

Test Laboratory: BTL Inc.

Date: 04/18/2016

T02_802.11b_CH1_Top Side_0cm_Ant 0

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS, 1Mbps) (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.928$ S/m; $\epsilon_r = 51.567$; $\rho = 996$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 – SN3932; ConvF(7.52, 7.52, 7.52); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (6x28x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (interpolated) = 0.677 W/kg

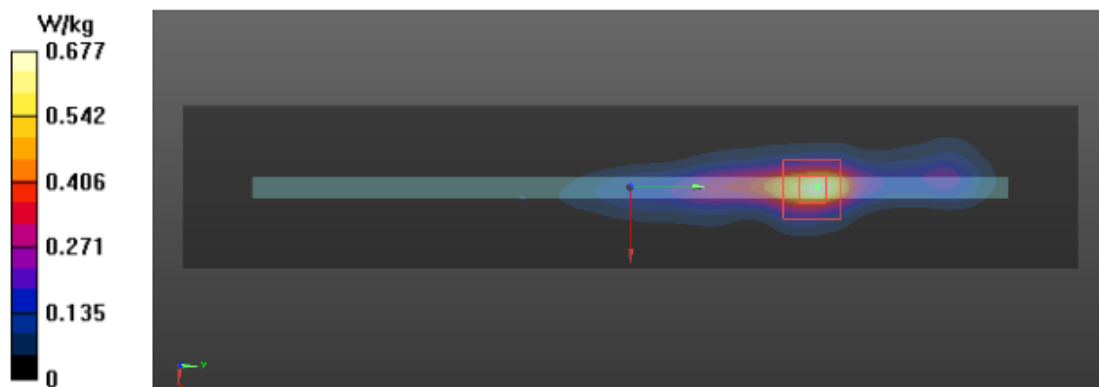
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 8.553 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 1.38 W/kg

SAR(1 g) = 0.540 W/kg; SAR(10 g) = 0.215 W/kg

Maximum value of SAR (measured) = 0.645 W/kg



Test Laboratory: BTL Inc.

Date: 04/18/2016

T10_802.11b_CH1_Top Side_0cm_Ant 1

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS, 1Mbps) (0); Frequency: 2412 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2412$ MHz; $\sigma = 1.928$ S/m; $\epsilon_r = 51.567$; $\rho = 996$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.52, 7.52, 7.52); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (6x28x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.627 W/kg

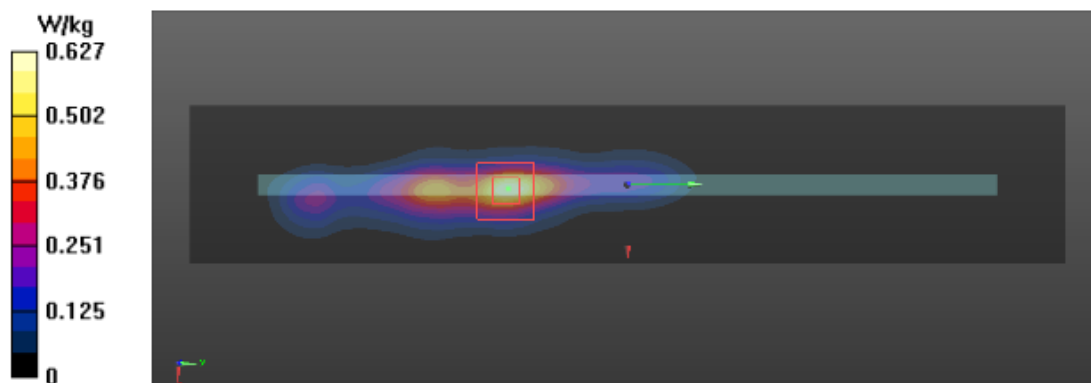
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.07 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.39 W/kg

SAR(1 g) = 0.550 W/kg; SAR(10 g) = 0.223 W/kg

Maximum value of SAR (measured) = 0.657 W/kg



Test Laboratory: BTL Inc.

