

SAR Plots

Test Laboratory: BACL . SAR Testing Lab

Date: 7/17/2019

#01_WLAN2.4G_802.11b 1Mbps_Right Cheek_Ch11

DUT: MIP-300

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.848 \text{ S/m}$; $\epsilon_r = 38.532$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (1); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (51x121x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 0.736 W/kg

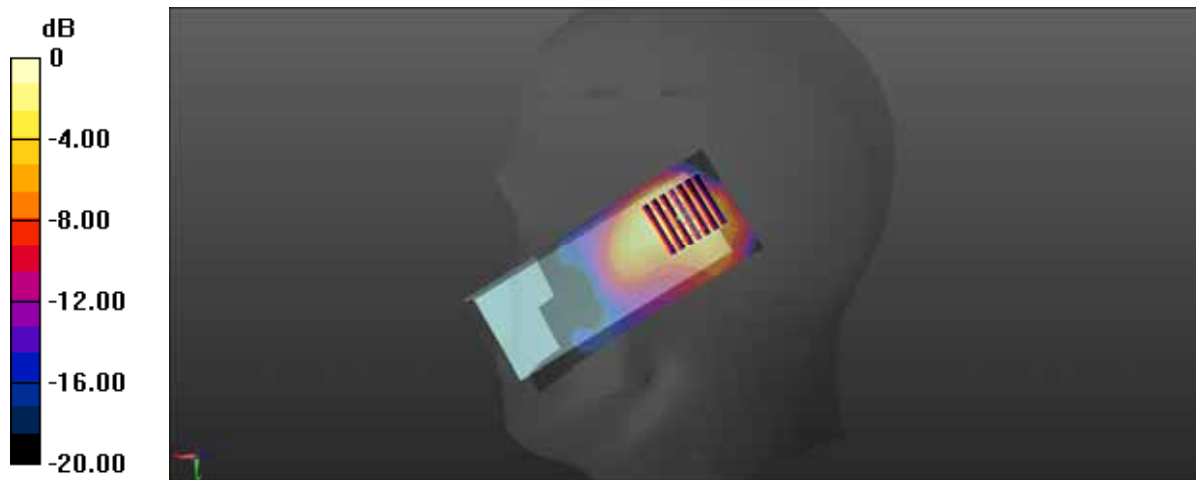
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.73 V/m; Power Drift = 0.12 dB

Peak SAR (extrapolated) = 0.927 W/kg

SAR(1 g) = 0.440 W/kg; SAR(10 g) = 0.209 W/kg

Maximum value of SAR (measured) = 0.717 W/kg



0 dB = 0.717 W/kg = -1.44 dBW/kg

Note: This test report is prepared for the customer shown above and for the device described herein. It may not be duplicated or used in part without prior written consent from Bay Area Compliance Laboratories Corp. (Taiwan) The determination of the test results does not require consideration of the uncertainty of the measurement , unless the assessment is required by customer agreement, regulation or standard document specification.

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#02_WLAN2.4G_802.11b 1Mbps_Right Tilted_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz;Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.848 \text{ S/m}$; $\epsilon_r = 38.532$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (1);SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (51x121x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 0.615 W/kg

