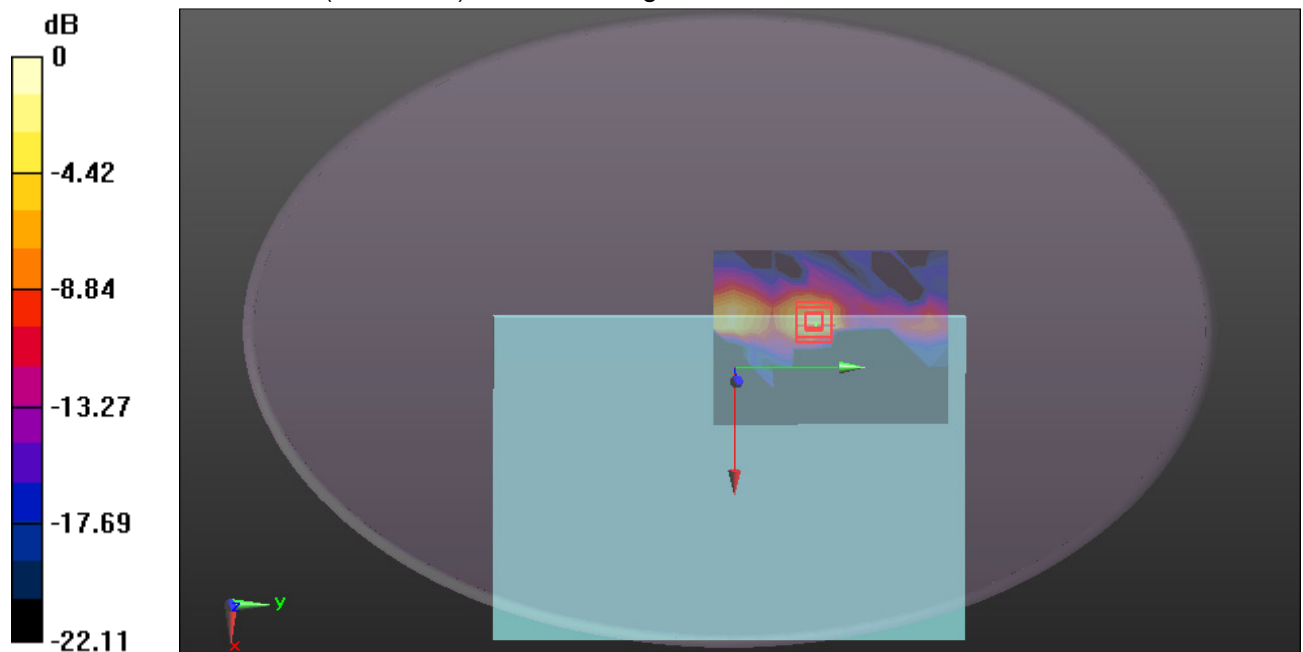**WiFi 2.4GHz/2.4G Body Bottom CH39 Aux Antenna/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.505 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 0.0340 W/kg

SAR(1 g) = 0.015 W/kg; SAR(10 g) = 0.00648 W/kg

Maximum value of SAR (measured) = 0.0250 W/kg

0 dB = 0.0250 W/kg = -16.02 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH78 Aux Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 (extrapolated): f = 2480 MHz; σ = 1.986 S/m; ε_r = 50.934; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH78 Aux Antenna/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0173 W/kg

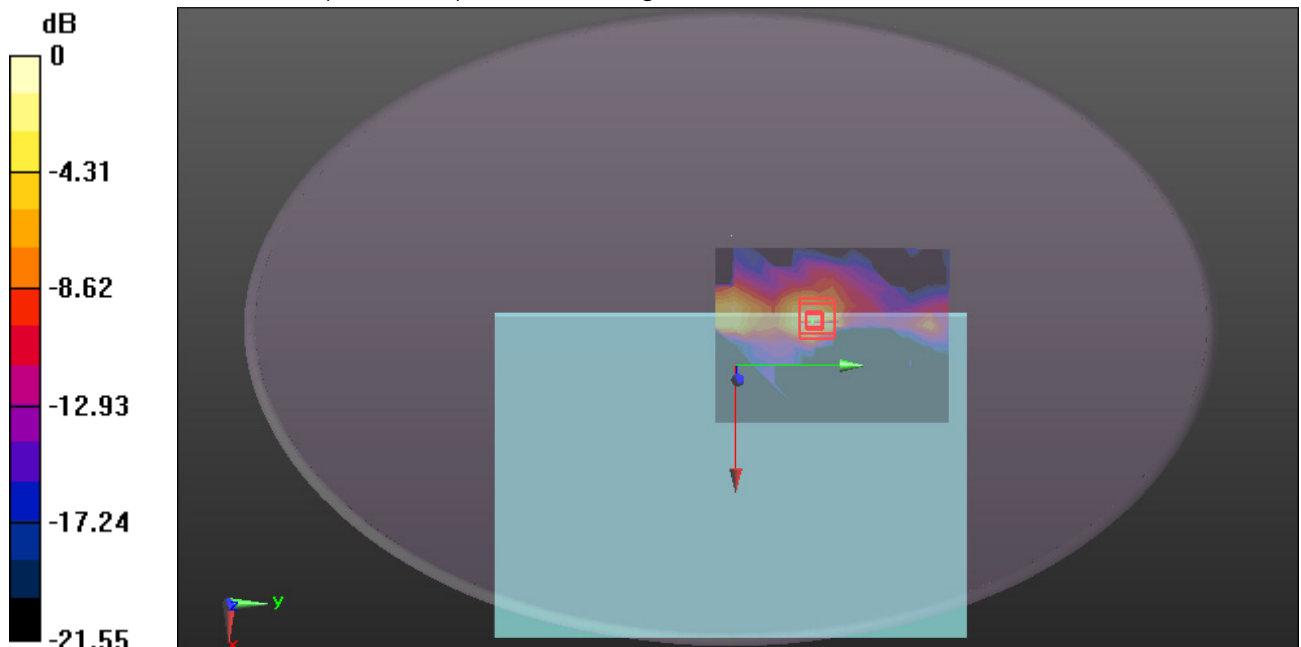**WiFi 2.4GHz/2.4G Body Bottom CH78 Aux Antenna/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
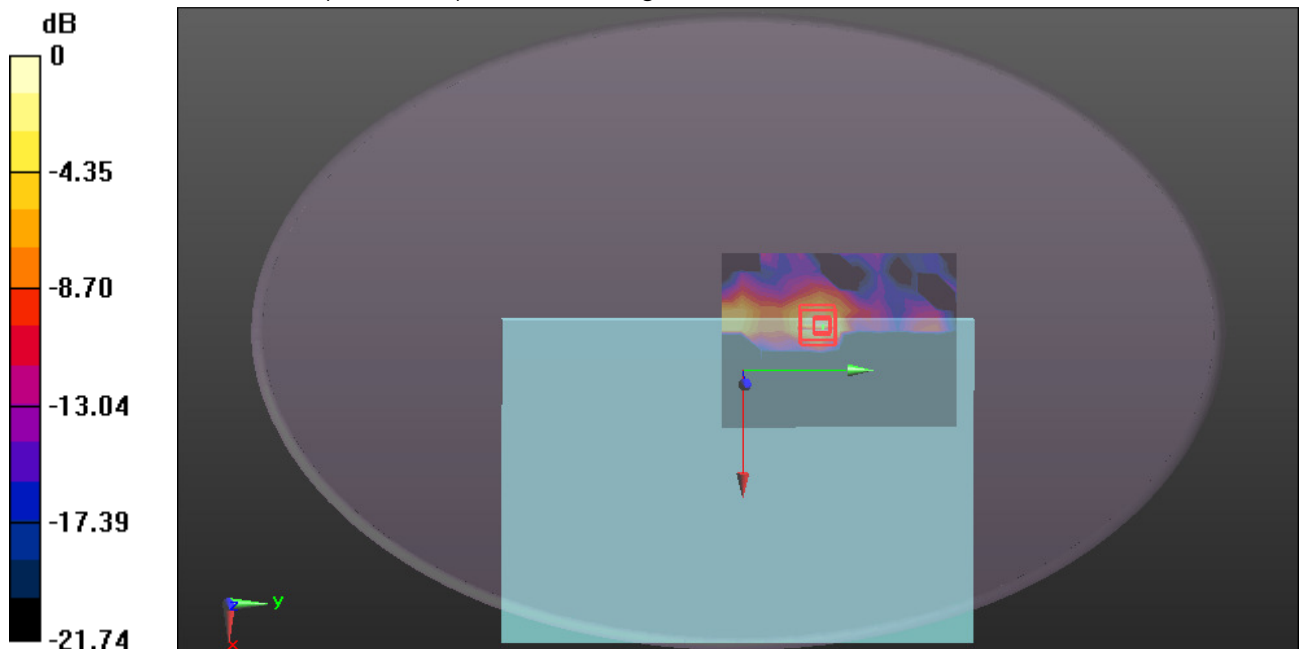
Reference Value = 1.846 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.0230 W/kg

