



Compliance Certification Services Inc.

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Test Laboratory: Compliance Certification Services Inc.

Date: 2/6/2015

2.4G GFSK-Body Horizontal Up High CH18**DUT: USB Receiver; Type: ULM200D; Serial: N/A**

Communication System: UID 0, GFSK (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2474 MHz; Duty Cycle: 1:1

Medium parameters used (extrapolated): $f = 2474$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.849$; $\rho = 1000$ 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(6.82, 6.82, 6.82); Calibrated: 7/28/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/22/2014
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

GFSK 2.4G/Up High CH18/Area Scan (13x8x1): Measurement grid: dx=10mm, dy=10mm[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.761 W/kg

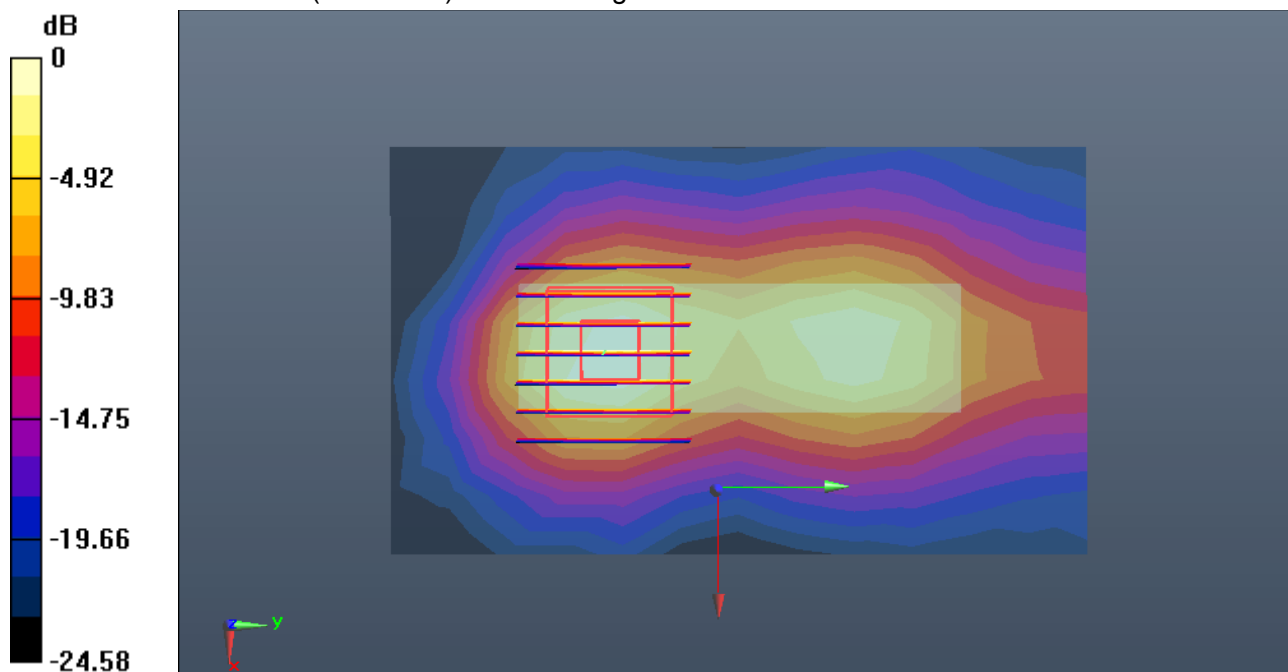
GFSK 2.4G/Up High CH18/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.62 V/m; Power Drift = 0.01 dB