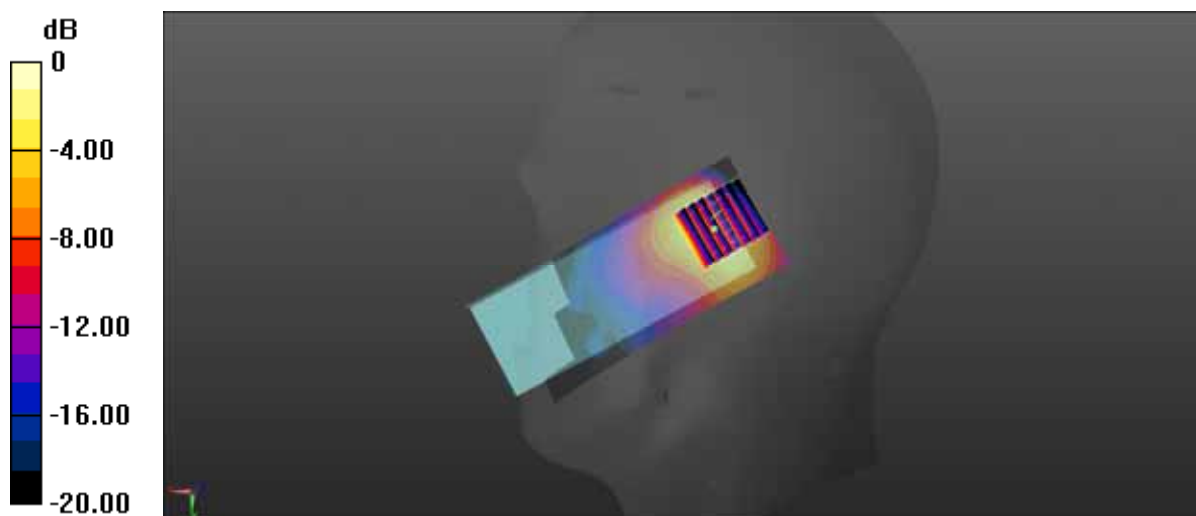
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 17.27 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 0.782 W/kg

SAR(1 g) = 0.367 W/kg; SAR(10 g) = 0.175 W/kg

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



0 dB = 0.618 W/kg = -2.09 dBW/kg

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#03_WLAN2.4G_802.11b 1Mbps_Left Cheek_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.848 \text{ S/m}$; $\epsilon_r = 38.532$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (51x121x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 0.632 W/kg

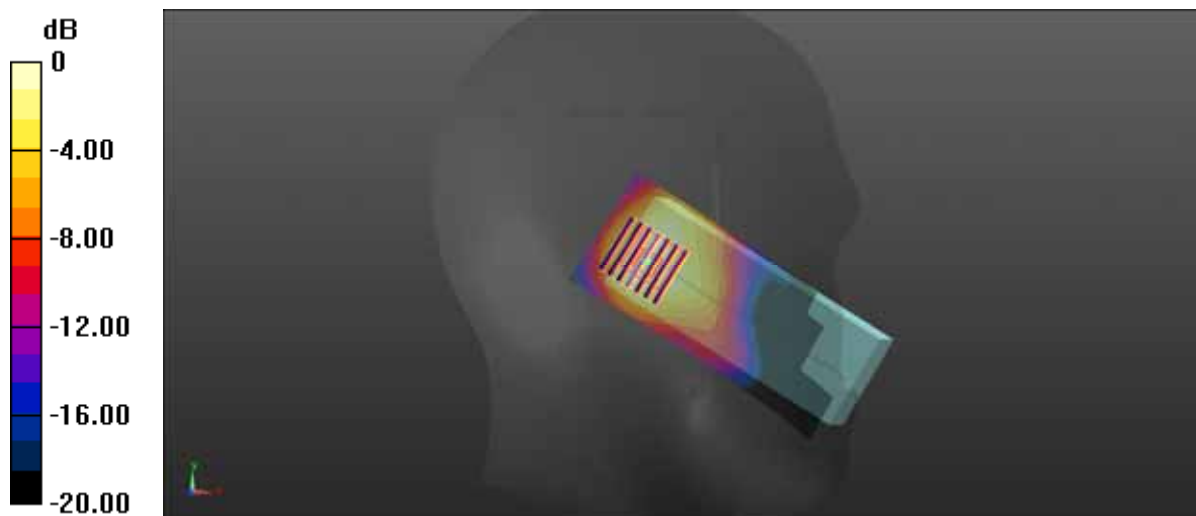
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 18.07 V/m; Power Drift = -0.00 dB

Peak SAR (extrapolated) = 0.721 W/kg

SAR(1 g) = 0.359 W/kg; SAR(10 g) = 0.188 W/kg

Maximum value of SAR (measured) = 0.575 W/kg

 $0 \text{ dB} = 0.575 \text{ W/kg} = -2.40 \text{ dBW/kg}$

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#04_WLAN2.4G_802.11b 1Mbps_Left Tilted_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462 \text{ MHz}$; $\sigma = 1.848 \text{ S/m}$; $\epsilon_r = 38.532$; $\rho = 1000 \text{ kg/m}^3$