SAR(1 g) = 0.011 W/kg; SAR(10 g) = 0.00477 W/kg

Maximum value of SAR (measured) = 0.0187 W/kg

0 dB = 0.0187 W/kg = -17.28 dBW/kg

Test Laboratory: Compliance Certification Services Inc. Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH52 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.395 S/m; ε_r = 49.159; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH52 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.04 W/kg
WIFI/IEEE802.11a Body Bottom CH52 Aux/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 2.648 V/m; Power Drift = 0.16 dB
Peak SAR (extrapolated) = 2.54 W/kg
SAR(1 g) = 0.585 W/kg; SAR(10 g) = 0.174 W/kg
Maximum value of SAR (measured) = 1.45 W/kg
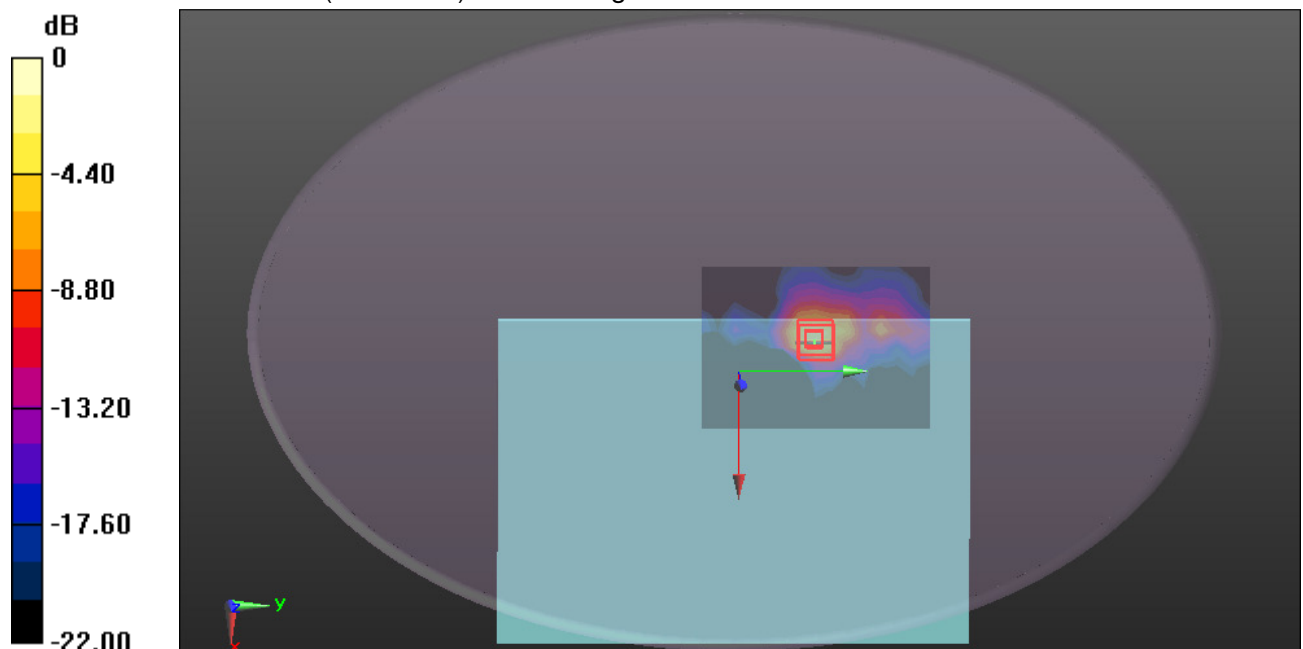
0 dB = 1.45 W/kg = 1.61 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH56 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.414 S/m; ε_r = 49.018; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH56 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.11 W/kg

**WIFI/IEEE802.11a Body Bottom CH56 Aux/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 3.409 V/m; Power Drift = -0.06 dB
Peak SAR (extrapolated) = 4.37 W/kg
SAR(1 g) = 1.04 W/kg; SAR(10 g) = 0.316 W/kg
Maximum value of SAR (measured) = 2.55 W/kg
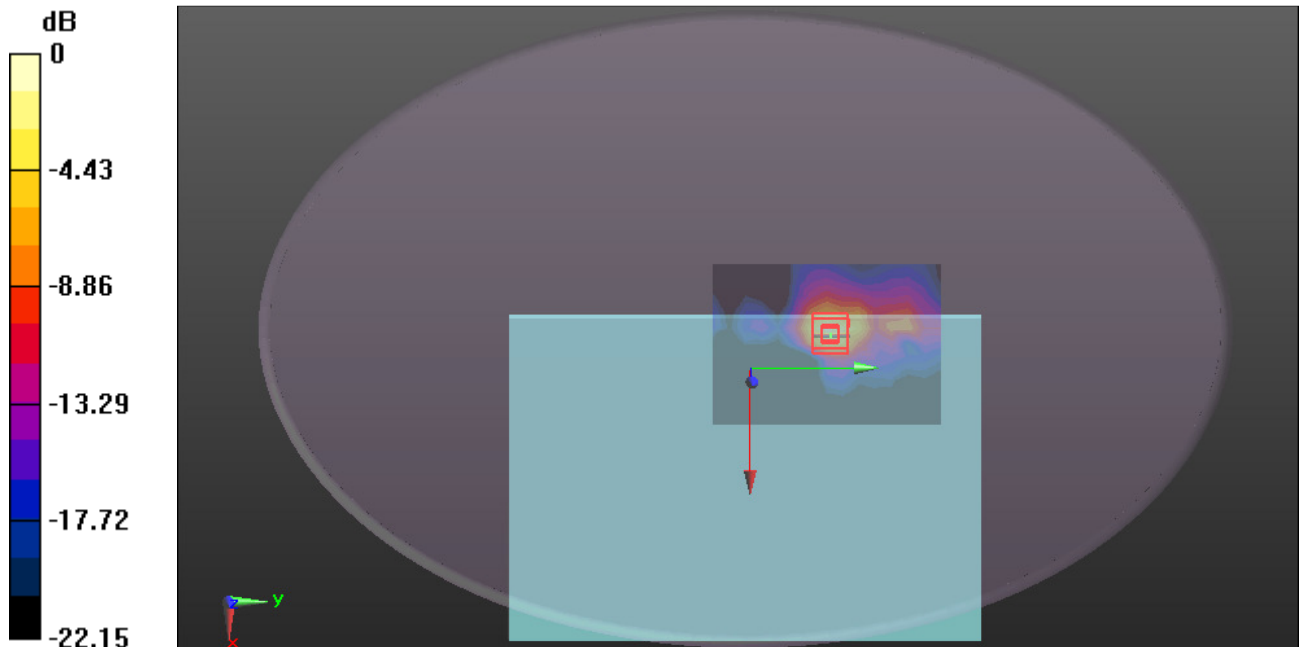
0 dB = 2.55 W/kg = 4.07 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH64 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.506 S/m; ε_r = 48.892; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.45 W/kg

**WIFI/IEEE802.11a Body Bottom CH64 Aux/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.307 V/m; Power Drift = 0.10 dB

