

Test Laboratory: BTL Inc.

Date: 06/01/2016

T602_GSM 850_GSM_CH190_Right Cheek_SIM 2

DUT: 1603C159A;

Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 837$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 41.788$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.49, 10.49, 10.49); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.390 W/kg

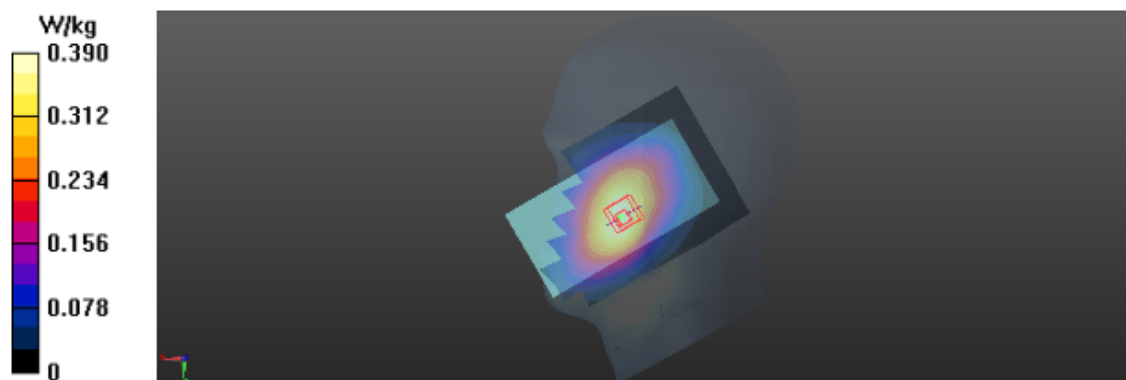
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.388 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.458 W/kg

SAR(1 g) = 0.374 W/kg; SAR(10 g) = 0.291 W/kg

Maximum value of SAR (measured) = 0.388 W/kg



Test Laboratory: BTL Inc.

Date: 04/03/2016

T08_GSM 1900_GSM_CH661_Left Cheek

DUT: 1603C159;

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.413$ S/m; $\epsilon_r = 39.879$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.36, 8.36, 8.36); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.451 W/kg

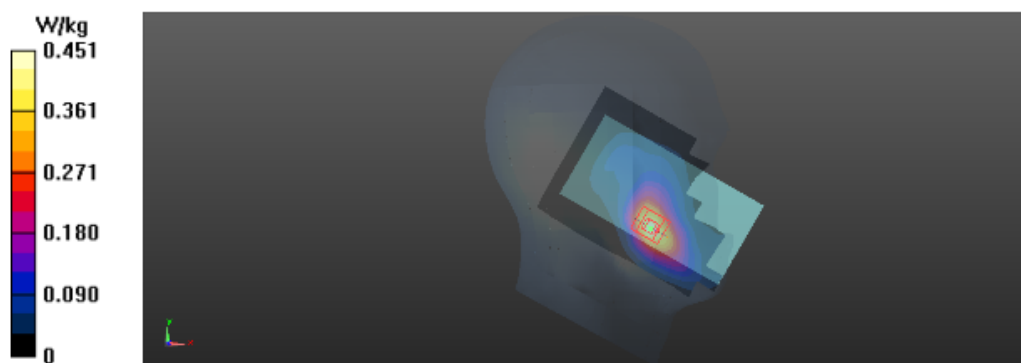
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.980 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.581 W/kg

SAR(1 g) = 0.384 W/kg; SAR(10 g) = 0.242 W/kg

Maximum value of SAR (measured) = 0.414 W/kg



Test Laboratory: BTL Inc.

Date: 06/03/2016

T605_UMTS B2_RMC 12.2K_CH9400_Left Cheek_Battery 2

DUT: 1603C159A;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.396$ S/m; $\epsilon_r = 41.834$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.36, 8.36, 8.36); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x13x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.699 W/kg

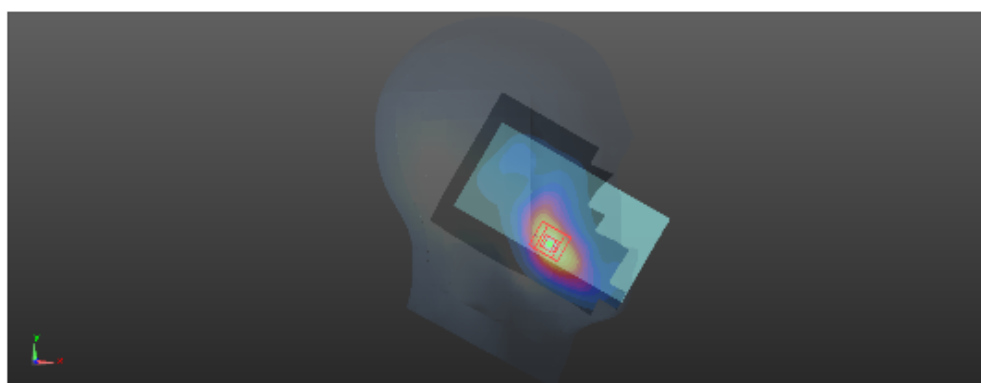
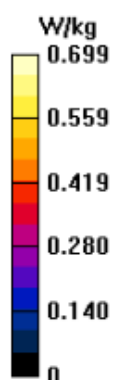
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.163 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 0.892 W/kg

SAR(1 g) = 0.602 W/kg; SAR(10 g) = 0.387 W/kg

Maximum value of SAR (measured) = 0.653 W/kg



Test Laboratory: BTL Inc.

Date: 04/05/2016

T20_UMTS B4_RMC 12.2K_CH1413_Left Cheek_Battery 2

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 41.601$; $\rho = 1000$ kg/m³

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.68, 8.68, 8.68); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.678 W/kg

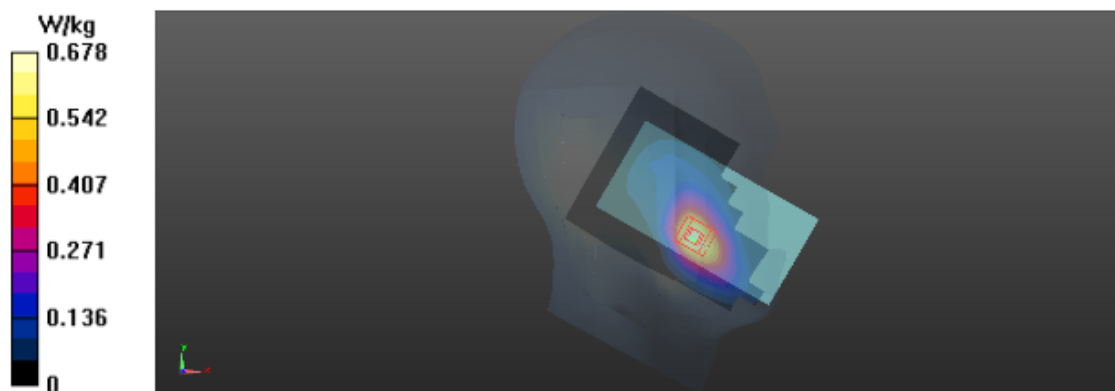
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.305 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.922 W/kg

SAR(1 g) = 0.609 W/kg; SAR(10 g) = 0.384 W/kg

Maximum value of SAR (measured) = 0.655 W/kg



Test Laboratory: BTL Inc.