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (51x121x1): Interpolated grid: $dx=1.200 \text{ mm}$, $dy=1.200 \text{ mm}$

Maximum value of SAR (interpolated) = 0.511 W/kg

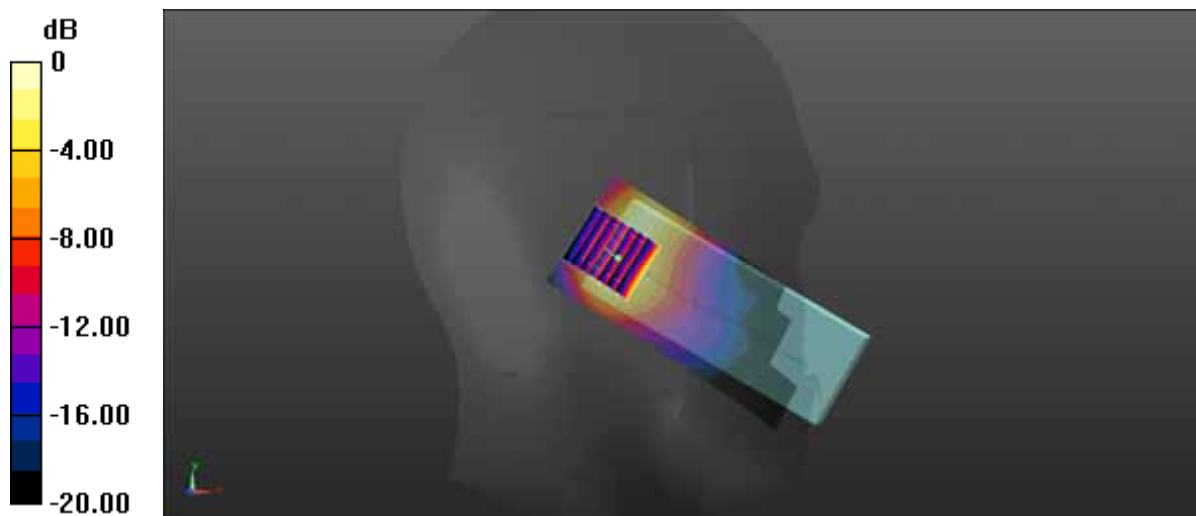
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 16.18 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.634 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.151 W/kg

Maximum value of SAR (measured) = 0.502 W/kg

 $0 \text{ dB} = 0.502 \text{ W/kg} = -2.99 \text{ dBW/kg}$

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#05_WLAN2.4G_802.11b 1Mbps_Front_10mm_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 38.532$; $\rho = 1000$ kg/m³

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (51x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.186 W/kg

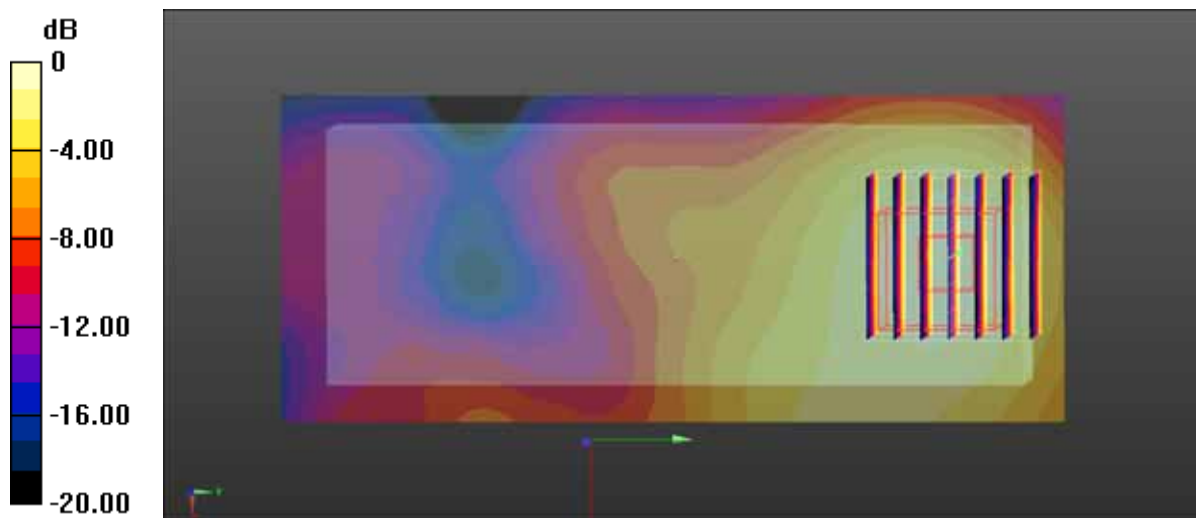
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.130 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.115 W/kg; SAR(10 g) = 0.062 W/kg