Peak SAR (extrapolated) = 4.25 W/kg

SAR(1 g) = 0.974 W/kg; SAR(10 g) = 0.299 W/kg

Maximum value of SAR (measured) = 2.32 W/kg
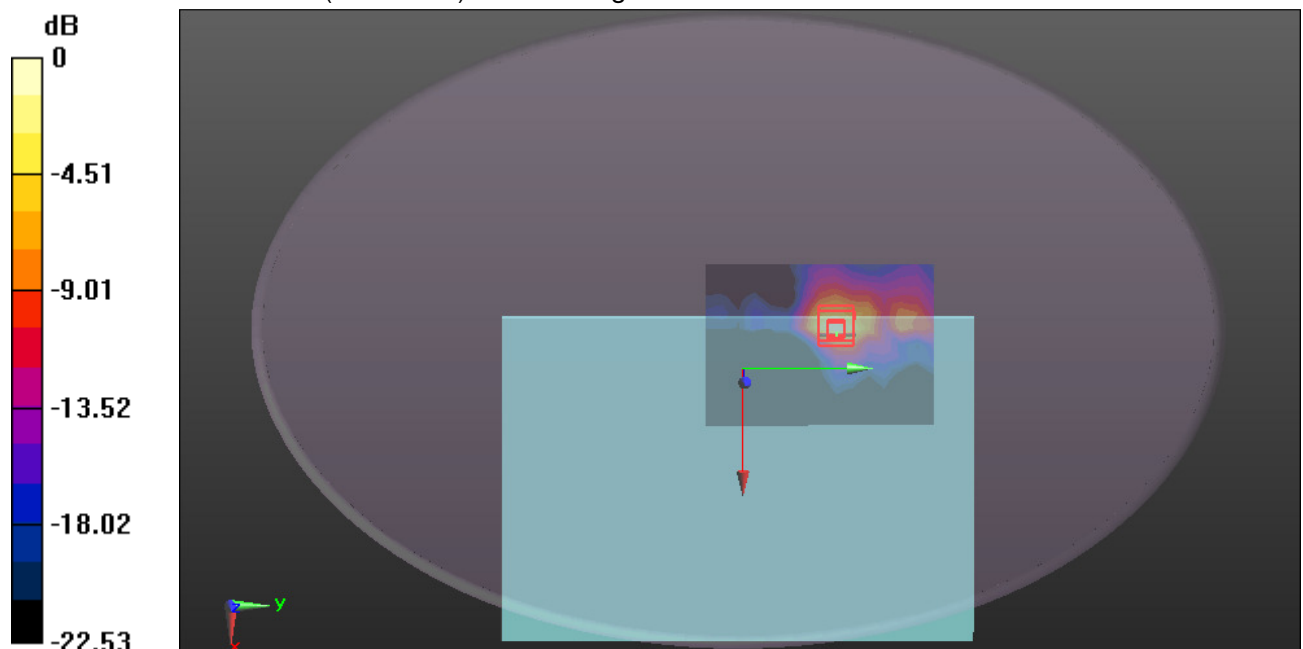
0 dB = 2.32 W/kg = 3.65 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH100 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.736 S/m; ε_r = 48.803; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH100 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm,
dy=10mm
Maximum value of SAR (measured) = 2.11 W/kg
WIFI/IEEE802.11a Body Bottom CH100 Aux/Zoom Scan (7x7x7)/Cube 0: Measurement grid:
dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 0.9750 V/m; Power Drift = -0.01 dB
Peak SAR (extrapolated) = 4.00 W/kg
SAR(1 g) = 0.928 W/kg; SAR(10 g) = 0.266 W/kg
Maximum value of SAR (measured) = 2.27 W/kg
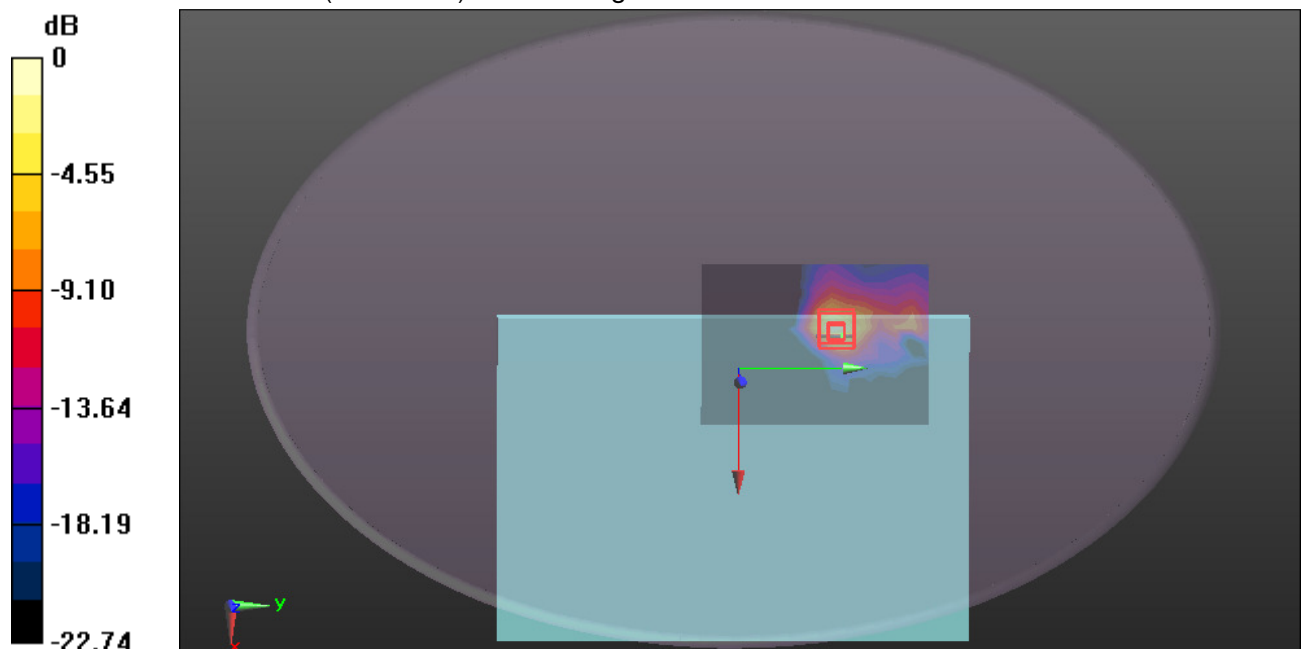
0 dB = 2.27 W/kg = 3.56 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH132 Aux Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III;
Frequency: 5660 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5660 MHz; σ = 5.919 S/m; ε_r = 48.381; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH132 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.68 W/kg

WIFI/IEEE802.11a Body Bottom CH132 Aux/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
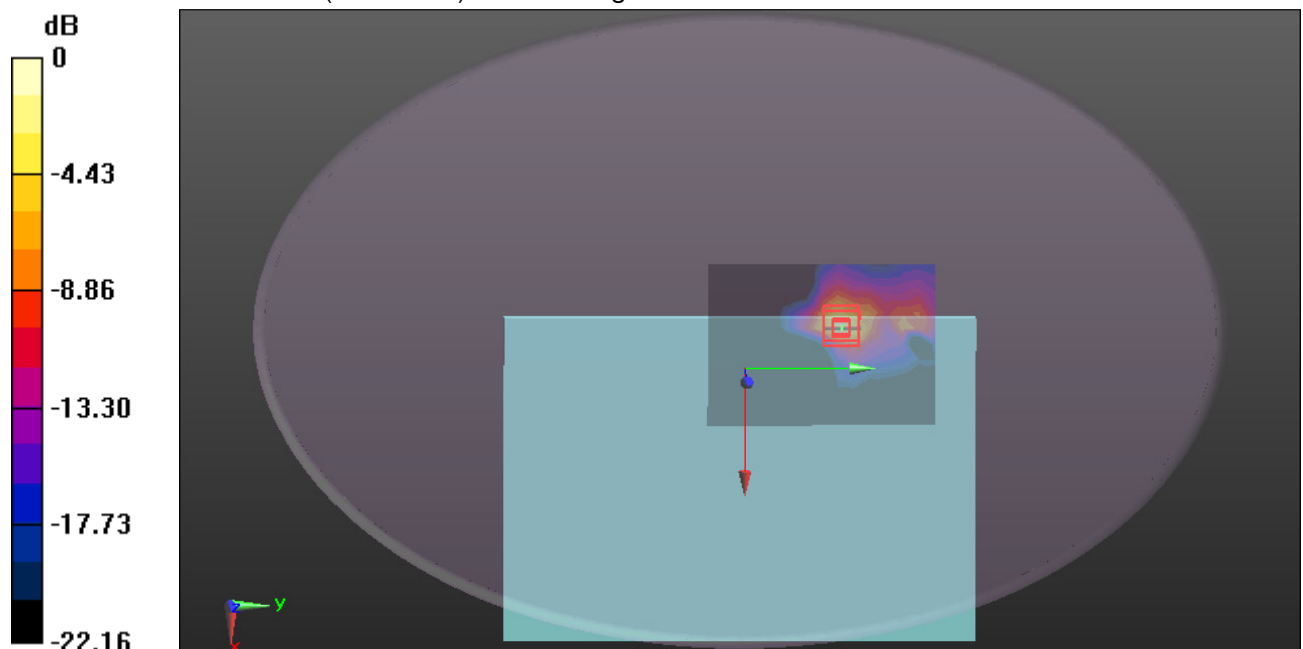
Reference Value = 1.547 V/m; Power Drift = -0.14 dB

Peak SAR (extrapolated) = 5.41 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.305 W/kg