Date: 04/18/2016

T21_802.11n_CH11_Top Side_0cm_Ant MIMO_Battery 2

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11n (HT20, 6.5Mbps, BPSK) (0); Frequency: 2462 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2462$ MHz; $\sigma = 2.003$ S/m; $\epsilon_r = 51.37$; $\rho = 996$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.52, 7.52, 7.52); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (6x28x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.495 W/kg

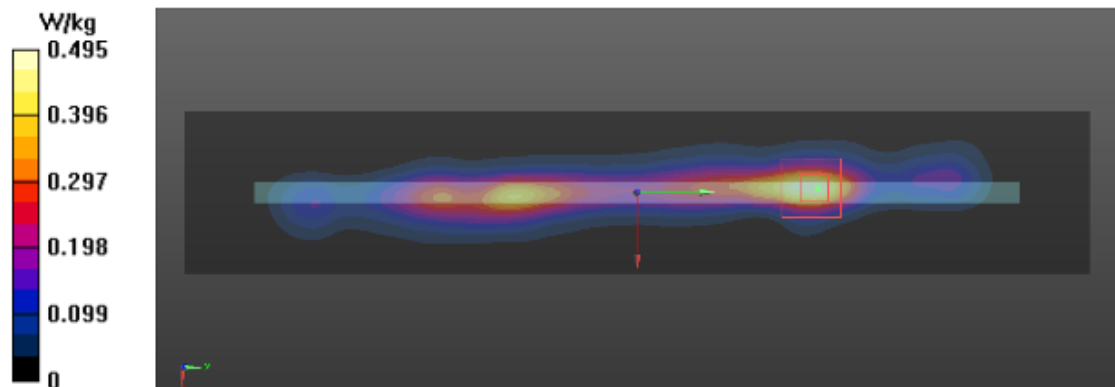
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 10.10 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 1.10 W/kg

SAR(1 g) = 0.419 W/kg; SAR(10 g) = 0.165 W/kg

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



Test Laboratory: BTL Inc.

Date: 04/18/2016

T25_802.11ac_CH58_Top Side_0cm_Ant 0_Battery 2

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5290 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.468$ S/m; $\epsilon_r = 47.64$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.29, 4.29, 4.29); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.807 W/kg

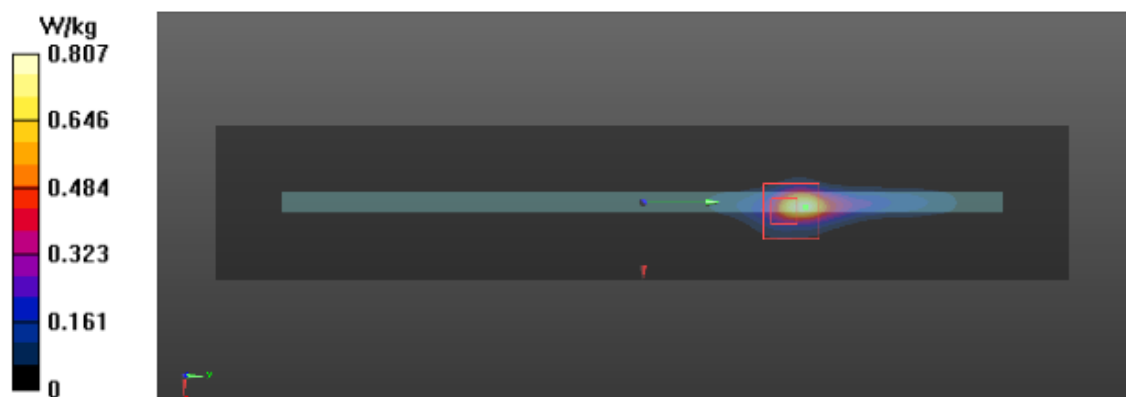
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.137 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 4.32 W/kg

SAR(1 g) = 0.645 W/kg; SAR(10 g) = 0.241 W/kg

Maximum value of SAR (measured) = 1.19 W/kg



Test Laboratory: BTL Inc.