Date: 04/02/2016

T25_UMTS B5_RMC 12.2K_CH4182_Right Cheek_Battery 2

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.902$ S/m; $\epsilon_r = 42.23$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.49, 10.49, 10.49); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.411 W/kg

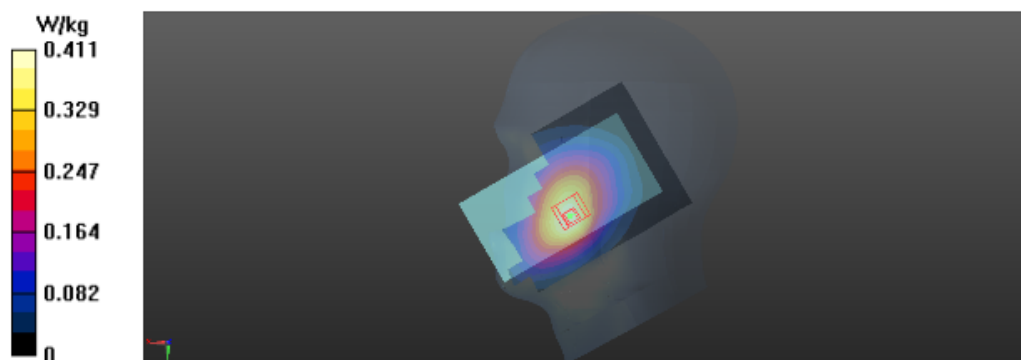
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.704 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.497 W/kg

SAR(1 g) = 0.389 W/kg; SAR(10 g) = 0.296 W/kg

Maximum value of SAR (measured) = 0.409 W/kg



Test Laboratory: BTL Inc.

Date: 04/03/2016

T209_LTE B2_QPSK 20M_CH18900_1RB_Left Cheek_Battery 2

DUT: 1603C159;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.413$ S/m; $\epsilon_r = 39.879$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.36, 8.36, 8.36); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.399 W/kg

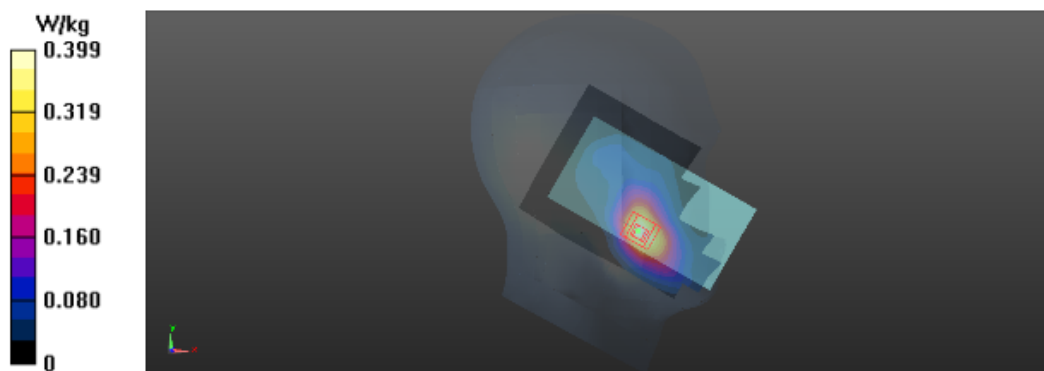
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.583 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.585 W/kg

SAR(1 g) = 0.383 W/kg; SAR(10 g) = 0.244 W/kg

Maximum value of SAR (measured) = 0.410 W/kg



Test Laboratory: BTL Inc.

Date: 04/05/2016

T218_LTE B4_QPSK 20M_CH20175_1RB_Left Cheek_Battery 2

DUT: 1603C159;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.312$ S/m; $\epsilon_r = 41.602$; $\rho = 1000$ kg/m³

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.68, 8.68, 8.68); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.301 W/kg

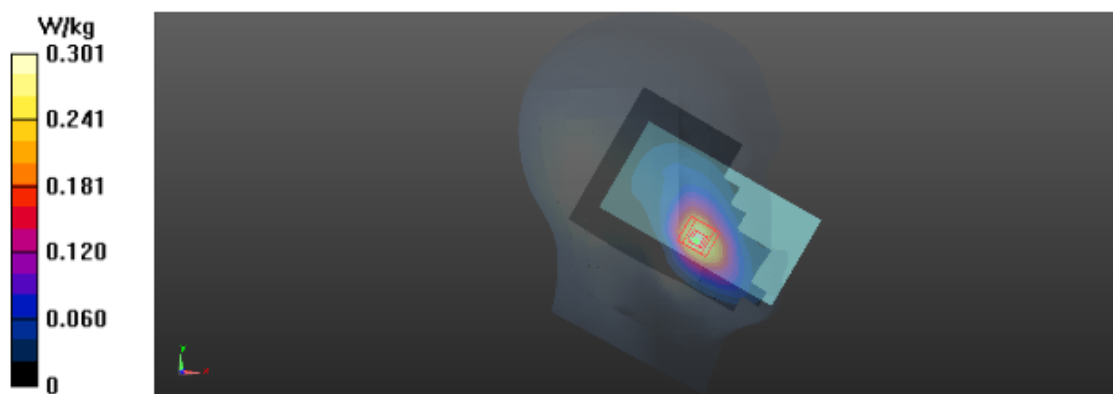
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.917 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.399 W/kg

SAR(1 g) = 0.264 W/kg; SAR(10 g) = 0.166 W/kg

Maximum value of SAR (measured) = 0.284 W/kg



Test Laboratory: BTL Inc.

Date: 06/01/2016

T610_LTE B5_QPSK 10M_CH20525_1RB_Right Cheek_Battery 2

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 10MHz, QPSK) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.884$ S/m; $\epsilon_r = 41.794$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.49, 10.49, 10.49); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.328 W/kg

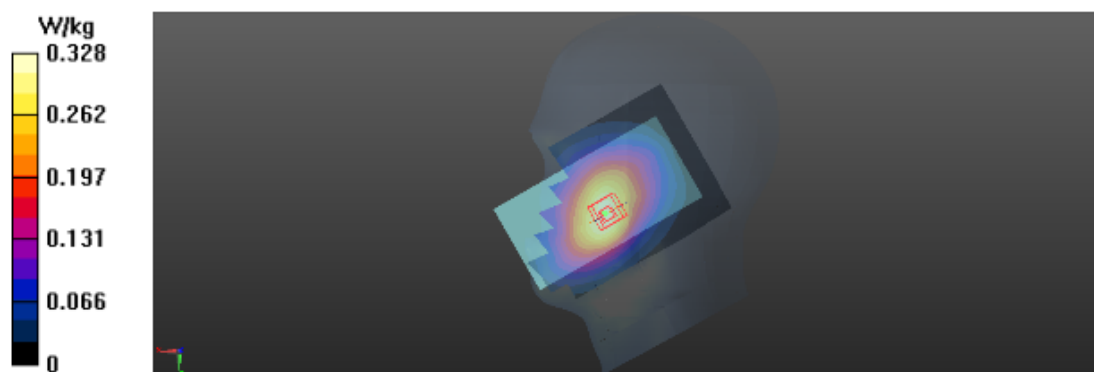
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.527 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.385 W/kg

SAR(1 g) = 0.313 W/kg; SAR(10 g) = 0.243 W/kg

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



Test Laboratory: BTL Inc.

Date: 06/02/2016

T611_LTE B7_QPSK 20M_CH21100_1RB_Right Cheek

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 1.978$ S/m; $\epsilon_r = 38.292$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(6.88, 6.88, 6.88); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x17x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (interpolated) = 0.167 W/kg

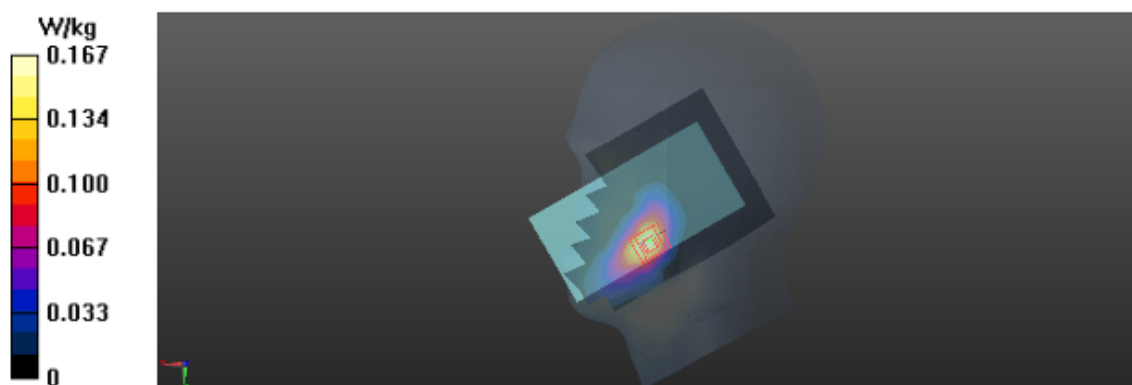
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.036 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.267 W/kg

SAR(1 g) = 0.139 W/kg; SAR(10 g) = 0.072 W/kg

Maximum value of SAR (measured) = 0.146 W/kg



Test Laboratory: BTL Inc.