Maximum value of SAR (measured) = 2.82 W/kg

0 dB = 2.82 W/kg = 4.50 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH144 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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; σ = 6.044 S/m; ε_r = 48.093; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH144 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 2.01 W/kg
WIFI/IEEE802.11a Body Bottom CH144 Aux/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
Reference Value = 1.689 V/m; Power Drift = -0.18 dB
Peak SAR (extrapolated) = 4.98 W/kg
SAR(1 g) = 1.05 W/kg; SAR(10 g) = 0.288 W/kg
Maximum value of SAR (measured) = 2.73 W/kg
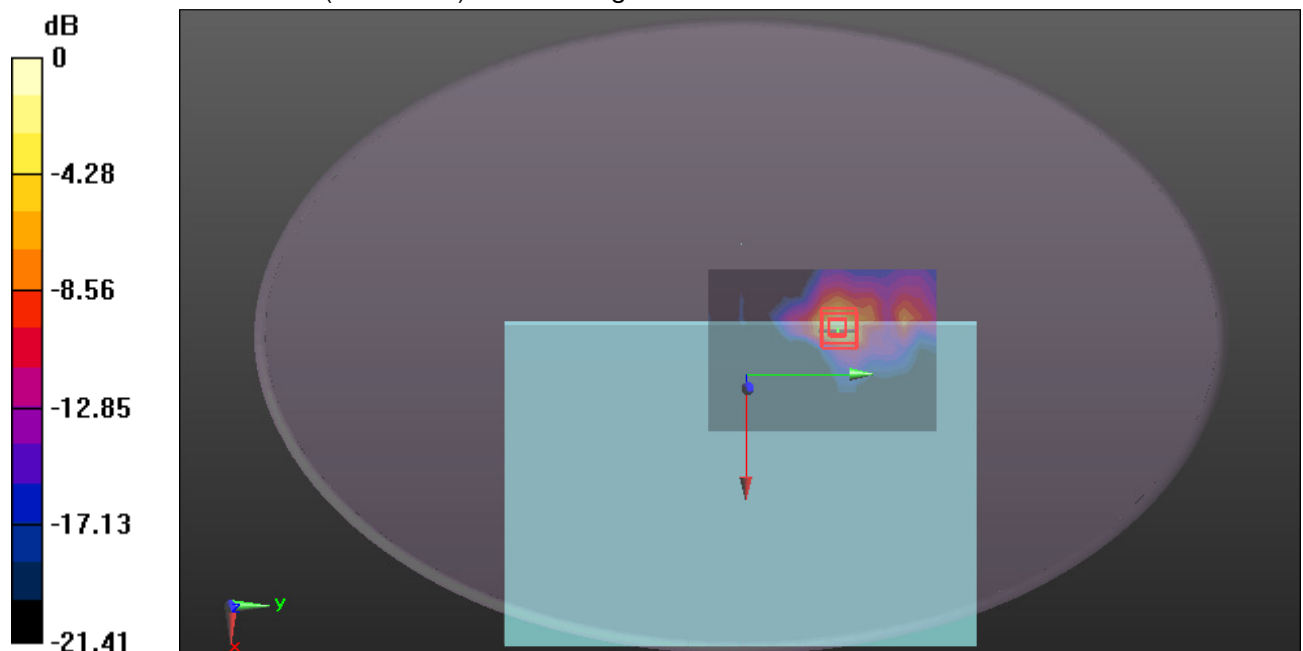
0 dB = 2.73 W/kg = 4.36 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

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

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.099 S/m; ε_r = 48.088; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm

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

WIFI/IEEE802.11a Body Bottom CH149 Aux/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 2.386 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 5.63 W/kg

SAR(1 g) = 1.1 W/kg; SAR(10 g) = 0.302 W/kg

Maximum value of SAR (measured) = 2.83 W/kg
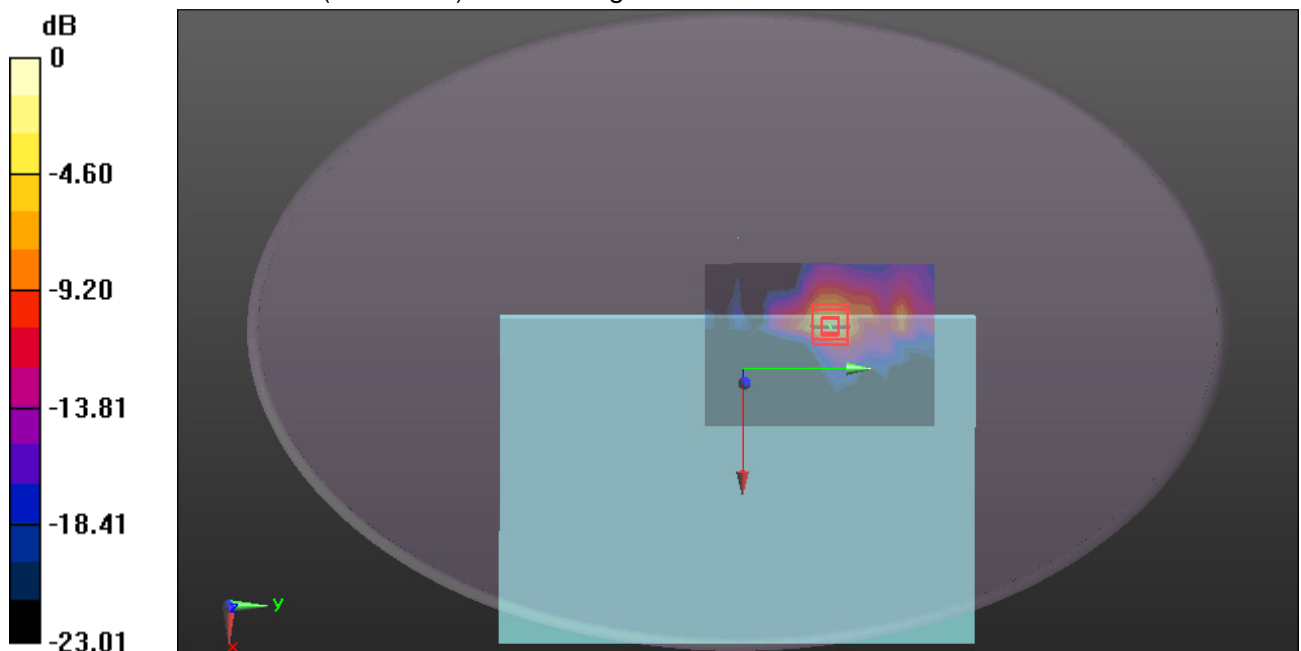
0 dB = 2.83 W/kg = 4.52 dBW/kg

Test Laboratory: Compliance Certification Services Inc.　　　　　Date: 6/21/2018

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

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.142 S/m; ε_r = 47.99; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH157 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm

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

WIFI/IEEE802.11a Body Bottom CH157 Aux/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.064 V/m; Power Drift = 0.16 dB