Date: 04/18/2016

T28_802.11ac_CH58_Top Side_0cm_Ant 1

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5290 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.468$ S/m; $\epsilon_r = 47.64$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.29, 4.29, 4.29); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.582 W/kg

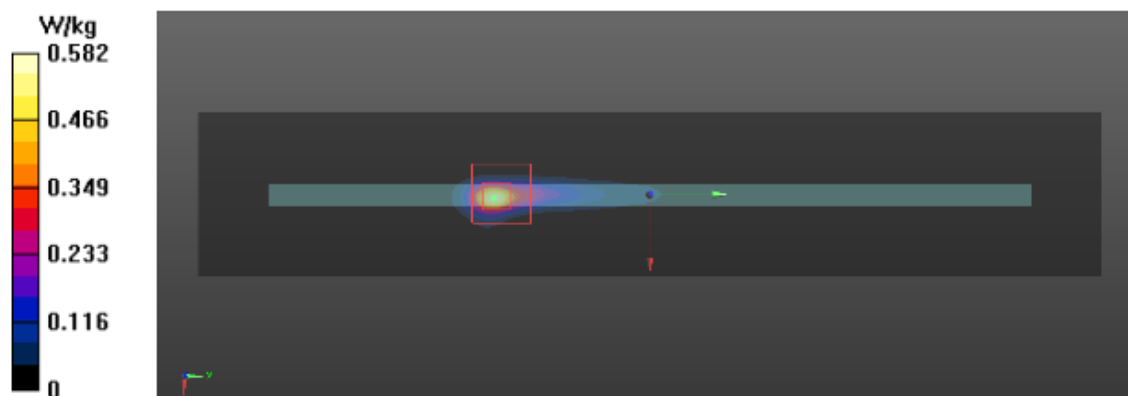
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.188 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.396 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.637 W/kg



Test Laboratory: BTL Inc.

Date: 04/19/2016

T32_802.11ac_CH106_Top Side_0cm_Ant 0

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5530 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5530$ MHz; $\sigma = 5.83$ S/m; $\epsilon_r = 47.08$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(3.71, 3.71, 3.71); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.533 W/kg

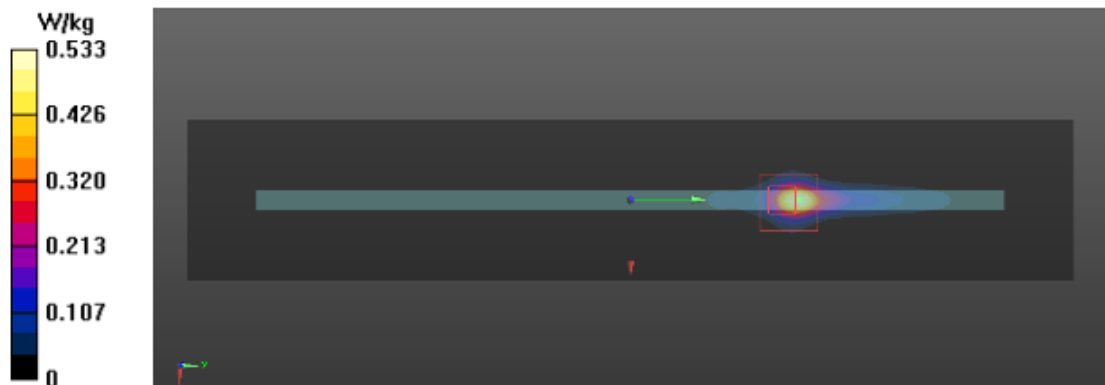
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 3.131 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 1.21 W/kg

SAR(1 g) = 0.380 W/kg; SAR(10 g) = 0.104 W/kg

Maximum value of SAR (measured) = 0.568 W/kg



Test Laboratory: BTL Inc.