Date: 04/16/2016

T403_802.11b_CH6_Left Cheek

DUT: 1603C159;

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS, 1Mbps) (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.847$ S/m; $\epsilon_r = 39.137$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.24, 7.24, 7.24); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x18x1): Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.606 W/kg

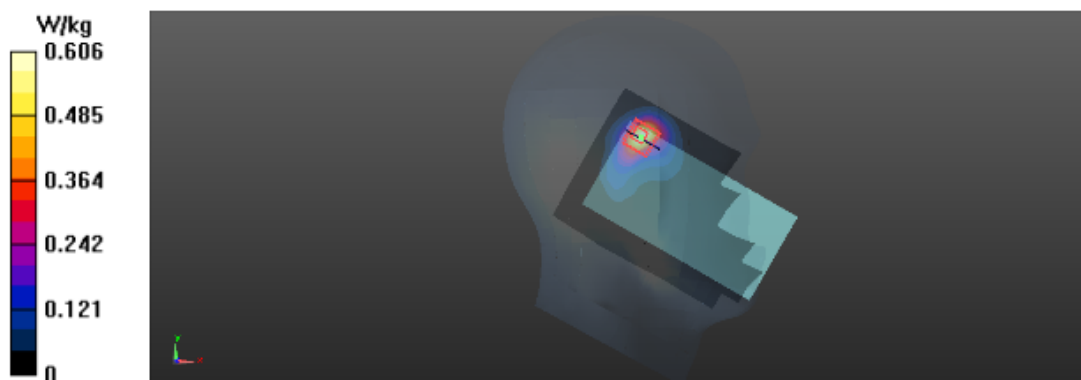
Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 8.392 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.31 W/kg

SAR(1 g) = 0.348 W/kg; SAR(10 g) = 0.146 W/kg

Maximum value of SAR (measured) = 0.572 W/kg



Test Laboratory: BTL Inc.

Date: 04/11/2016

T31_GSM 850_GSM_CH190_Front Face_1.5cm

DUT: 1603C159;

Communication System: UID 0, Generic GSM (0); Frequency: 836.6 MHz; Duty Cycle: 1:8.30042

Medium parameters used: $f = 837$ MHz; $\sigma = 0.974$ S/m; $\epsilon_r = 54.18$; $\rho = 1000$ kg/m³

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.22, 10.22, 10.22); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.344 W/kg

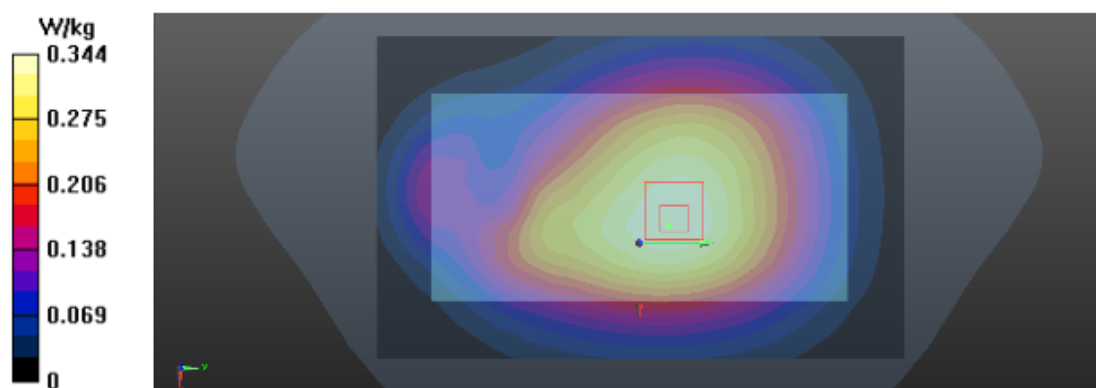
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 18.19 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.418 W/kg

SAR(1 g) = 0.330 W/kg; SAR(10 g) = 0.254 W/kg

Maximum value of SAR (measured) = 0.344 W/kg



Test Laboratory: BTL Inc.

Date: 05/30/2016

T616_GSM 850_GPRS 2TX_CH190_Front Face_1cm_SIM 2

DUT: 1603C159A;

Communication System: UID 0, GPRS 2TX (0); Frequency: 836.6 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 837$ MHz; $\sigma = 0.979$ S/m; $\epsilon_r = 55.566$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.22, 10.22, 10.22); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.512 W/kg

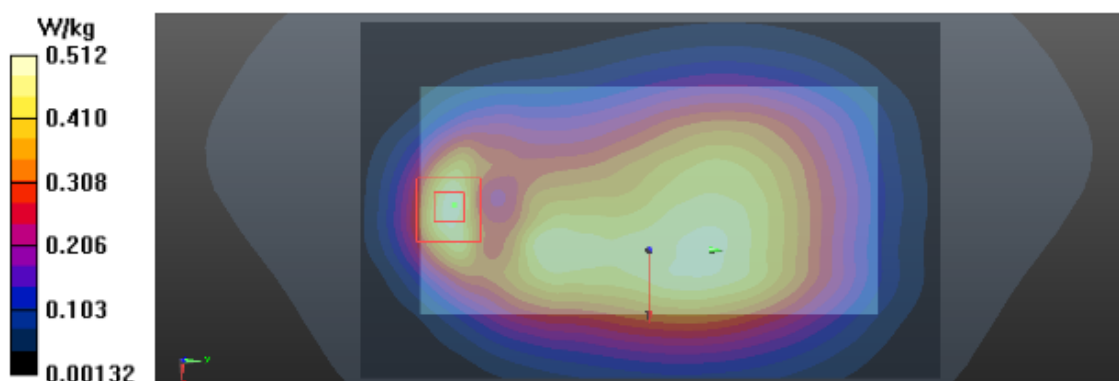
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 20.28 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.768 W/kg

SAR(1 g) = 0.449 W/kg; SAR(10 g) = 0.258 W/kg

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



Test Laboratory: BTL Inc.

Date: 05/31/2016

T617_GSM 1900_GSM_CH661_Rear Face_1.5cm_Battery 2

DUT: 1603C159A;

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.3

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.537$ S/m; $\epsilon_r = 53.528$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.508 W/kg

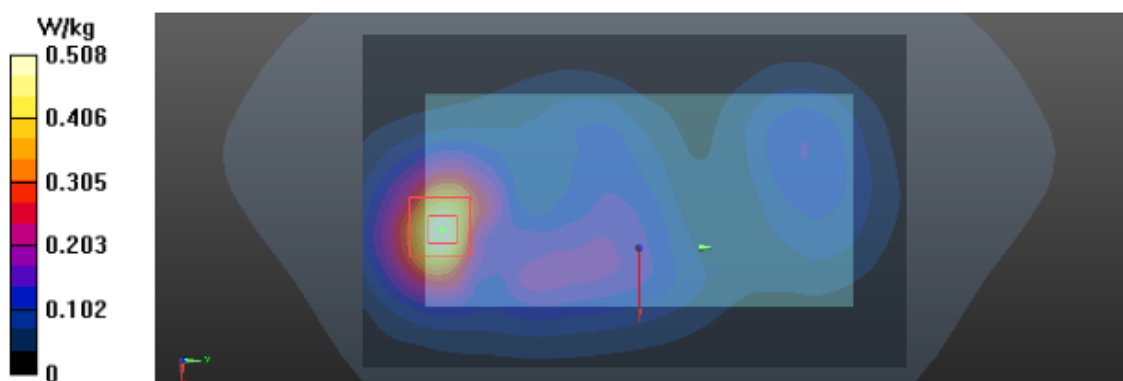
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.859 V/m; Power Drift = -0.07 dB

Peak SAR (extrapolated) = 0.757 W/kg

SAR(1 g) = 0.450 W/kg; SAR(10 g) = 0.253 W/kg

Maximum value of SAR (measured) = 0.497 W/kg



Test Laboratory: BTL Inc.