Peak SAR (extrapolated) = 5.06 W/kg

SAR(1 g) = 1.02 W/kg; SAR(10 g) = 0.277 W/kg

Maximum value of SAR (measured) = 2.72 W/kg
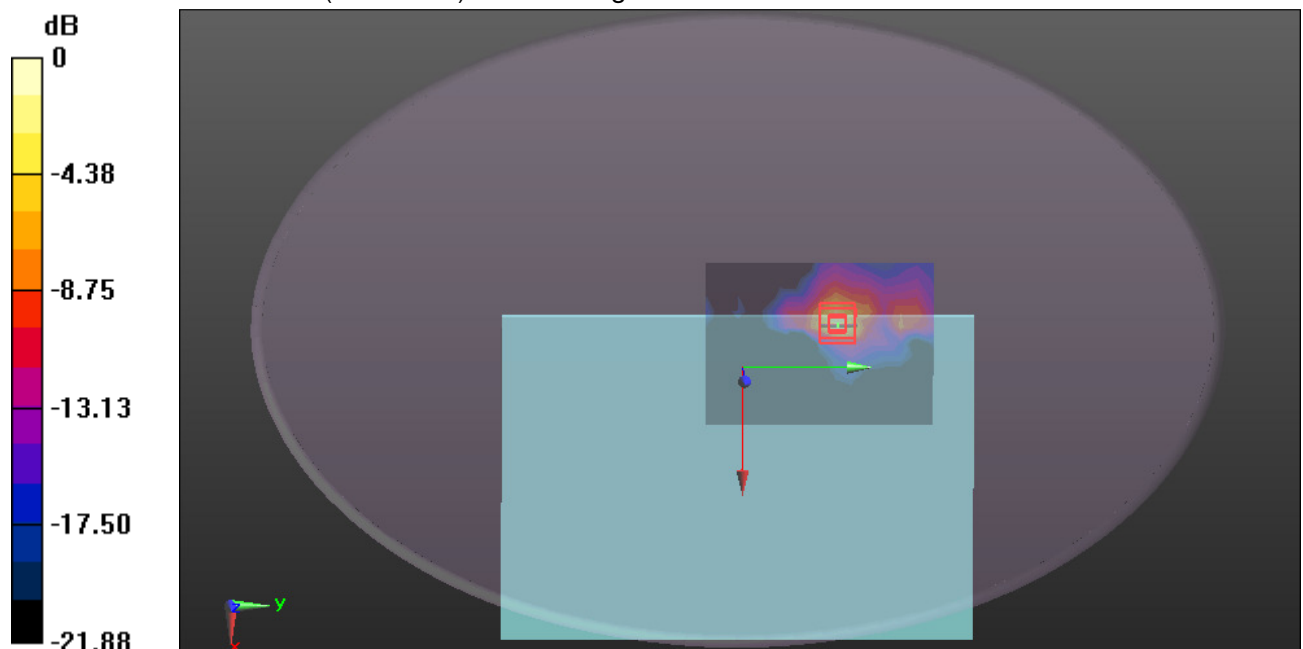
0 dB = 2.72 W/kg = 4.35 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH165 Aux Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.207 S/m; ε_r = 47.759; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH165 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm
Maximum value of SAR (measured) = 1.65 W/kg
**WIFI/IEEE802.11a Body Bottom CH165 Aux/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
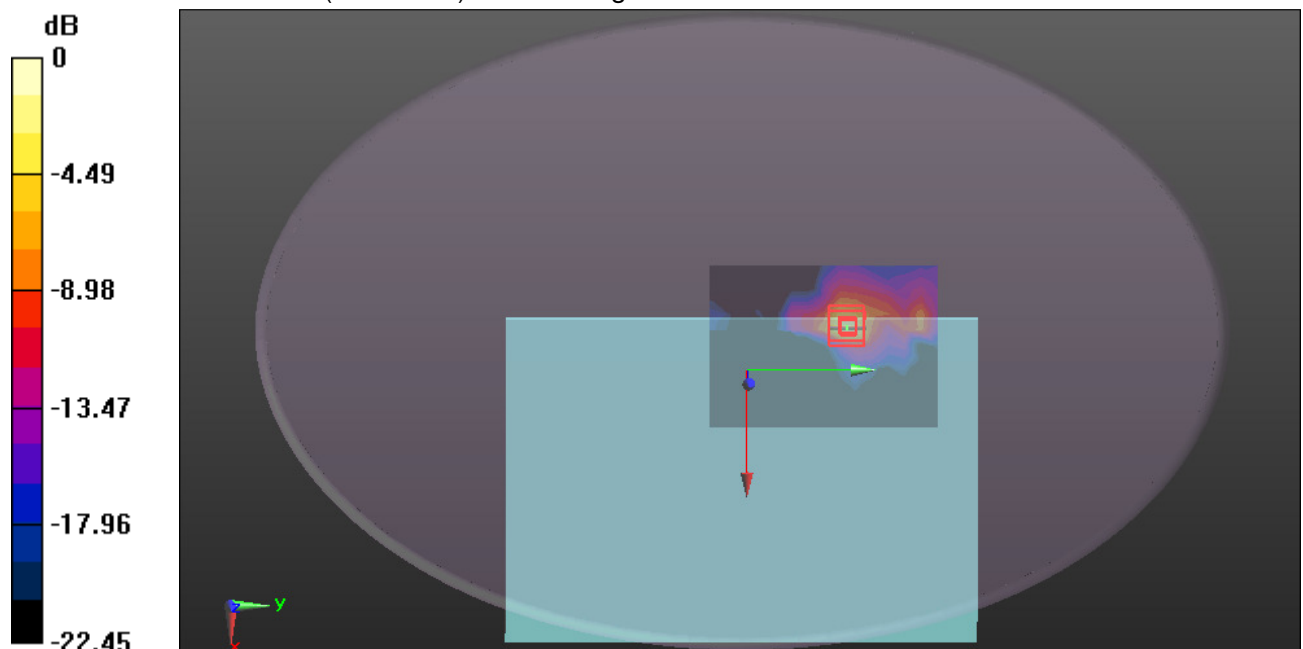Reference Value = 0.5110 V/m; Power Drift = 0.14 dB
Peak SAR (extrapolated) = 4.49 W/kg
SAR(1 g) = 0.880 W/kg; SAR(10 g) = 0.238 W/kg
Maximum value of SAR (measured) = 2.33 W/kg

0 dB = 2.33 W/kg = 3.67 dBW/kg

SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen Branch

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

2.4G-Body Bottom CH0 Aux Antenna for INPAQ Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 MHz; σ = 1.948 S/m; ε_r = 52.251; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH0 Aux Antenna/Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0213 W/kg

WiFi 2.4GHz/2.4G Body Bottom CH0 Aux Antenna/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
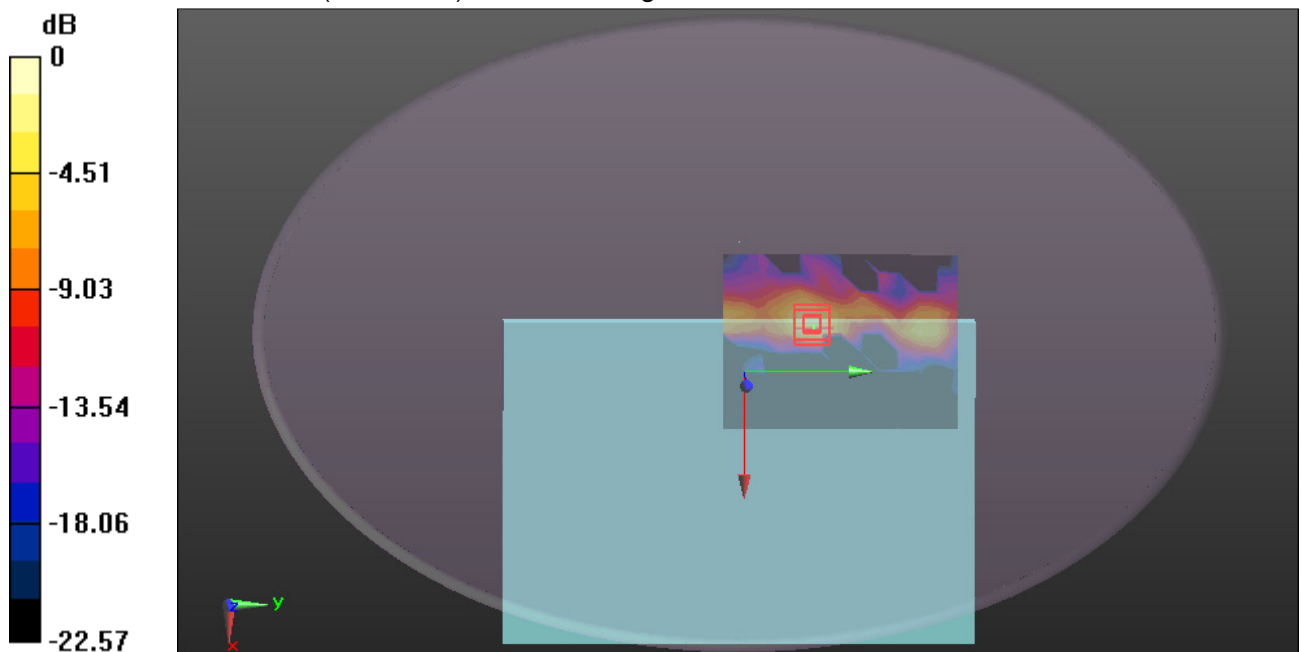
Reference Value = 0.9270 V/m; Power Drift = 0.02dB

Peak SAR (extrapolated) = 0.0360 W/kg

SAR(1 g) = 0.016 W/kg; SAR(10 g) = 0.00674 W/kg

Maximum value of SAR (measured) = 0.0272 W/kg

0 dB = 0.0272 W/kg = -15.65 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH1 Aux Antenna for INPAQ Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.947 S/m; ε_r = 52.065; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Aux/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.493 W/kg
WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Aux/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
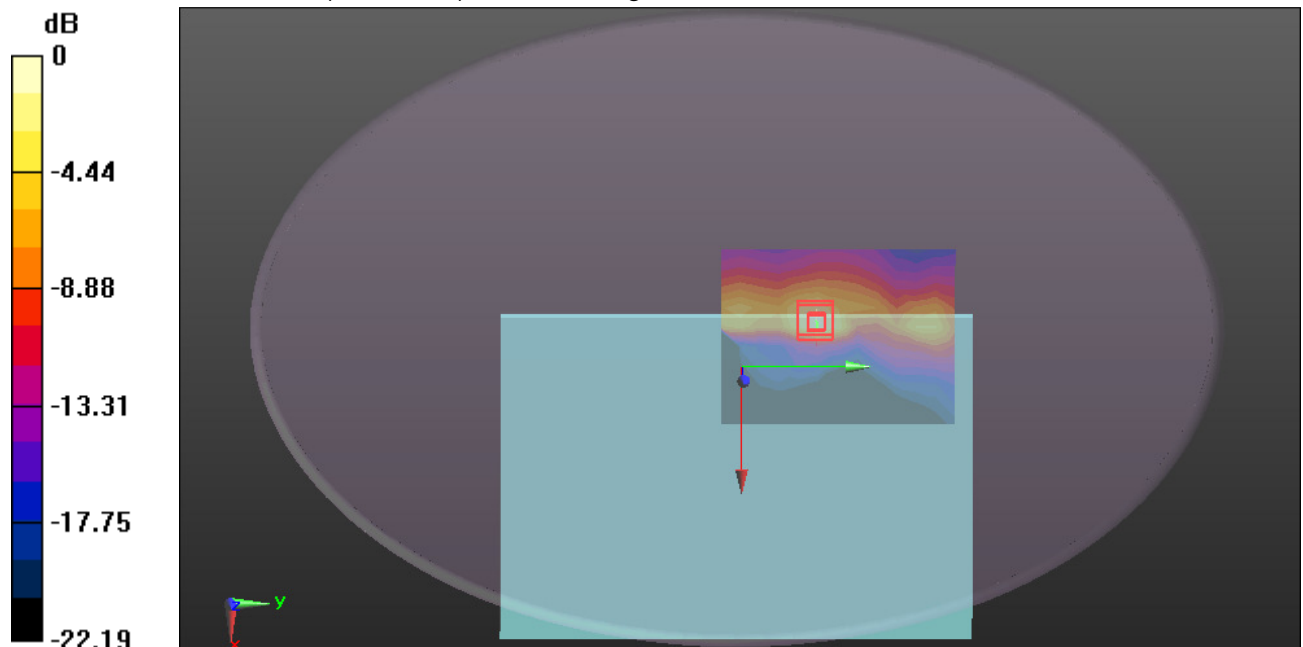dx=5mm, dy=5mm, dz=5mm
Reference Value = 9.260 V/m; Power Drift = 0.13 dB
Peak SAR (extrapolated) = 0.678 W/kg
SAR(1 g) = 0.318 W/kg; SAR(10 g) = 0.141 W/kg
Maximum value of SAR (measured) = 0.489 W/kg