Maximum value of SAR (measured) = 0.181 W/kg



0 dB = 0.181 W/kg = -7.42 dBW/kg

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#06_WLAN2.4G_802.11b 1Mbps_Back_0mm_Ch11_Belt Clip**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 38.532$; $\rho = 1000$ kg/m³

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) MHz; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (51x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.326 W/kg

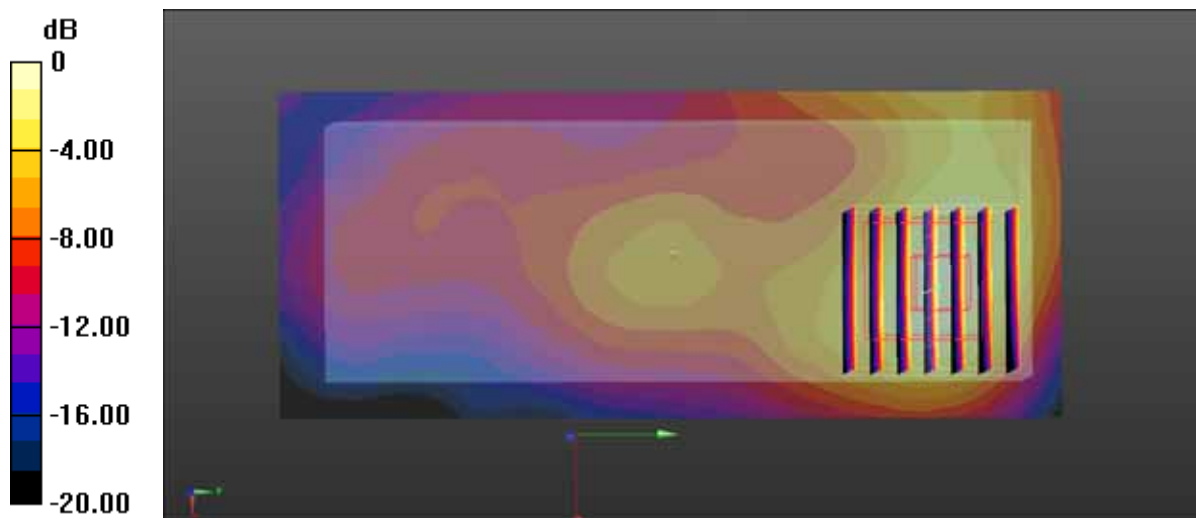
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.09 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.744 W/kg

SAR(1 g) = 0.188 W/kg; SAR(10 g) = 0.085 W/kg

Maximum value of SAR (measured) = 0.326 W/kg



0 dB = 0.326 W/kg = -4.87 dBW/kg

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#07_WLAN2.4G_802.11b 1Mbps_Top Side_10mm_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 38.532$; $\rho = 1000$ kg/m³

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (41x51x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.318 W/kg