Date: 05/31/2016

T619_GSM 1900_GPRS 2TX_CH810_Front Face_1cm_Battery 2

DUT: 1603C159A;

Communication System: UID 0, GPRS 2TX (0); Frequency: 1909.8 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1910$ MHz; $\sigma = 1.575$ S/m; $\epsilon_r = 53.408$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 1.41 W/kg

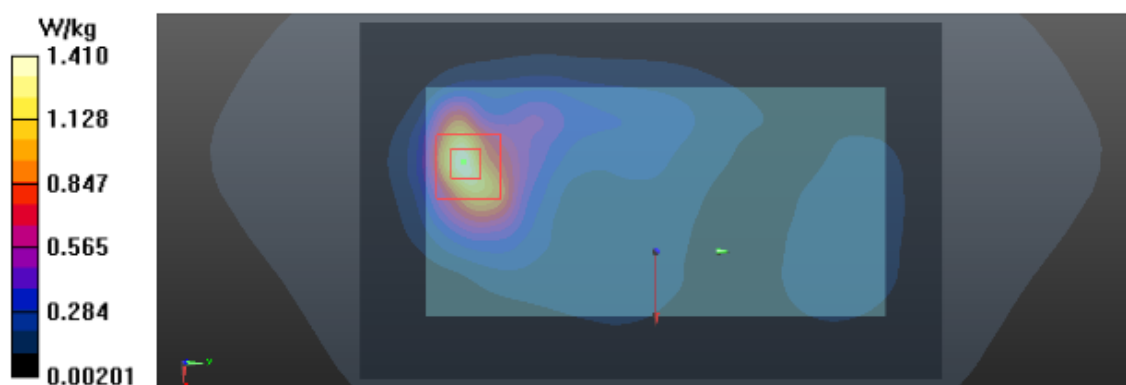
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 10.20 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 2.24 W/kg

SAR(1 g) = 1.25 W/kg; SAR(10 g) = 0.661 W/kg

Maximum value of SAR (measured) = 1.43 W/kg



Test Laboratory: BTL Inc.

Date: 05/31/2016

T623_UMTS B2_RMC 12.2K_CH9400_Front Face_1.5cm

DUT: 1603C159A;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.537$ S/m; $\epsilon_r = 53.528$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.772 W/kg

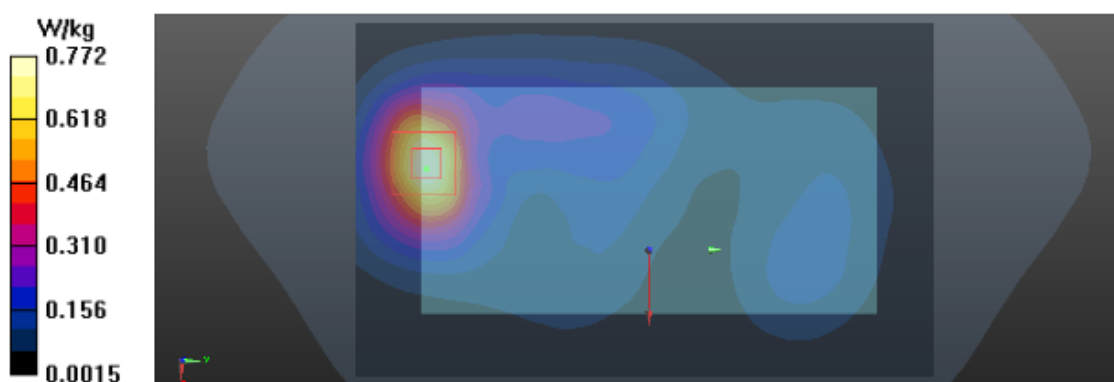
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.521 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 1.18 W/kg

SAR(1 g) = 0.701 W/kg; SAR(10 g) = 0.390 W/kg

Maximum value of SAR (measured) = 0.771 W/kg



Test Laboratory: BTL Inc.

Date: 04/08/2016

T64_UMTS B2_RMC 12.2K_CH9400_Front Face_1cm

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ S/m; $\epsilon_r = 52.896$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.469 W/kg

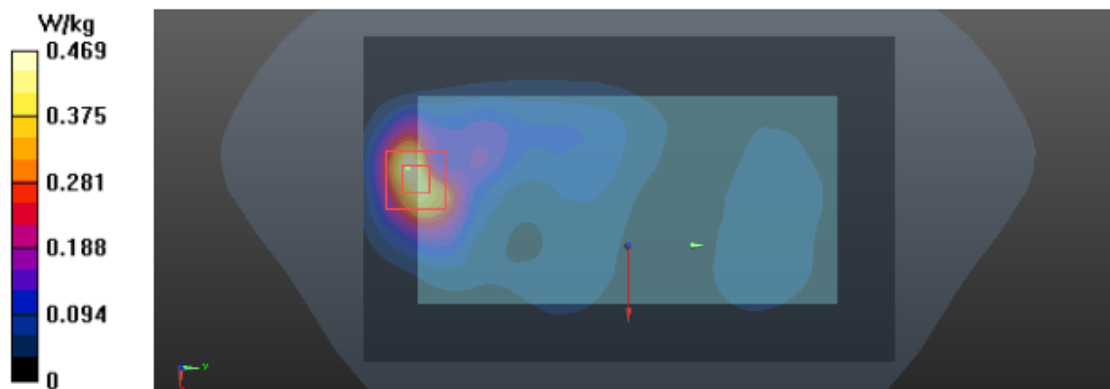
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 5.870 V/m; Power Drift = -0.08 dB

Peak SAR (extrapolated) = 0.781 W/kg

SAR(1 g) = 0.416 W/kg; SAR(10 g) = 0.210 W/kg

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



Test Laboratory: BTL Inc.

Date: 05/31/2016

T625_UMTS B4_RMC 12.2K_CH1413_Front Face_1.5cm

DUT: 1603C159A;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.479$ S/m; $\epsilon_r = 52.58$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.38, 8.38, 8.38); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.928 W/kg

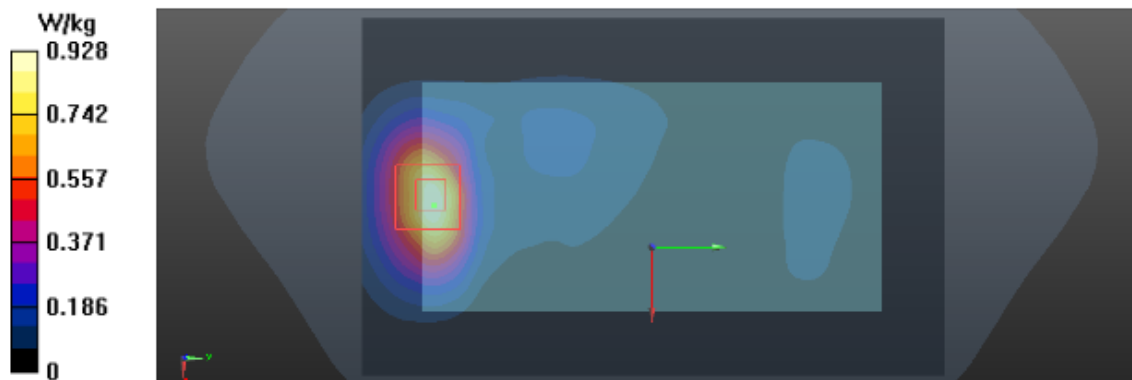
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.407 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 1.35 W/kg

SAR(1 g) = 0.843 W/kg; SAR(10 g) = 0.487 W/kg

Maximum value of SAR (measured) = 0.919 W/kg



Test Laboratory: BTL Inc.