0 dB = 0.489 W/kg = -3.11 dBW/kg

Test Laboratory: Compliance Certification Services Inc.　　　　Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH132 Aux Antenna for INPAQ Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III;
Frequency: 5660 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5660 MHz; σ = 5.919 S/m; ε_r = 48.381; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH132 Aux/Area Scan (11x15x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.84 W/kg

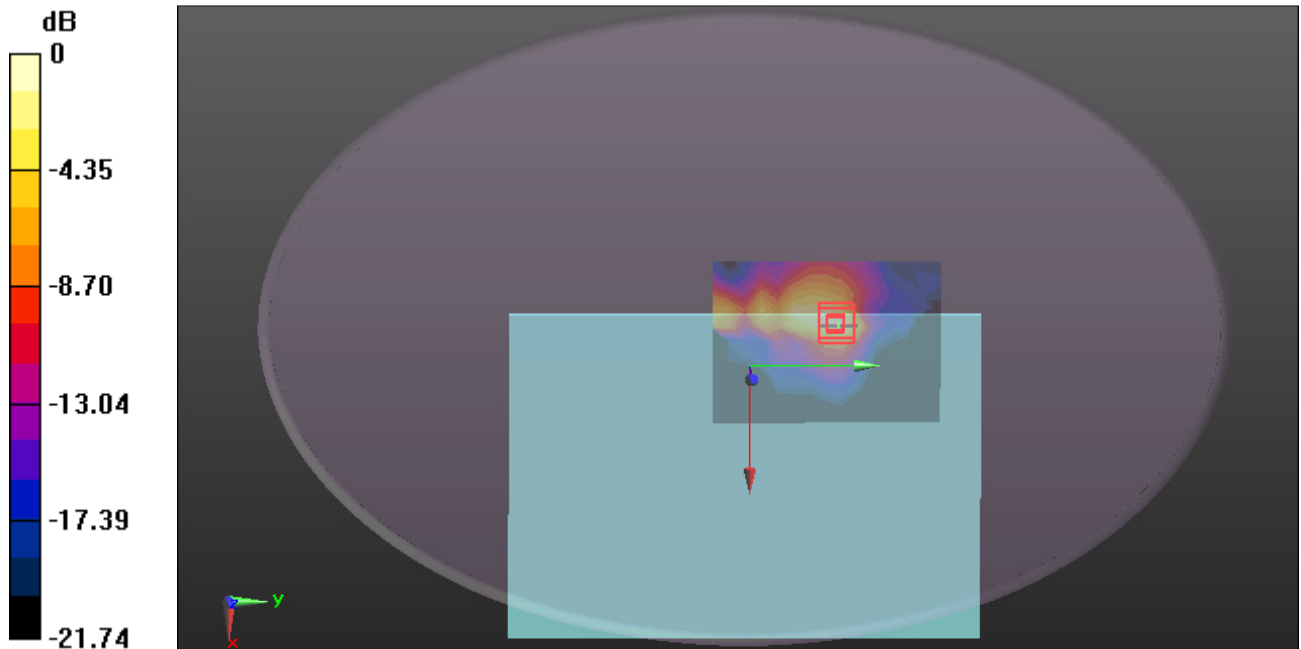**WIFI/IEEE802.11a Body Bottom CH132 Aux/Zoom Scan (7x7x7)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 4.097 V/m; Power Drift = 0.15 dB

Peak SAR (extrapolated) = 3.44 W/kg

SAR(1 g) = 0.743 W/kg; SAR(10 g) = 0.251 W/kg

Maximum value of SAR (measured) = 1.77 W/kg

0 dB = 1.77 W/kg = 2.48 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

2.4G-Body Bottom CH0 Main Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 MHz; σ = 1.948 S/m; ε_r = 52.251; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WiFi 2.4GHz/2.4G Body Bottom CH0 Main /Area Scan (10x13x1): Measurement grid: dx=12mm, dy=12mm

Maximum value of SAR (measured) = 0.0123 W/kg

WiFi 2.4GHz/2.4G Body Bottom CH0 Main /Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
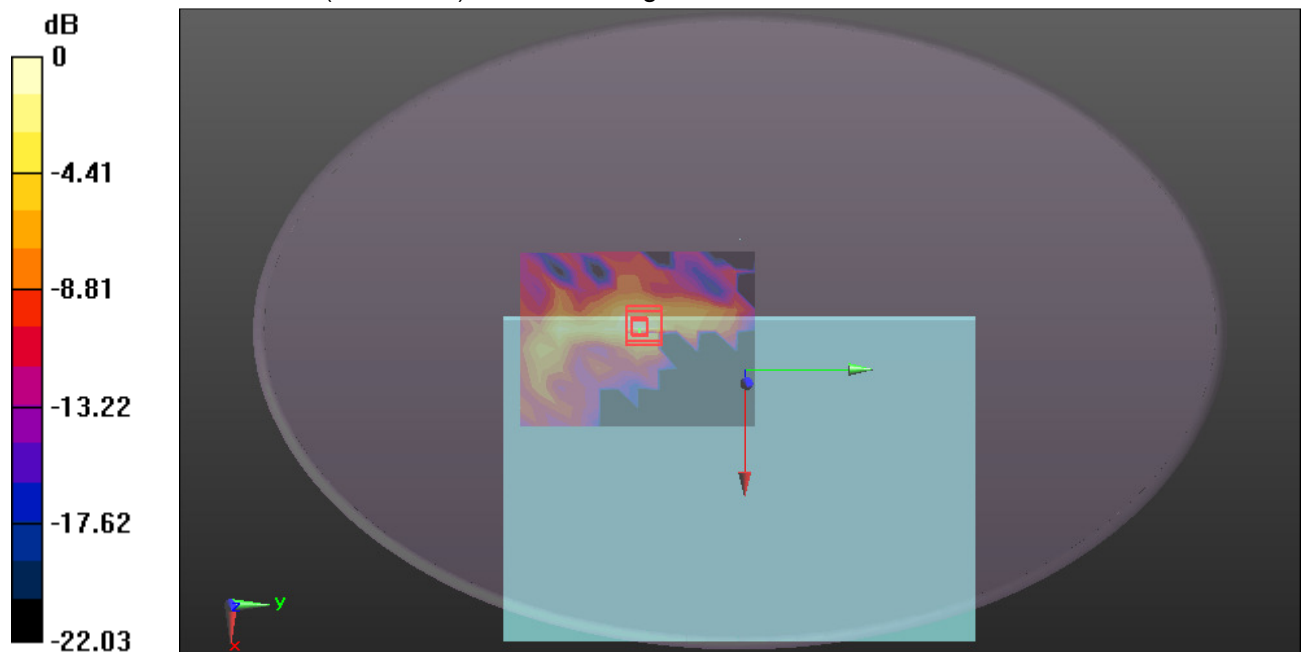
Reference Value = 0.6730 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.0150 W/kg

SAR(1 g) = 0.00715 W/kg; SAR(10 g) = 0.00306 W/kg

Maximum value of SAR (measured) = 0.0120 W/kg

0 dB = 0.0120 W/kg = -19.21 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/20/2018