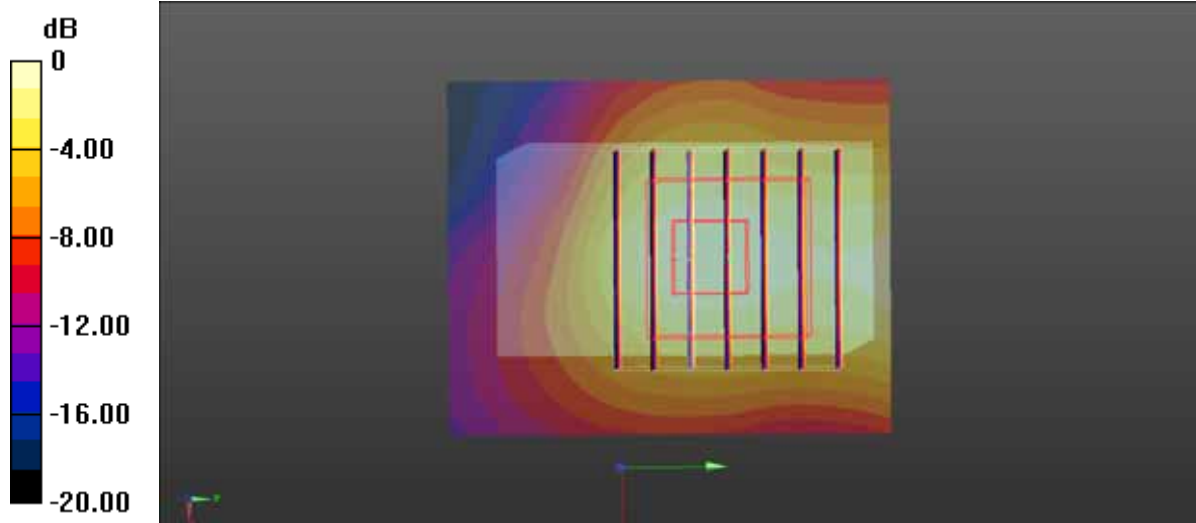
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 13.26 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.405 W/kg

SAR(1 g) = 0.191 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.320 W/kg



0 dB = 0.320 W/kg = -4.95 dBW/kg

Test Laboratory: BACL . SAR Testing Lab

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#08_WLAN2.4G_802.11b 1Mbps_Right Side_10mm_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 38.532$; $\rho = 1000$ kg/m³

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (41x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.291 W/kg

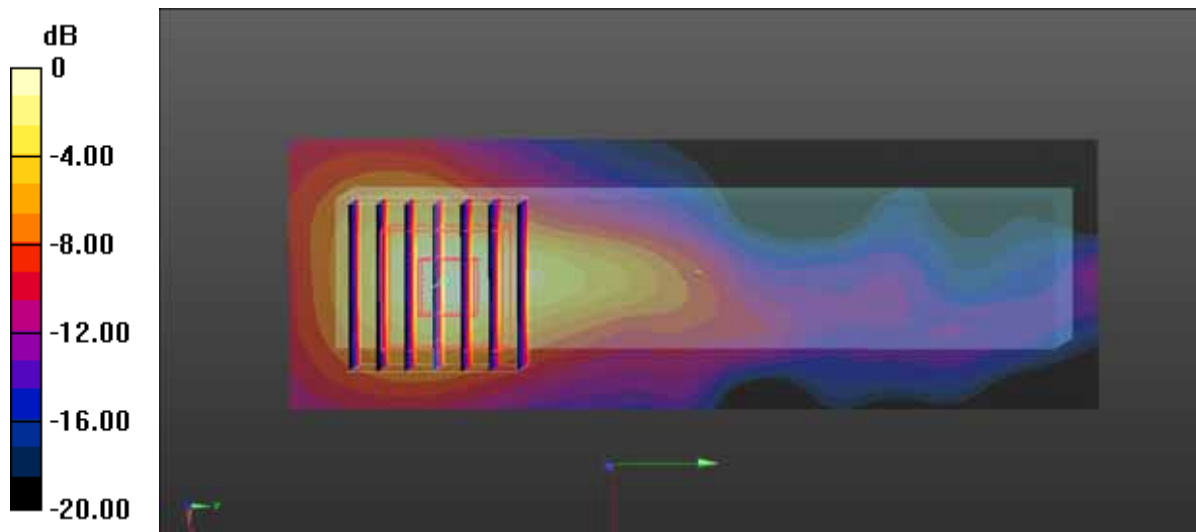
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 12.83 V/m; Power Drift = -0.10 dB