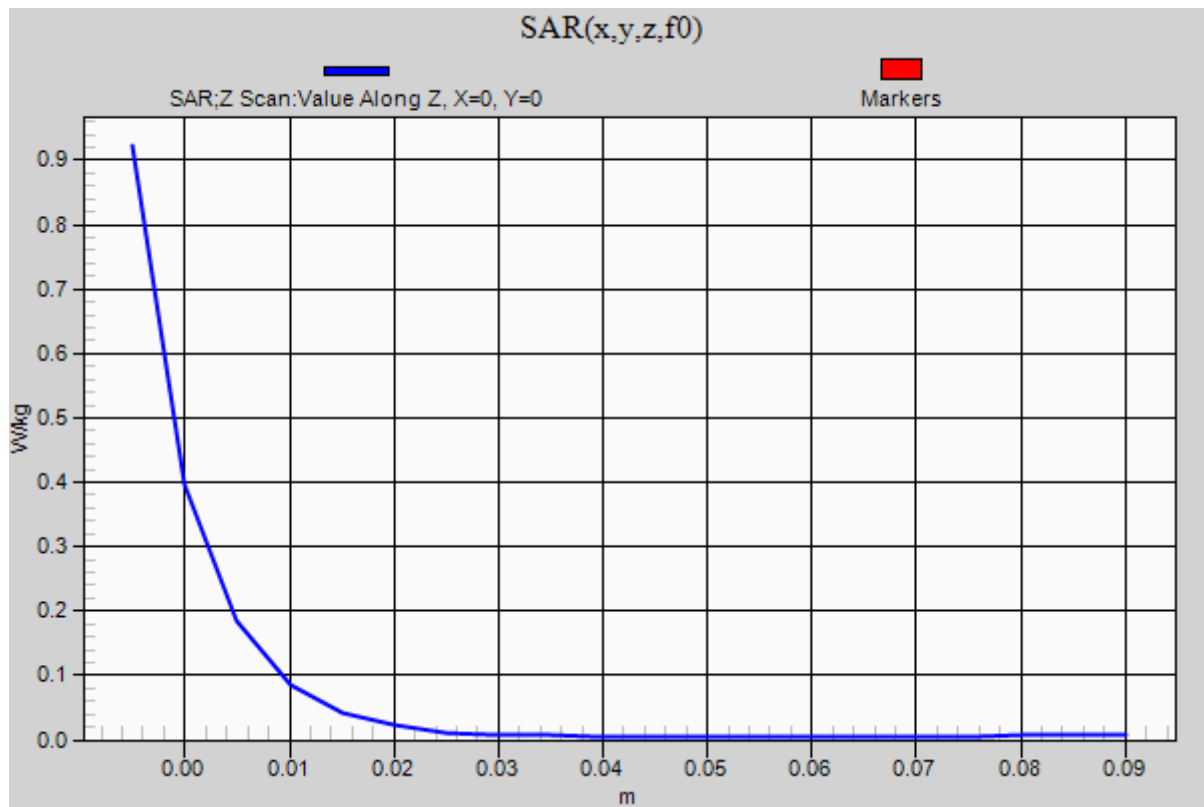
Peak SAR (extrapolated) = 1.29 W/kg

SAR(1 g) = 0.572 W/kg; SAR(10 g) = 0.246 W/kg[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.903 W/kg



0 dB = 0.903 W/kg = -0.44 dBW/kg





Test Laboratory: Compliance Certification Services Inc.

Date: 2/6/2015

2.4G GFSK-Body Horizontal Down High CH18**DUT: USB Receiver; Type: ULM200D; Serial: N/A**

Communication System: UID 0, GFSK (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2474 MHz; Duty Cycle: 1:1

Medium parameters used (extrapolated): $f = 2474$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.849$; $\rho = 1000$ 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(6.82, 6.82, 6.82); Calibrated: 7/28/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/22/2014
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

GFSK 2.4G/Down High CH18/Area Scan (13x8x1): Measurement grid: dx=10mm, dy=10mm[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.698 W/kg

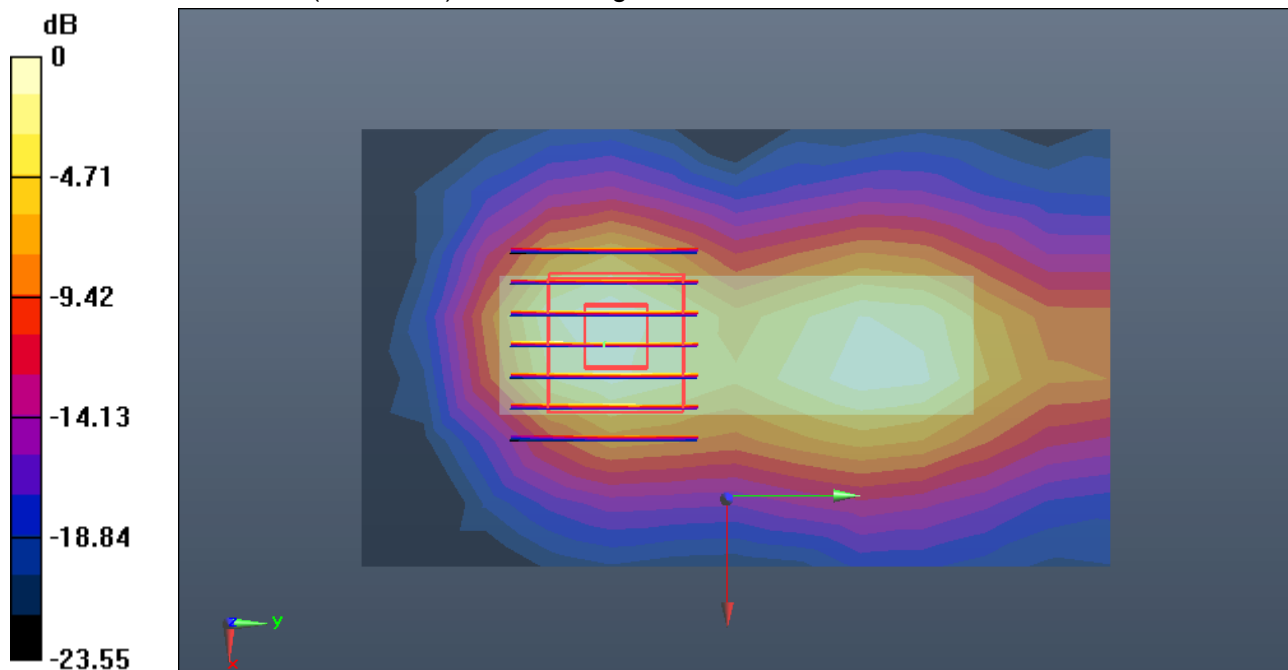
GFSK 2.4G/Down High CH18/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.46 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 1.05 W/kg