WIFI 802.11 b-Body Bottom CH1 Main Antenna for South Star Antenna
DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 1.947 S/m; ε_r = 52.065; 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 - SN3798; ConvF(7.32, 7.32, 7.32); Calibrated: 7/26/2017;
- Sensor-Surface: 1.4mm (Mechanical Surface Detection), Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/20/2017
- 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 Main/Area Scan (10x13x1): Measurement grid:
dx=12mm, dy=12mm
Maximum value of SAR (measured) = 0.393 W/kg
WiFi 2.4GHz/IEEE802.11b Body Bottom CH1 Main/Zoom Scan (7x7x5)/Cube 0: Measurement grid:
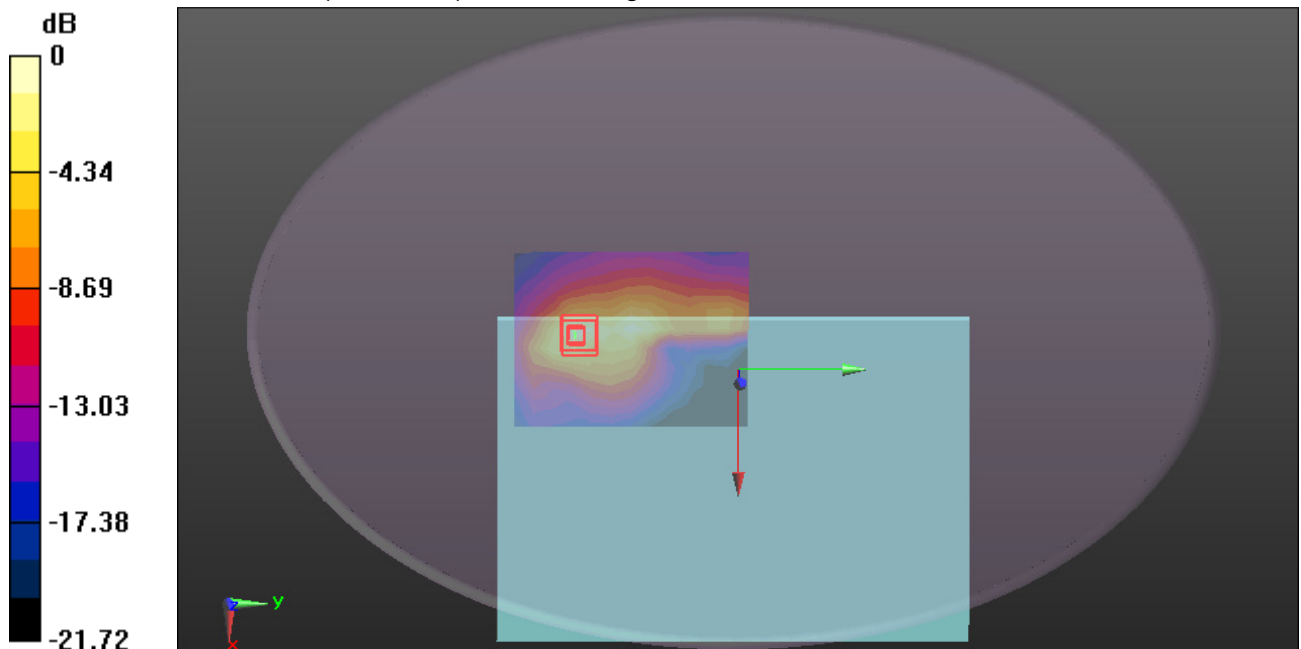dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.123 V/m; Power Drift = -0.03 dB
Peak SAR (extrapolated) = 0.529 W/kg
SAR(1 g) = 0.246 W/kg; SAR(10 g) = 0.110 W/kg
Maximum value of SAR (measured) = 0.368 W/kg

0 dB = 0.368 W/kg = -4.34 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH64 Main Antenna for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.506 S/m; ε_r = 48.892; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH64 Main/Area Scan (11x13x1): Measurement grid: dx=10mm, dy=10mm

Maximum value of SAR (measured) = 1.03 W/kg

WIFI/IEEE802.11a Body Bottom CH64 Main/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=1.4mm
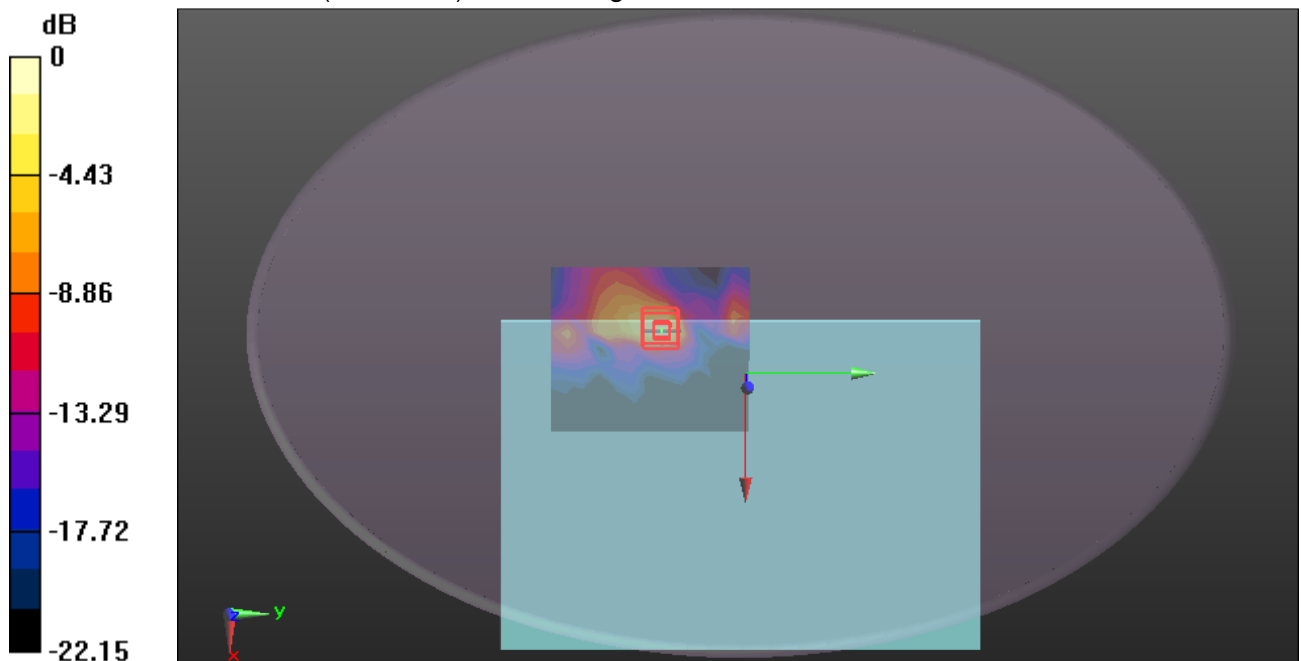
Reference Value = 4.122 V/m; Power Drift = 0.19 dB

Peak SAR (extrapolated) = 1.94 W/kg

SAR(1 g) = 0.460 W/kg; SAR(10 g) = 0.139 W/kg

Maximum value of SAR (measured) = 1.10 W/kg

0 dB = 1.10 W/kg = 0.41 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH56 Aux Antenna repeat for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 5.414 S/m; ε_r = 49.018; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH56 Aux repeat/Area Scan (11x15x1): Measurement grid:
dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.40 W/kg

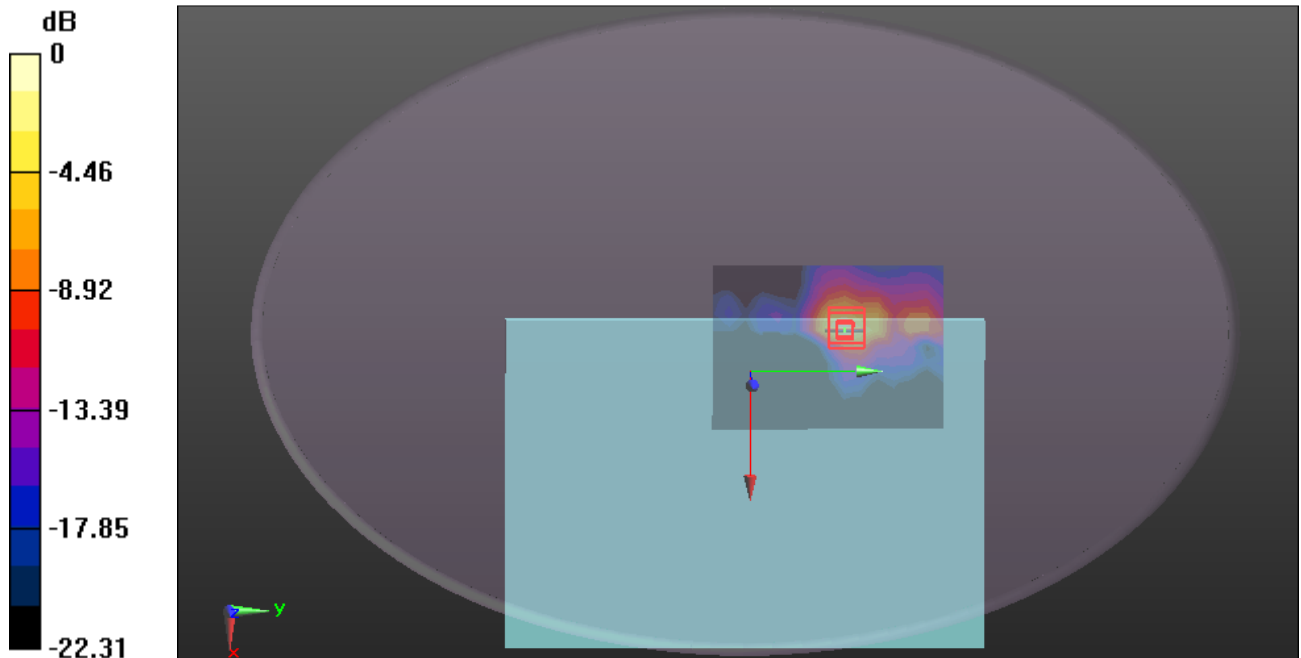**WIFI/IEEE802.11a Body Bottom CH56 Aux1 repeat/Zoom Scan (7x7x7)/Cube 0:** Measurement
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.371 V/m; Power Drift = 0.14 dB