Peak SAR (extrapolated) = 0.406 W/kg

SAR(1 g) = 0.143 W/kg; SAR(10 g) = 0.063 W/kg

Maximum value of SAR (measured) = 0.297 W/kg



0 dB = 0.297 W/kg = -5.27 dBW/kg

Test Laboratory: BACL . SAR Testing Lab

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#09_WLAN2.4G_802.11b 1Mbps_Left Side_10mm_Ch11**DUT: MIP-300**

Communication System: 802.11b; Frequency: 2462 MHz; Duty Cycle: 1:1

Medium: HSL2450 Medium parameters used: $f = 2462$ MHz; $\sigma = 1.848$ S/m; $\epsilon_r = 38.532$; $\rho = 1000$ kg/m³

Ambient Temperature : 24.0 ; Liquid Temperature : 23.0

DASY5 Configuration:

- Probe: EX3DV4 - SN7520; ConvF(7.33, 7.33, 7.33) ; Calibrated: 11/5/2018
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1561; Calibrated: 11/7/2018
- Phantom: Twin-SAM V8.0 (20deg probe tilt)-Right; Type: QD 000 P40 CB; Serial: 1368
- Measurement SW: DASY52, Version 52.10 (2); SEMCAD X Version 14.6.12 (7470)

Ch11/Area Scan (41x121x1): Interpolated grid: dx=1.200 mm, dy=1.200 mm

Maximum value of SAR (interpolated) = 0.189 W/kg

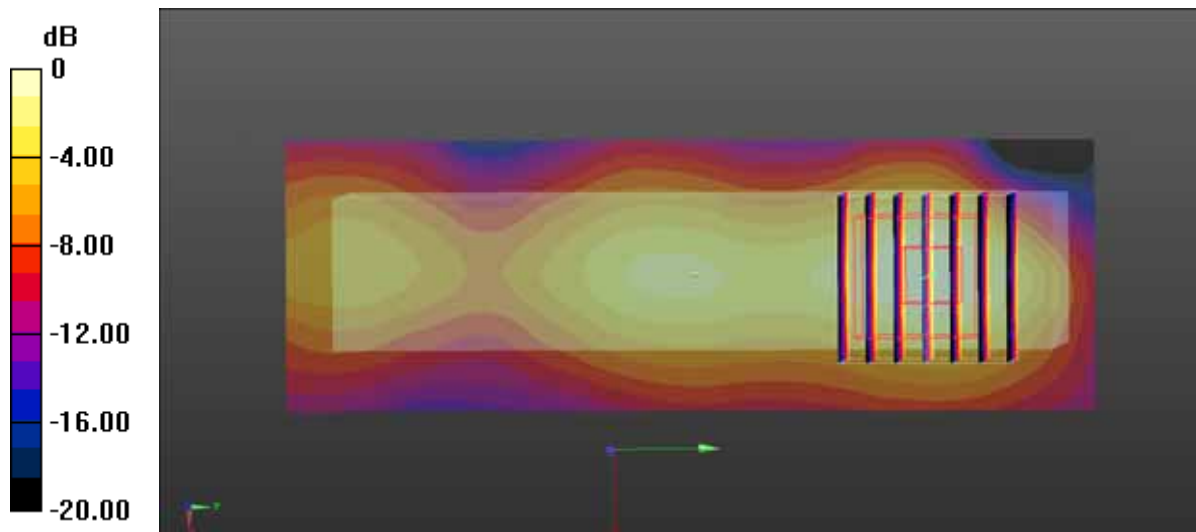
Ch11/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.28 V/m; Power Drift = -0.15 dB

Peak SAR (extrapolated) = 0.220 W/kg

SAR(1 g) = 0.107 W/kg; SAR(10 g) = 0.049 W/kg

Maximum value of SAR (measured) = 0.178 W/kg



0 dB = 0.178 W/kg = -7.50 dBW/kg