SAR(1 g) = 0.460 W/kg; SAR(10 g) = 0.202 W/kg[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.698 W/kg



0 dB = 0.698 W/kg = -1.56 dBW/kg



Test Laboratory: Compliance Certification Services Inc.

Date: 2/6/2015

2.4G GFSK-Body Vertical Front High CH18**DUT: USB Receiver; Type: ULM200D; Serial: N/A**

Communication System: UID 0, GFSK (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2474 MHz; Duty Cycle: 1:1

Medium parameters used (extrapolated): $f = 2474$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.849$; $\rho = 1000$ 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(6.82, 6.82, 6.82); Calibrated: 7/28/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/22/2014
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

GFSK 2.4G/Front High CH18/Area Scan (13x8x1): Measurement grid: dx=10mm, dy=10mm[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.375 W/kg

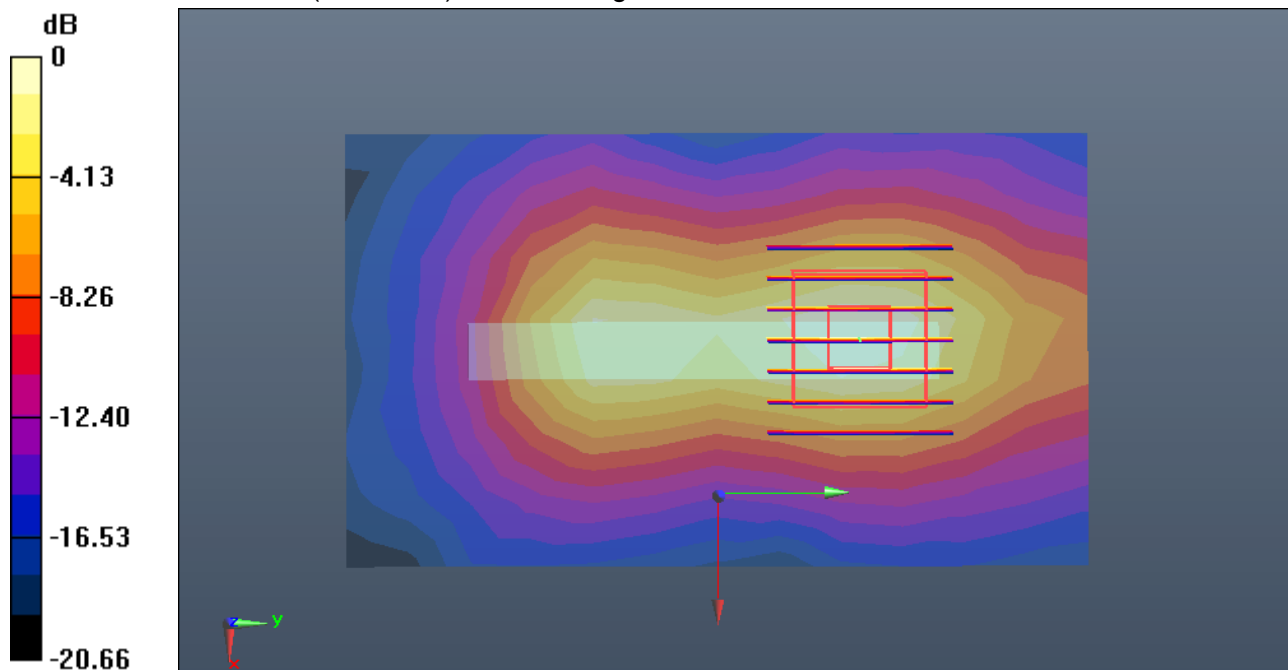
GFSK 2.4G/Front High CH18/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.63 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.546 W/kg