Date: 04/10/2016

T87_UMTS B4_RMC 12.2K_CH1413_Front Face_1cm

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.445$ S/m; $\epsilon_r = 51.731$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.38, 8.38, 8.38); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.767 W/kg

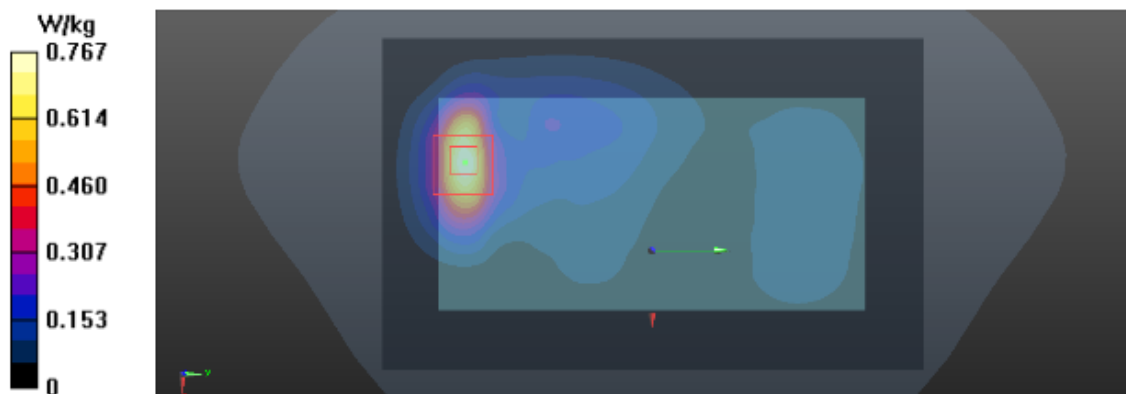
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.400 V/m; Power Drift = 0.08 dB

Peak SAR (extrapolated) = 1.19 W/kg

SAR(1 g) = 0.677 W/kg; SAR(10 g) = 0.355 W/kg

Maximum value of SAR (measured) = 0.768 W/kg



Test Laboratory: BTL Inc.

Date: 04/11/2016

T101_UMTS B5_RMC 12.2K_CH4182_Front Face_1.5cm

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.974$ S/m; $\epsilon_r = 54.18$; $\rho = 1000$ kg/m³

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.22, 10.22, 10.22); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.413 W/kg

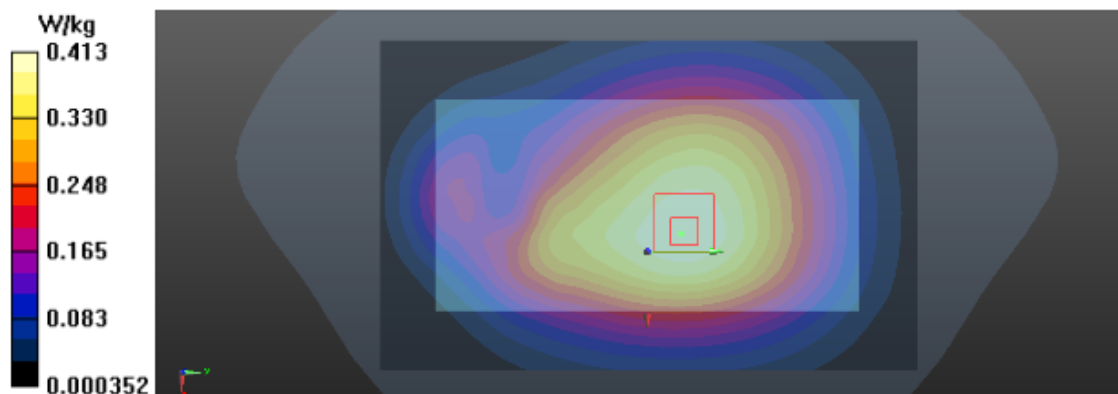
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 19.69 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.496 W/kg

SAR(1 g) = 0.391 W/kg; SAR(10 g) = 0.302 W/kg

Maximum value of SAR (measured) = 0.409 W/kg



Test Laboratory: BTL Inc.

Date: 04/11/2016

T104_UMTS B5_RMC 12.2K_CH4182_Front Face_1cm

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 837$ MHz; $\sigma = 0.974$ S/m; $\epsilon_r = 54.18$; $\rho = 1000$ kg/m³

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.22, 10.22, 10.22); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.489 W/kg

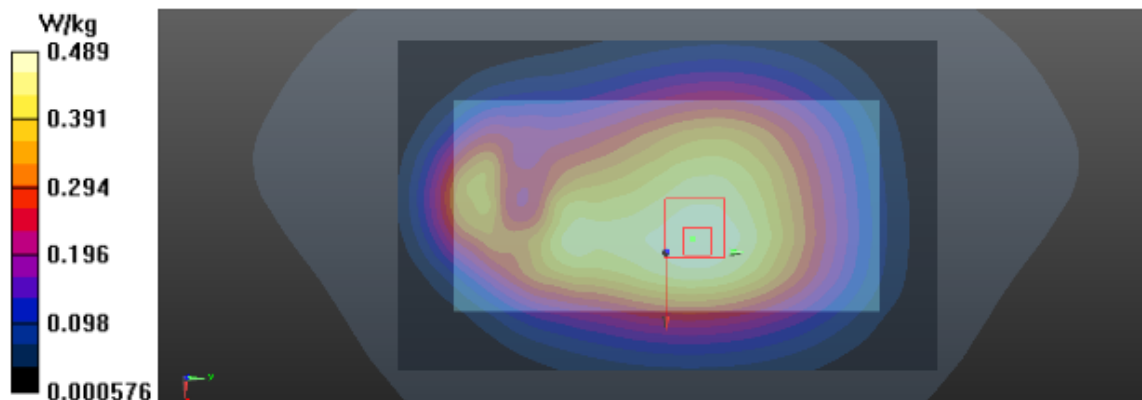
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 21.24 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.592 W/kg

SAR(1 g) = 0.464 W/kg; SAR(10 g) = 0.357 W/kg

Maximum value of SAR (measured) = 0.485 W/kg



Test Laboratory: BTL Inc.

Date: 04/08/2016

T251_LTE B2_QPSK 20M_CH18900_1RB_Front Face_1.5cm

DUT: 1603C159;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ S/m; $\epsilon_r = 52.896$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.562 W/kg

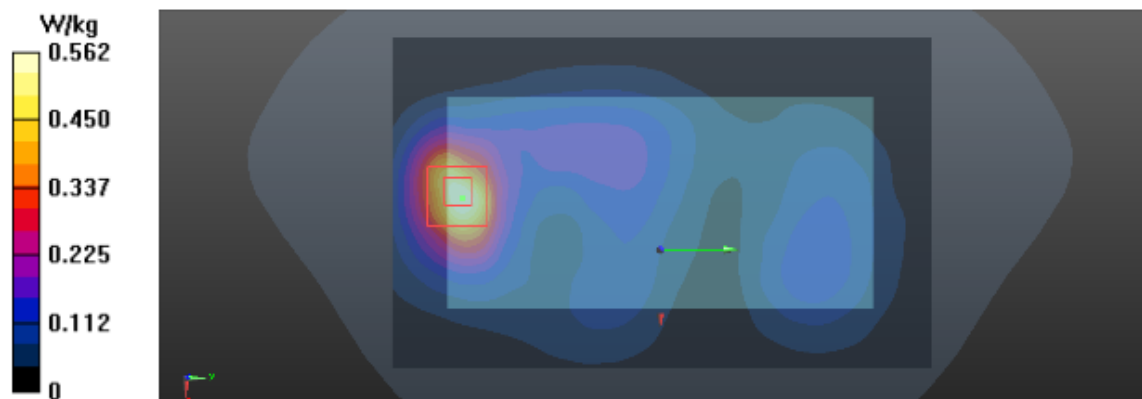
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.689 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.908 W/kg

SAR(1 g) = 0.526 W/kg; SAR(10 g) = 0.284 W/kg

Maximum value of SAR (measured) = 0.578 W/kg



Test Laboratory: BTL Inc.