Date: 04/19/2016

T41_802.11ac_CH106_Top Side_0cm_Ant 1_Battery 2

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5530 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5530$ MHz; $\sigma = 5.83$ S/m; $\epsilon_r = 47.08$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(3.71, 3.71, 3.71); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.459 W/kg

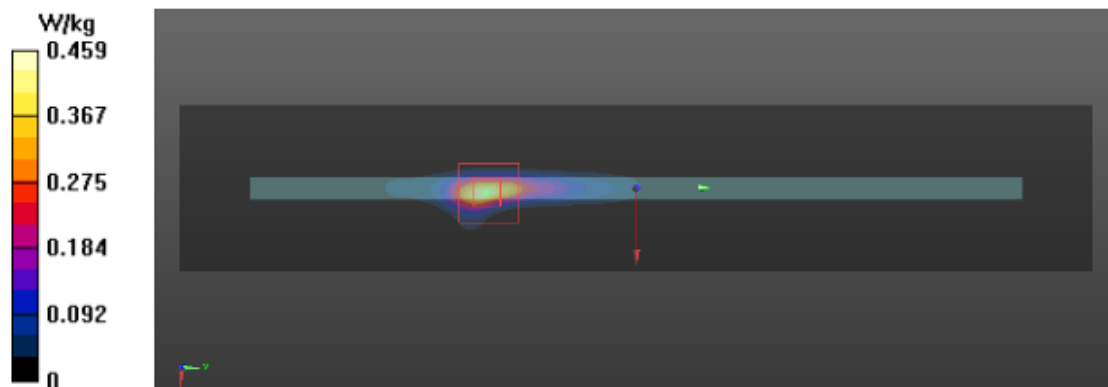
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.803 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 1.17 W/kg

SAR(1 g) = 0.370 W/kg; SAR(10 g) = 0.102 W/kg

Maximum value of SAR (measured) = 0.560 W/kg



Test Laboratory: BTL Inc.

Date: 04/19/2016

T46_802.11ac_CH155_Top Side_0cm_Ant 0

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.168$ S/m; $\epsilon_r = 46.63$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(3.88, 3.88, 3.88); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.426 W/kg

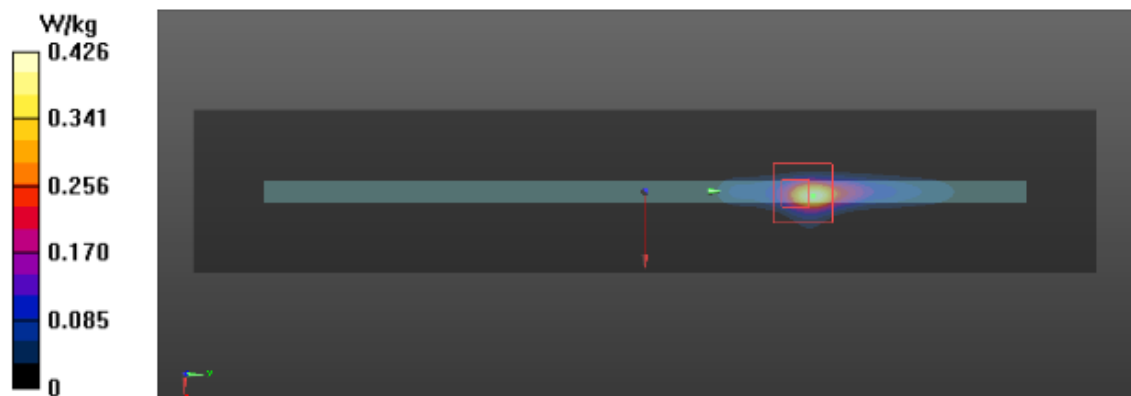
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 0 V/m; Power Drift = 0.00 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.354 W/kg; SAR(10 g) = 0.107 W/kg

Maximum value of SAR (measured) = 0.461 W/kg



Test Laboratory: BTL Inc.

