

Test Laboratory: BTL Inc.

Date: 12/12/2015

### T01\_GSM 850\_CH190\_Right Cheek

DUT: 1512C068;

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

Medium parameters used (interpolated):  $f = 837$  MHz;  $\sigma = 0.879$  S/m;  $\epsilon_r = 43.162$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(9.75, 9.75, 9.75); Calibrated: 01/30/2015;
- 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 (11x16x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.198 W/kg

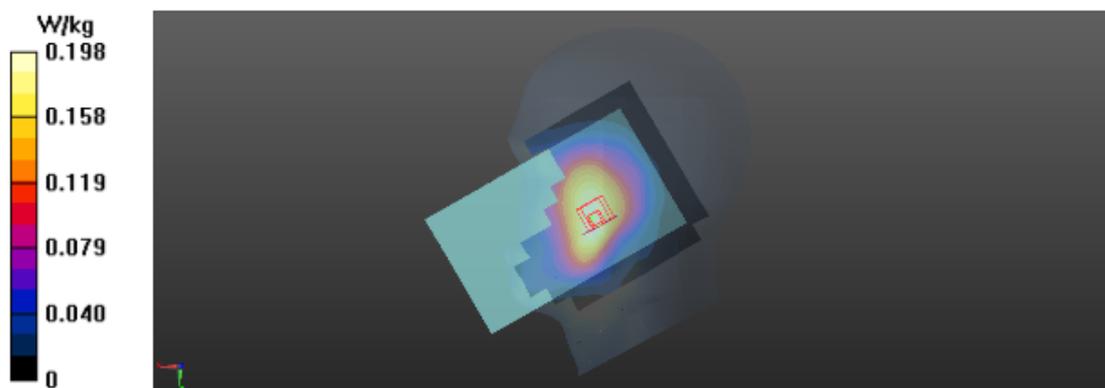
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 7.137 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.218 W/kg

**SAR(1 g) = 0.188 W/kg; SAR(10 g) = 0.153 W/kg**

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



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### T06\_GSM 1900\_CH661\_Right Cheek

DUT: 1512C068;

Communication System: UID 0, Generic GSM (0); Frequency: 1880 MHz; Duty Cycle: 1:8.30042

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.399$  S/m;  $\epsilon_r = 39.208$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.23, 8.23, 8.23); Calibrated: 01/30/2015;
- 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 (11x16x1):** Interpolated grid: dx=15 mm, dy=15

mm Maximum value of SAR (interpolated) = 0.069 W/kg

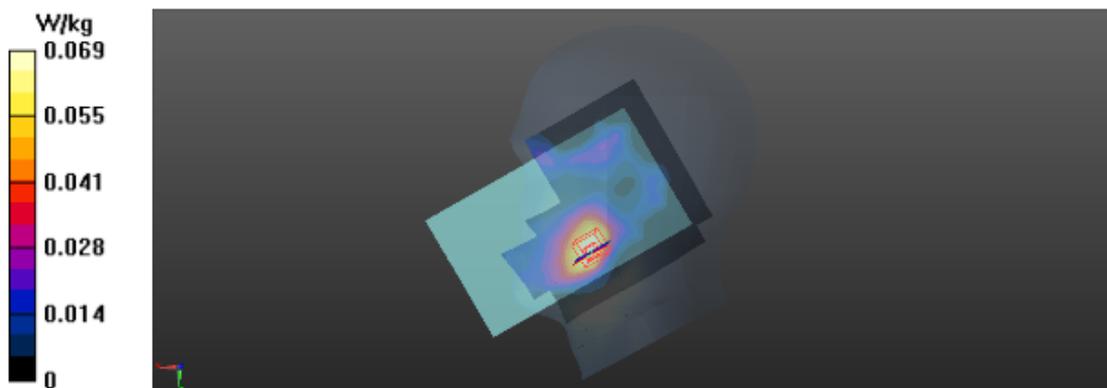
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 2.633 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.0830 W/kg

**SAR(1 g) = 0.062 W/kg; SAR(10 g) = 0.042 W/kg**

Maximum value of SAR (measured) = 0.0649 W/kg



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### T11\_WCDMA B2\_RMC12.2K\_CH9400\_Right Cheek

DUT: 1512C068;

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

Medium parameters used:  $f = 1880$  MHz;  $\sigma = 1.399$  S/m;  $\epsilon_r = 39.208$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(8.23, 8.23, 8.23); Calibrated: 01/30/2015;
- 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 (11x16x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.115 W/kg

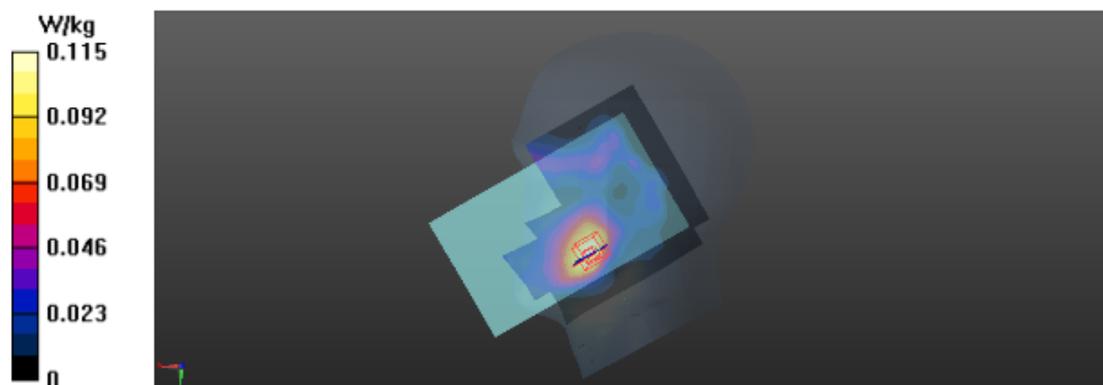
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 3.464 V/m; Power Drift = -0.02 dB