Peak SAR (extrapolated) = 4.14 W/kg

SAR(1 g) = 0.979 W/kg; SAR(10 g) = 0.302 W/kg

Maximum value of SAR (measured) = 2.29 W/kg

0 dB = 2.29 W/kg = 3.60 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

WIFI 802.11 a-Body Bottom CH132 Aux Antenna repeat for South Star Antenna

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; Serial: N/A

Communication System: UID 0, IEEE 802.11 a (0); Communication System Band: 5G Band III;
Frequency: 5660 MHz;Duty Cycle: 1:1

Medium parameters used: f = 5660 MHz; σ = 5.919 S/m; ε_r = 48.381; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH132 Aux repeat/Area Scan (11x15x1): Measurement grid:
dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.75 W/kg

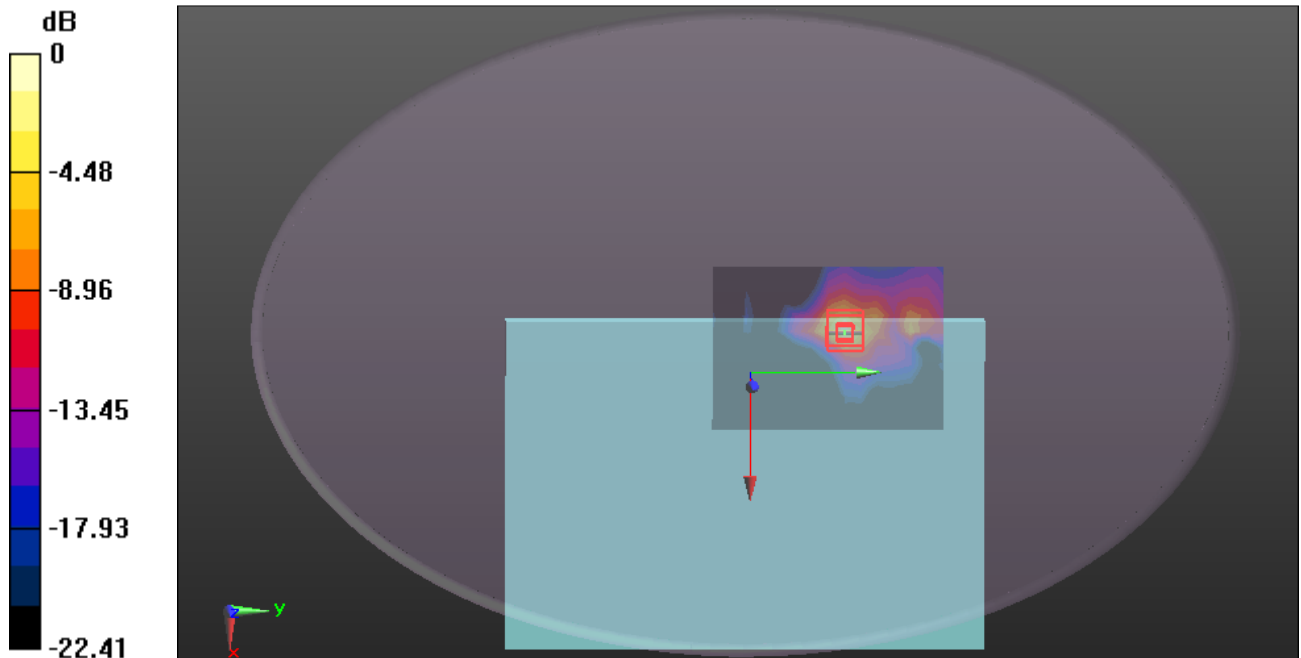**WIFI/IEEE802.11a Body Bottom CH132 Aux repeat/Zoom Scan (7x7x7)/Cube 0:** Measurement
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.956 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 5.07 W/kg

SAR(1 g) = 1.07 W/kg; SAR(10 g) = 0.301 W/kg

Maximum value of SAR (measured) = 2.71 W/kg

0 dB = 2.71 W/kg = 4.33 dBW/kg

Test Laboratory: Compliance Certification Services Inc.   Date: 6/21/2018

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

DUT: Notebook Computer; Type: Lenovo ideapad 130S-11IGM; 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 = 6.099 S/m; ε_r = 48.088; 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 - 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:xxxx
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

WIFI/IEEE802.11a Body Bottom CH149 Aux repeat/Area Scan (11x15x1): Measurement grid:
dx=10mm, dy=10mm

Maximum value of SAR (measured) = 2.36 W/kg

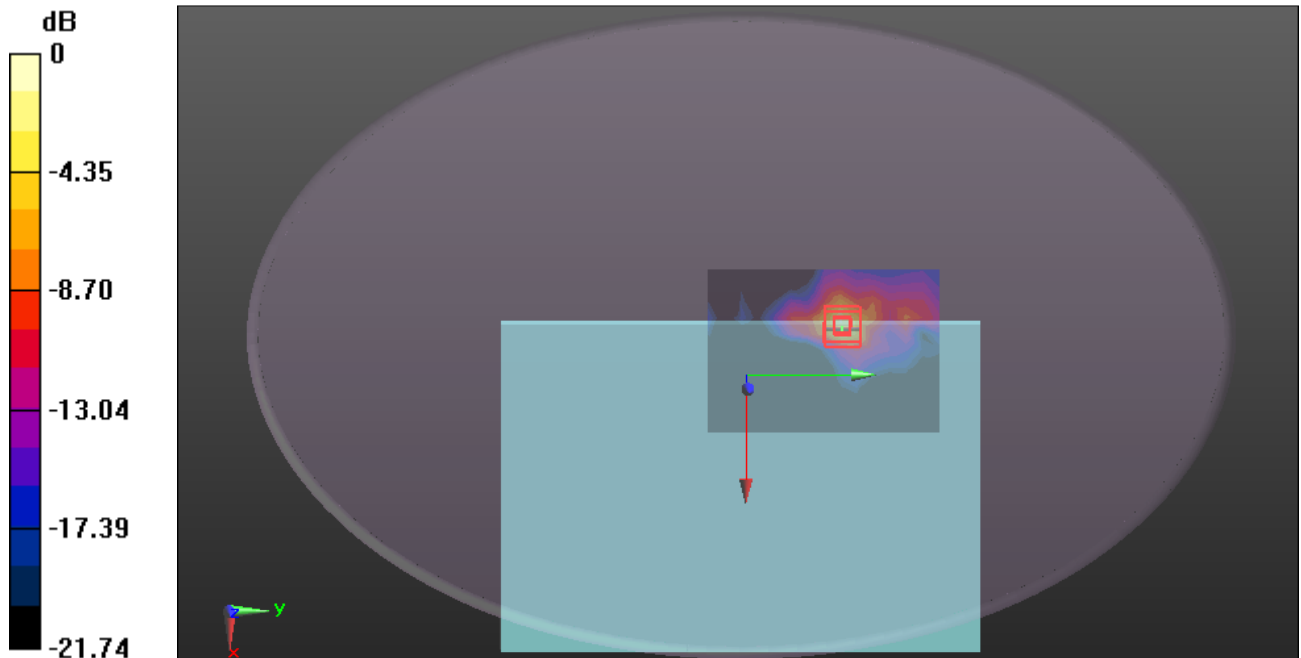**WIFI/IEEE802.11a Body Bottom CH149 Aux repeat/Zoom Scan (7x7x7)/Cube 0:** Measurement
grid: dx=4mm, dy=4mm, dz=1.4mm

Reference Value = 1.081 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 5.36 W/kg

SAR(1 g) = 1.13 W/kg; SAR(10 g) = 0.309 W/kg

Maximum value of SAR (measured) = 2.95 W/kg

0 dB = 2.95 W/kg = 4.70 dBW/kg