Date: 04/19/2016

T50_802.11ac_CH155_Top Side_0cm_Ant 1

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.168$ S/m; $\epsilon_r = 46.63$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(3.88, 3.88, 3.88); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.367 W/kg

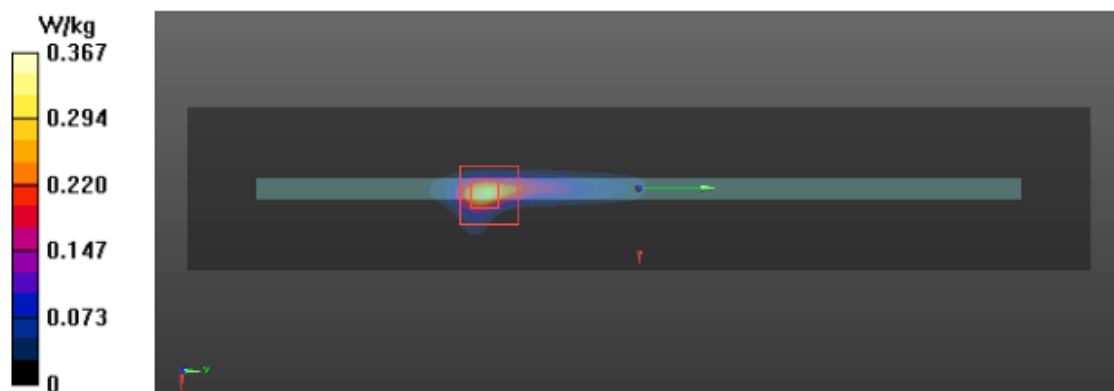
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.548 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.877 W/kg

SAR(1 g) = 0.262 W/kg; SAR(10 g) = 0.085 W/kg

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



Test Laboratory: BTL Inc.

Date: 04/18/2016

T59_802.11ac_CH58_Top Side_0cm_Ant 0+1

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5290 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5290$ MHz; $\sigma = 5.468$ S/m; $\epsilon_r = 47.64$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(4.29, 4.29, 4.29); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

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

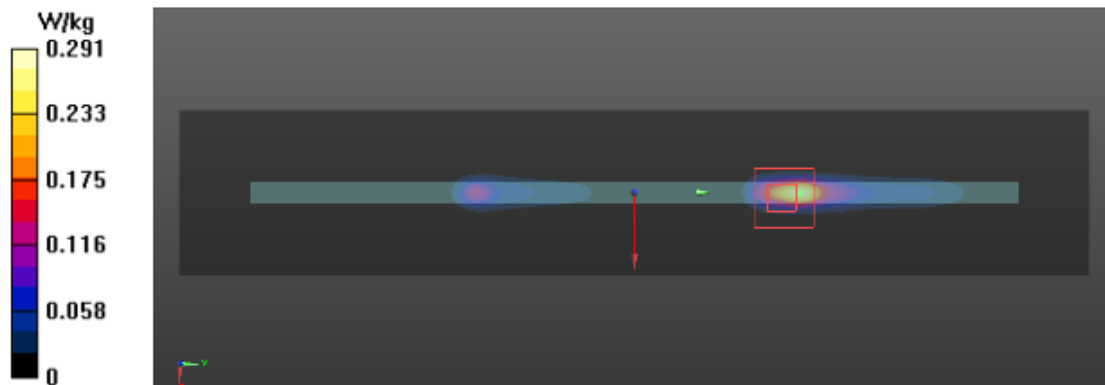
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.489 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.03 W/kg

SAR(1 g) = 0.313 W/kg; SAR(10 g) = 0.082 W/kg

Maximum value of SAR (measured) = 0.398 W/kg



Test Laboratory: BTL Inc.

Date: 04/1/2016

T63_802.11ac_CH106_Top Side_0cm_Ant 0+1

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5530 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5530$ MHz; $\sigma = 5.83$ S/m; $\epsilon_r = 47.08$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(3.71, 3.71, 3.71); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.234 W/kg