Date: 04/08/2016

T268_LTE B2_QPSK 20M_CH18900_1RB_Front Face_1cm_Battery 2

DUT: 1603C159;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.52$ S/m; $\epsilon_r = 52.896$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: $dx=15$ mm, $dy=15$ mm

Maximum value of SAR (interpolated) = 0.911 W/kg

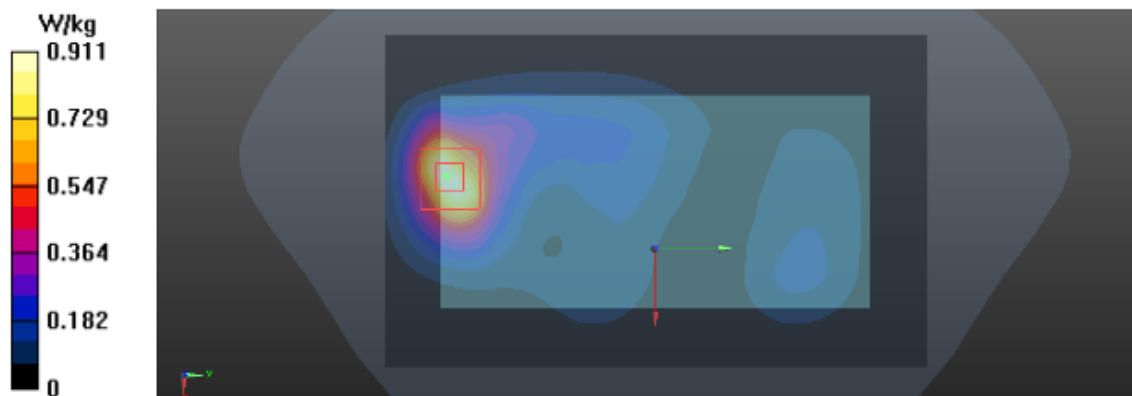
Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8$ mm, $dy=8$ mm, $dz=5$ mm

Reference Value = 8.464 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.88 W/kg

SAR(1 g) = 0.839 W/kg; SAR(10 g) = 0.452 W/kg

Maximum value of SAR (measured) = 1.16 W/kg



Test Laboratory: BTL Inc.

Date: 05/31/2016

T633_LTE B4_QPSK 20M_CH20175_1RB_Front Face_1.5cm_Battery 2

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.478$ S/m; $\epsilon_r = 52.582$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.38, 8.38, 8.38); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.527 W/kg

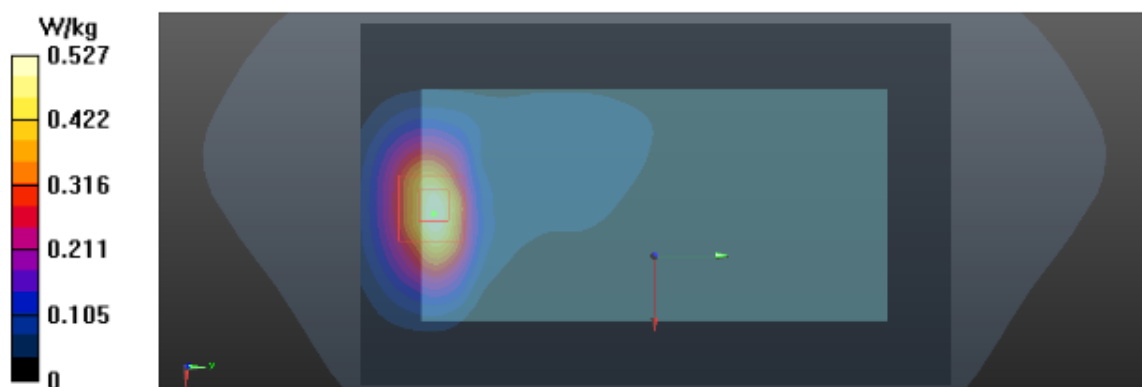
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.862 V/m; Power Drift = 0.09 dB

Peak SAR (extrapolated) = 0.729 W/kg

SAR(1 g) = 0.459 W/kg; SAR(10 g) = 0.265 W/kg

Maximum value of SAR (measured) = 0.501 W/kg



Test Laboratory: BTL Inc.

Date: 05/31/2016

T634_LTE B4_QPSK 20M_CH20175_1RB_Front Face_1cm_Battery 2

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.478$ S/m; $\epsilon_r = 52.582$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.38, 8.38, 8.38); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.675 W/kg

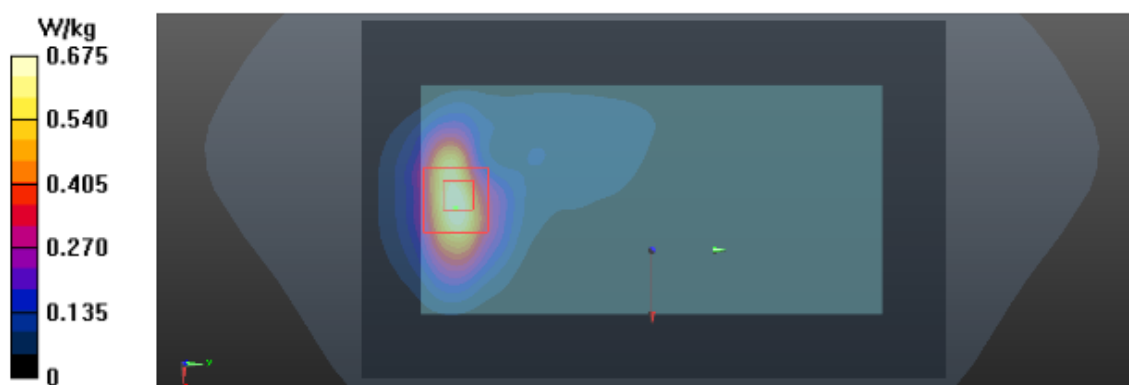
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.478 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 1.04 W/kg

SAR(1 g) = 0.618 W/kg; SAR(10 g) = 0.338 W/kg

Maximum value of SAR (measured) = 0.683 W/kg



Test Laboratory: BTL Inc.

Date: 05/30/2016

T636_LTE B5_QPSK 10M_CH20525_1RB_Front Face _1.5cm

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 10MHz, QPSK) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.979$ S/m; $\epsilon_r = 55.571$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.22, 10.22, 10.22); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.303 W/kg

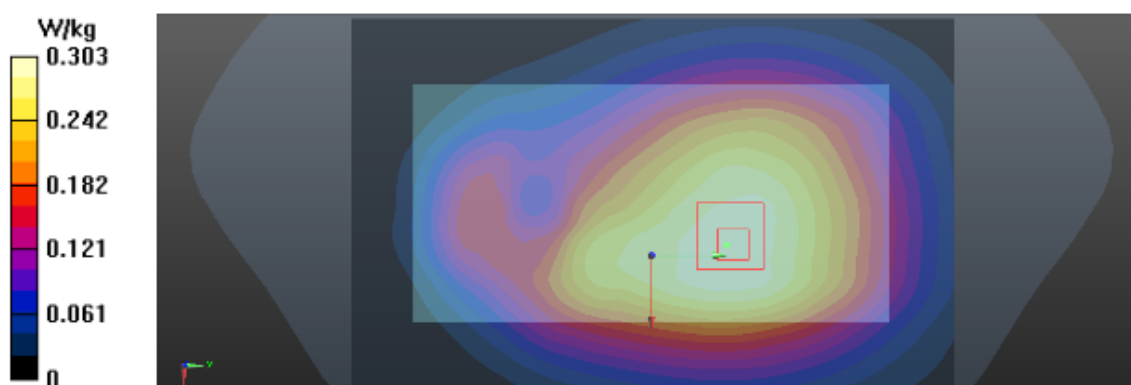
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 15.81 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.348 W/kg

SAR(1 g) = 0.285 W/kg; SAR(10 g) = 0.226 W/kg

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



Test Laboratory: BTL Inc.