SAR(1 g) = 0.266 W/kg; SAR(10 g) = 0.128 W/kg[Info: Extrapolated medium parameters used for SAR evaluation.](#)

Maximum value of SAR (measured) = 0.400 W/kg



0 dB = 0.400 W/kg = -3.98 dBW/kg



Test Laboratory: Compliance Certification Services Inc.

Date: 2/6/2015

2.4G GFSK-Body Vertical Back High CH18

DUT: USB Receiver; Type: ULM200D; Serial: N/A

Communication System: UID 0, GFSK (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2474 MHz; Duty Cycle: 1:1

Medium parameters used (extrapolated): $f = 2474$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.849$; $\rho = 1000$ kg/m³

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

Phantom section: Flat Section

Measurement Standard: DASYS5 (IEEE/IEC/ANSI C63.19-2007)

DASY Configuration:

- Probe: EX3DV4 - SN3798; ConvF(6.82, 6.82, 6.82); Calibrated: 7/28/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/22/2014
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASYS5 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

GFSK 2.4G/Back High CH18/Area Scan (13x8x1): Measurement grid: dx=10mm, dy=10mm

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

Maximum value of SAR (measured) = 0.363 W/kg

GFSK 2.4G/Back High CH18/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

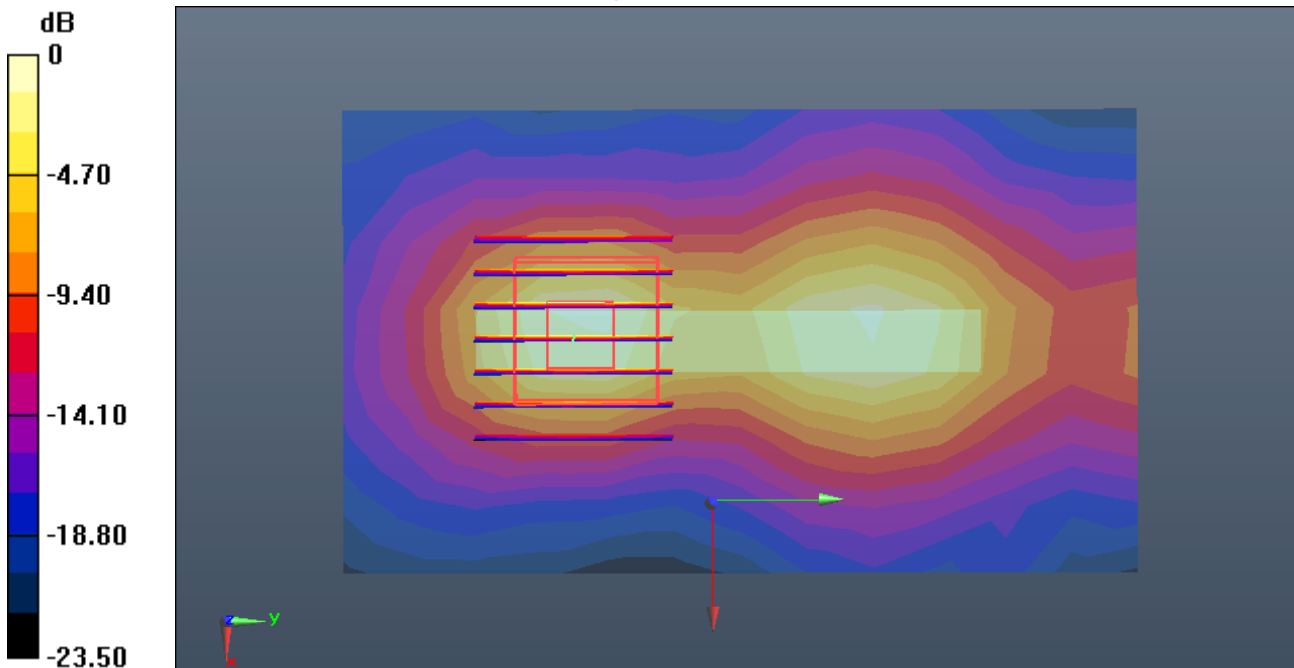
Reference Value = 8.437 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.715 W/kg

SAR(1 g) = 0.271 W/kg; SAR(10 g) = 0.108 W/kg

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

Maximum value of SAR (measured) = 0.466 W/kg



0 dB = 0.466 W/kg = -3.32 dBW/kg



Test Laboratory: Compliance Certification Services Inc.