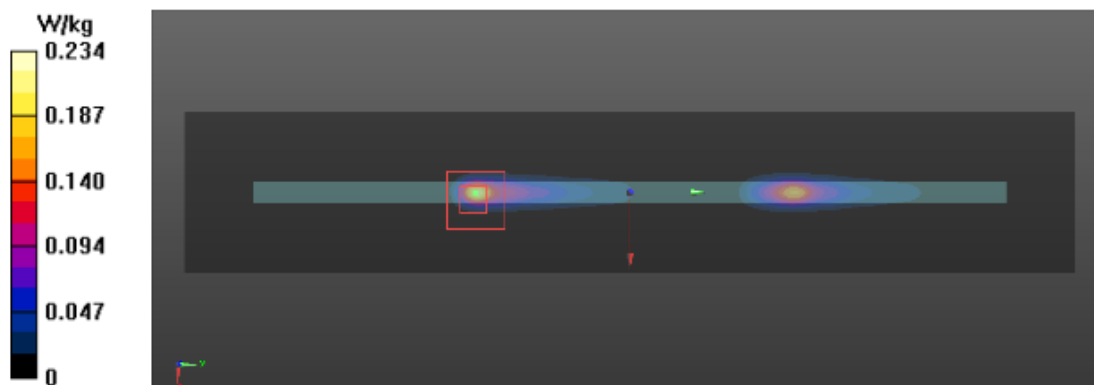
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 2.212 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.621 W/kg

SAR(1 g) = 0.158 W/kg; SAR(10 g) = 0.043 W/kg

Maximum value of SAR (measured) = 0.168 W/kg



Test Laboratory: BTL Inc.

Date: 04/19/2016

T67_802.11ac_CH155_Top Side_0cm_Ant 0+1

DUT: 1603C029;

Communication System: UID 0, IEEE 802.11ac WIFI (80MHz, 64-QAM, 99pc duty cycle) (0); Frequency: 5775 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 5775$ MHz; $\sigma = 6.168$ S/m; $\epsilon_r = 46.63$; $\rho = 996$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(3.88, 3.88, 3.88); Calibrated: 02/19/2016;
- Sensor-Surface: 2mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (7x34x1): Interpolated grid: dx=10 mm, dy=10 mm

Maximum value of SAR (interpolated) = 0.152 W/kg

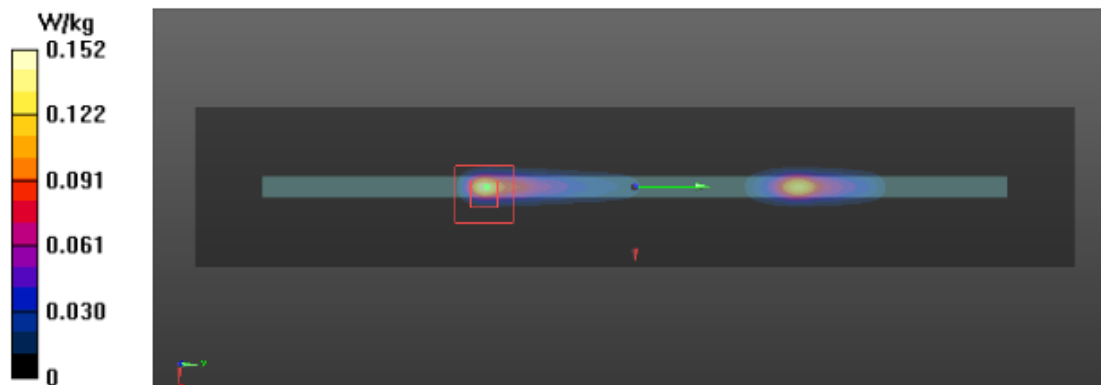
Zoom Scan (7x7x12)/Cube 0: Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 1.423 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.582 W/kg

SAR(1 g) = 0.125 W/kg; SAR(10 g) = 0.041 W/kg

Maximum value of SAR (measured) = 0.131 W/kg



Test Laboratory: BTL Inc.

Date: 04/18/2016

T66_Bluetooth_CH0_Top Side_0cm

DUT: 1603C029;

Communication System: UID 0, IEEE802.15.1 BluetoothGFSK, DH1 (0); Frequency: 2402 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2402$ MHz; $\sigma = 1.909$ S/m; $\epsilon_r = 53.307$; $\rho = 996$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.52, 7.52, 7.52); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: ELI v5.0; Type: QDOVA002AA; Serial: TP:1222
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (6x28x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

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

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

Reference Value = 4.896 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.389 W/kg

SAR(1 g) = 0.163 W/kg; SAR(10 g) = 0.073 W/kg

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