Date: 05/30/2016

T637_LTE B5_QPSK 10M_CH20525_1RB_Front Face _1cm

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 10MHz, QPSK) (0); Frequency: 836.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 836.5$ MHz; $\sigma = 0.979$ S/m; $\epsilon_r = 55.571$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.22, 10.22, 10.22); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

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

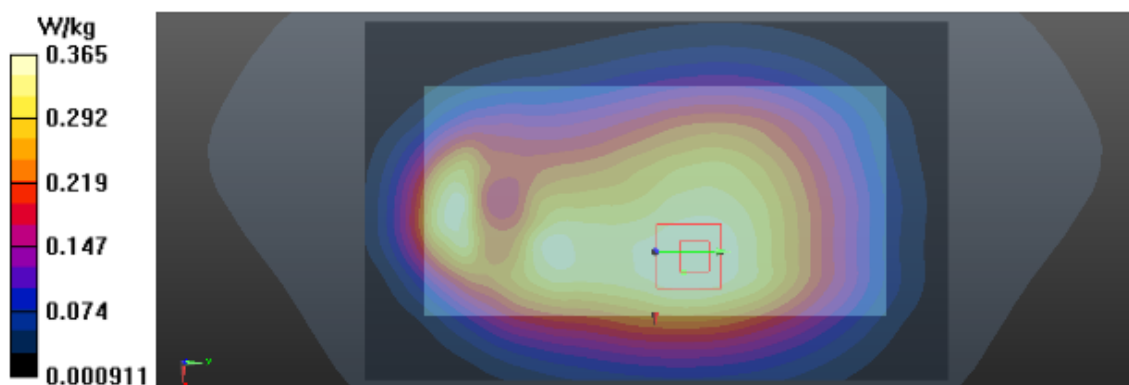
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 17.55 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.429 W/kg

SAR(1 g) = 0.346 W/kg; SAR(10 g) = 0.270 W/kg

Maximum value of SAR (measured) = 0.358 W/kg



Test Laboratory: BTL Inc.

Date: 04/07/2016

T303_LTE B7_QPSK 20M_CH21100_1RB_Front Face_1.5cm

DUT: 1603C159;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 2.126$ S/m; $\epsilon_r = 52.634$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(6.99, 6.99, 6.99); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Right; Type: Twin SAM; Serial: 1896
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x18x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (interpolated) = 0.196 W/kg

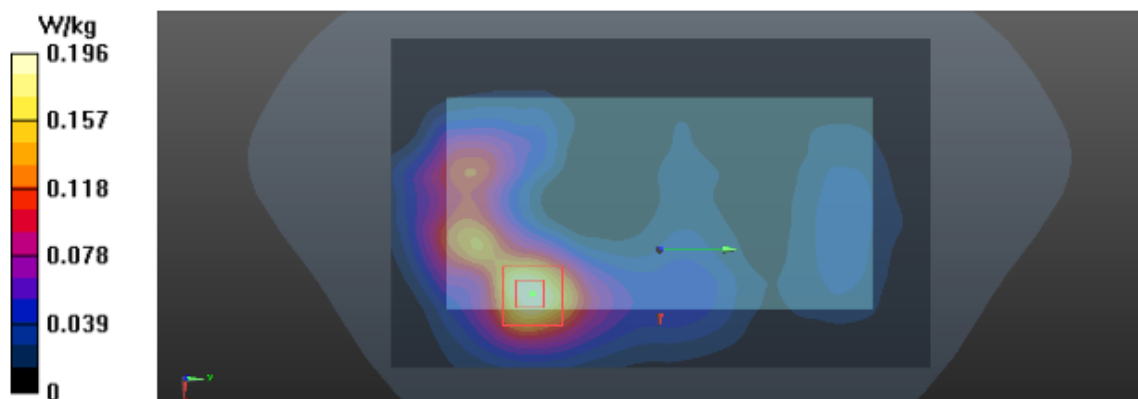
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.484 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.343 W/kg

SAR(1 g) = 0.183 W/kg; SAR(10 g) = 0.092 W/kg

Maximum value of SAR (measured) = 0.203 W/kg



Test Laboratory: BTL Inc.

Date: 05/30/2016

T639_LTE B7_QPSK 20M_CH21100_1RB_Front Face_1cm

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 2535 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2535$ MHz; $\sigma = 2.12$ S/m; $\epsilon_r = 52.621$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(6.99, 6.99, 6.99); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x17x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

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

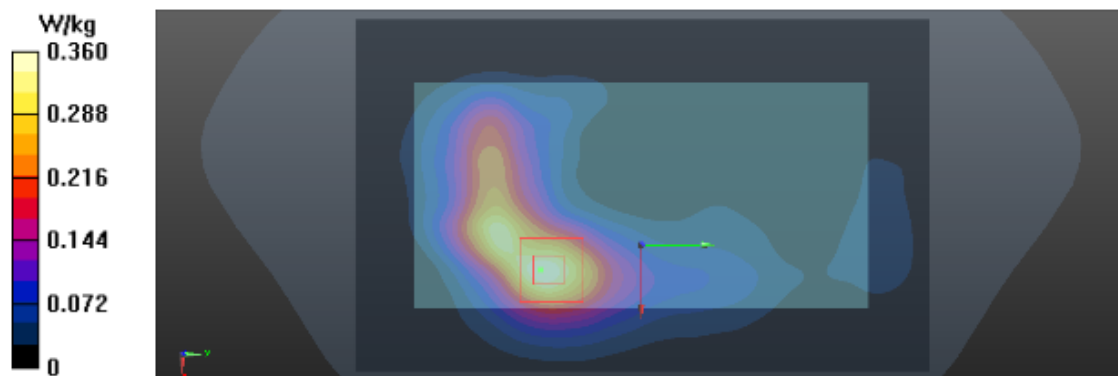
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 1.673 V/m; Power Drift = -0.09 dB

Peak SAR (extrapolated) = 0.605 W/kg

SAR(1 g) = 0.324 W/kg; SAR(10 g) = 0.166 W/kg

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



Test Laboratory: BTL Inc.

Date: 04/16/2016

T407_802.11b_CH6_Rear Face_1.5cm

DUT: 1603C159;

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS, 1Mbps) (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.977$ S/m; $\epsilon_r = 51.669$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °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: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x18x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (interpolated) = 0.0937 W/kg

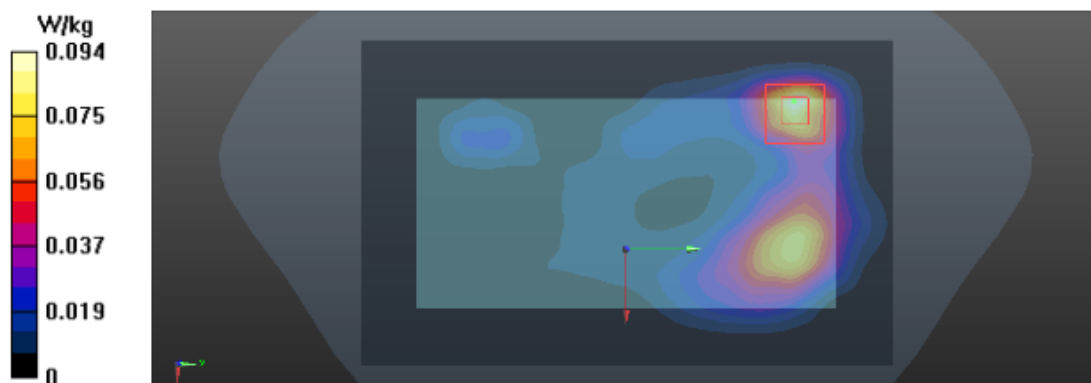
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.103 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.149 W/kg

SAR(1 g) = 0.050 W/kg; SAR(10 g) = 0.021 W/kg

Maximum value of SAR (measured) = 0.0773 W/kg



Test Laboratory: BTL Inc.

Date: 04/17/2016

T410_802.11b_CH6_Rear Face_1cm

DUT: 1603C159;

Communication System: UID 0, IEEE 802.11b WiFi 2.4GHz (DSSS, 1Mbps) (0); Frequency: 2437 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 2437$ MHz; $\sigma = 1.977$ S/m; $\epsilon_r = 51.669$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °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: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (11x18x1): Interpolated grid: $dx=12$ mm, $dy=12$ mm

Maximum value of SAR (interpolated) = 0.183 W/kg

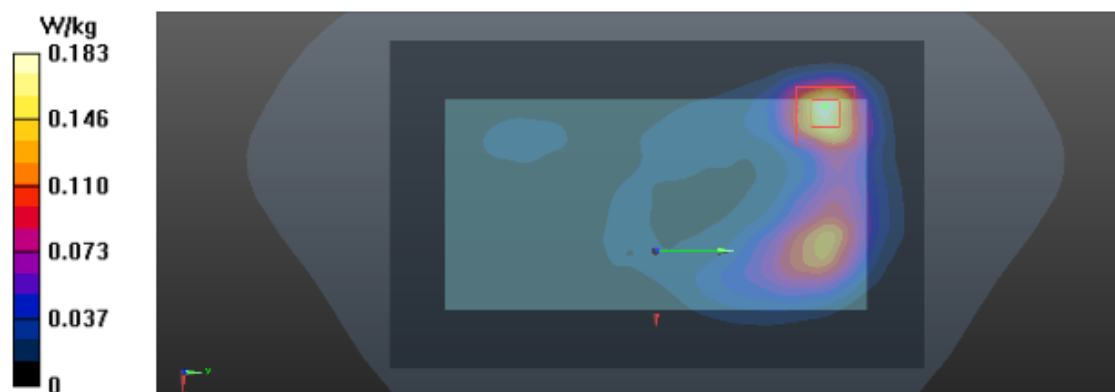
Zoom Scan (7x7x7)/Cube 0: Measurement grid: $dx=5$ mm, $dy=5$ mm, $dz=5$ mm

Reference Value = 2.447 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.361 W/kg

SAR(1 g) = 0.117 W/kg; SAR(10 g) = 0.038 W/kg

Maximum value of SAR (measured) = 0.180 W/kg



Test Laboratory: BTL Inc.