Date: 2/6/2015

2.4G GFSK-Body Tip High CH18

DUT: USB Receiver; Type: ULM200D; Serial: N/A

Communication System: UID 0, GFSK (0); Communication System Band: ISM 2.4Ghz Band; Frequency: 2474 MHz; Duty Cycle: 1:1

Medium parameters used (extrapolated): $f = 2474$ MHz; $\sigma = 2.03$ S/m; $\epsilon_r = 51.849$; $\rho = 1000$ 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(6.82, 6.82, 6.82); Calibrated: 7/28/2014;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1245; Calibrated: 7/22/2014
- Phantom: Twin SAM Phantom; Type: QD 000 P40 CD; Serial: 1609
- DASY52 52.8.8(1222);
- SEMCAD X Version 14.6.10 (7331)

GFSK 2.4G/High CH18/Area Scan (10x9x1): Measurement grid: dx=10mm, dy=10mm

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

Maximum value of SAR (measured) = 0.0402 W/kg

GFSK 2.4G/High CH18/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

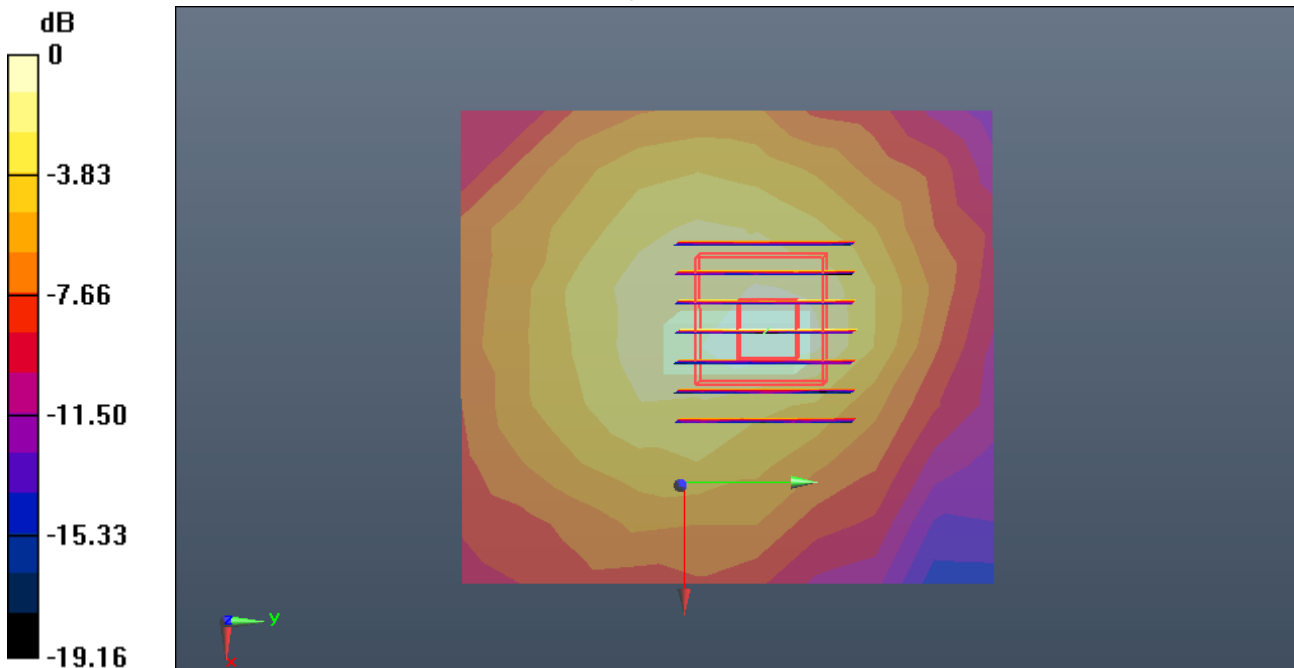
Reference Value = 4.499 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.0620 W/kg

SAR(1 g) = 0.028 W/kg; SAR(10 g) = 0.014 W/kg

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

Maximum value of SAR (measured) = 0.0434 W/kg



0 dB = 0.0434 W/kg = -13.63 dBW/kg