Date: 05/31/2016

T651_GSM 1900_GPRS 2TX_CH661_Front Face_0cm_Battery 2

DUT: 1603C159A;

Communication System: UID 0, GPRS 2TX (0); Frequency: 1880 MHz; Duty Cycle: 1:4

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.537$ S/m; $\epsilon_r = 53.528$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.2 °C; Liquid Temperature: 22.2 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 3.82 W/kg

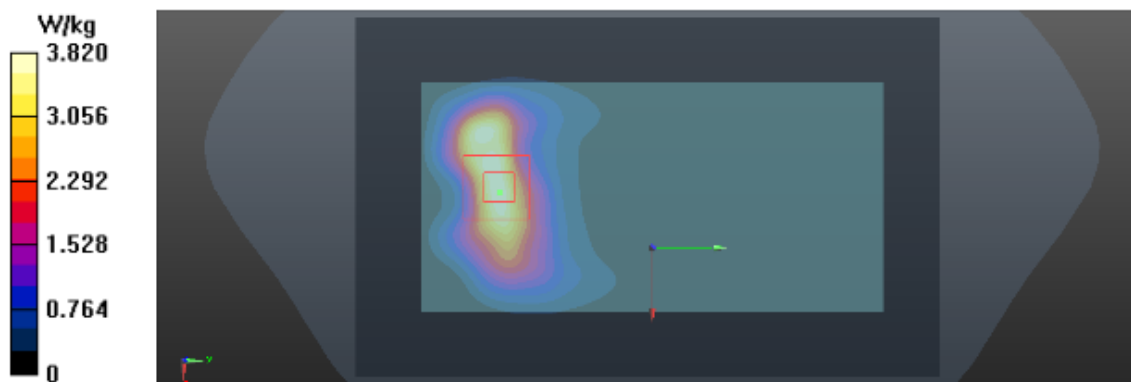
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.174 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 8.10 W/kg

SAR(1 g) = 3.42 W/kg; SAR(10 g) = 1.67 W/kg

Maximum value of SAR (measured) = 4.88 W/kg



Test Laboratory: BTL Inc.

Date: 04/10/2016

T422_UMTS B4_RMC 12. 2K_CH1413_Front Face_0cm

DUT: 1603C159;

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1732.6 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1733$ MHz; $\sigma = 1.445$ S/m; $\epsilon_r = 51.731$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.38, 8.38, 8.38); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 6.23 W/kg

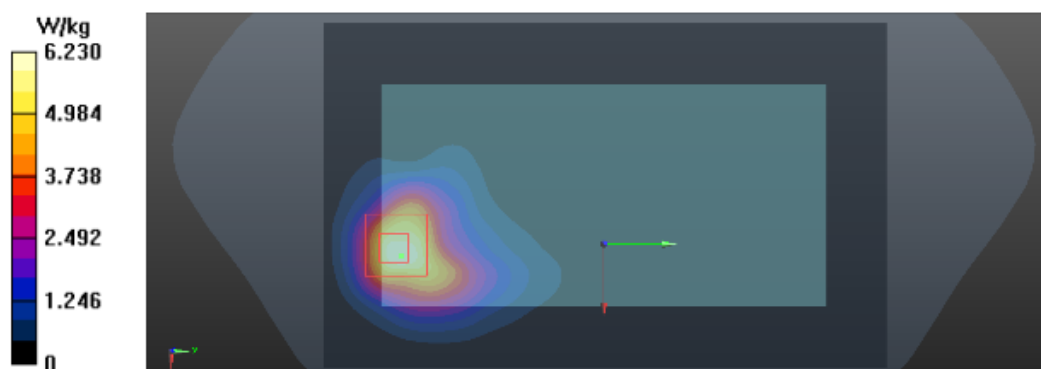
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 6.447 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 14.3 W/kg

SAR(1 g) = 6.1 W/kg; SAR(10 g) = 2.84 W/kg

Maximum value of SAR (measured) = 6.53 W/kg



Test Laboratory: BTL Inc.

Date: 06/04/2016

T642_LTE B2_QPSK 20M_CH18900_1RB_Front Face_0cm_Battery 2

DUT: 1603C159A;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1880 MHz; Duty Cycle: 1:1

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.545$ S/m; $\epsilon_r = 52.484$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.1 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.94, 7.94, 7.94); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 2.28 W/kg

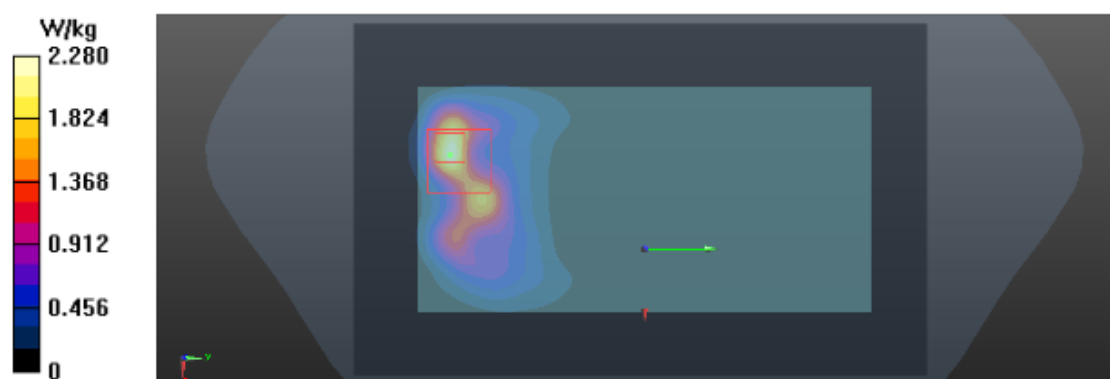
Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.078 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 4.25 W/kg

SAR(1 g) = 1.87 W/kg; SAR(10 g) = 0.802 W/kg

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



Test Laboratory: BTL Inc.

Date: 04/10/2016

T447_LTE B4_QPSK 20M_CH20175_1RB_Front Face_0cm_Battery 2

DUT: 1603C159;

Communication System: UID 0, LTE-FDD(1RB, 20MHz, QPSK) (0); Frequency: 1732.5 MHz; Duty Cycle: 1:1

Medium parameters used (interpolated): $f = 1732.5$ MHz; $\sigma = 1.445$ S/m; $\epsilon_r = 51.733$; $\rho = 1000$ kg/m³

Ambient Temperature: 23.3 °C; Liquid Temperature: 22.5 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.38, 8.38, 8.38); Calibrated: 02/19/2016;
- Sensor-Surface: 4mm (Mechanical Surface Detection), $z = 1.0, 31.0$
- Electronics: DAE4 Sn1390; Calibrated: 09/18/2015
- Phantom: SAM Front; Type: Twin SAM; Serial: 1784
- DASY52 52.8.8(1222); SEMCAD X 14.6.10(7331)

Area Scan (9x14x1): Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 3.76 W/kg

Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 4.748 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 7.01 W/kg

SAR(1 g) = 3.1 W/kg; SAR(10 g) = 1.44 W/kg

Maximum value of SAR (measured) = 3.64 W/kg