Peak SAR (extrapolated) = 0.138 W/kg

**SAR(1 g) = 0.104 W/kg; SAR(10 g) = 0.071 W/kg**

Maximum value of SAR (measured) = 0.108 W/kg



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**T16\_WCDMA B5\_RMC12.2K\_CH4182\_Right Cheek**

**DUT: 1512C068;**

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.4 MHz; Duty Cycle:  
1:1 Medium parameters used:  $f = 836$  MHz;  $\sigma = 0.903$  S/m;  $\epsilon_r = 42.899$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature: 23.3 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(9.75, 9.75, 9.75); Calibrated: 01/30/2015;
- 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 (11x16x1):** Interpolated grid:  $dx=15$  mm,  $dy=15$  mm

Maximum value of SAR (interpolated) = 0.137 W/kg

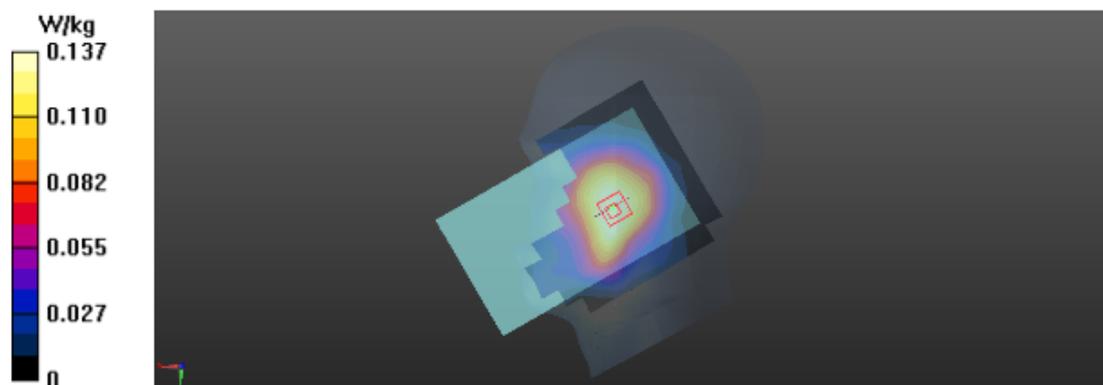
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid:  $dx=8$ mm,  $dy=8$ mm,  $dz=5$ mm

Reference Value = 7.504 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 0.156 W/kg

**SAR(1 g) = 0.133 W/kg; SAR(10 g) = 0.109 W/kg**

Maximum value of SAR (measured) = 0.138 W/kg



Test Laboratory: BTL Inc.

Date: 12/11/2015

### T21\_802.11b\_CH6\_Right Cheek

**DUT: 1512C068;**

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;  $\sigma = 1.821$  S/m;  $\epsilon_r = 39.108$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.38, 7.38, 7.38); Calibrated: 01/30/2015;
- 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 (13x20x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 0.389 W/kg

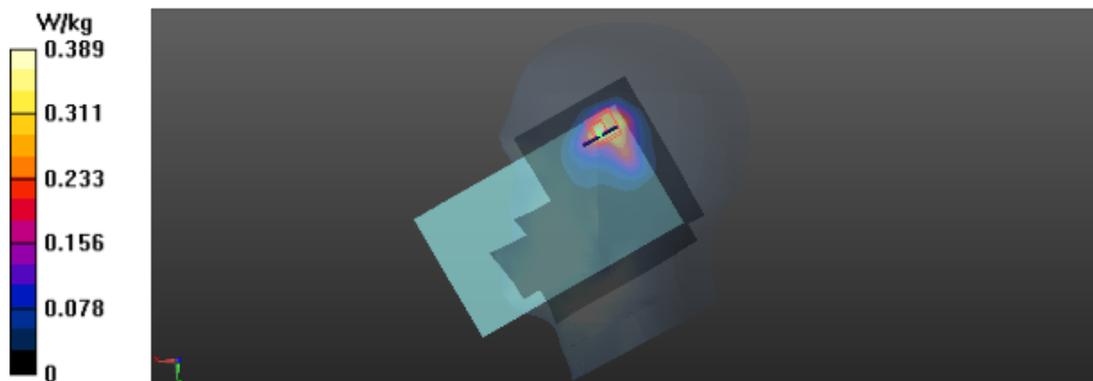
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.021 V/m; Power Drift = -0.03 dB

Peak SAR (extrapolated) = 0.732 W/kg

**SAR(1 g) = 0.328 W/kg; SAR(10 g) = 0.151 W/kg**

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



Test Laboratory: BTL Inc.

Date: 12/15/2015

**T46\_GSM 850\_GPRS 4TX\_CH128\_Rear Face\_0.8cm**

**DUT: 1512C068;**

Communication System: UID 0, GPRS 4TX (0); Frequency: 824.2 MHz; Duty Cycle: 1:2

Medium parameters used (interpolated):  $f = 824.2$  MHz;  $\sigma = 0.964$  S/m;  $\epsilon_r = 54.747$ ;  $\rho = 1000$  kg/m<sup>3</sup>

Ambient Temperature: 23.4 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.19, 10.19, 10.19); Calibrated: 01/30/2015;
- 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 (11x16x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 1.39 W/kg

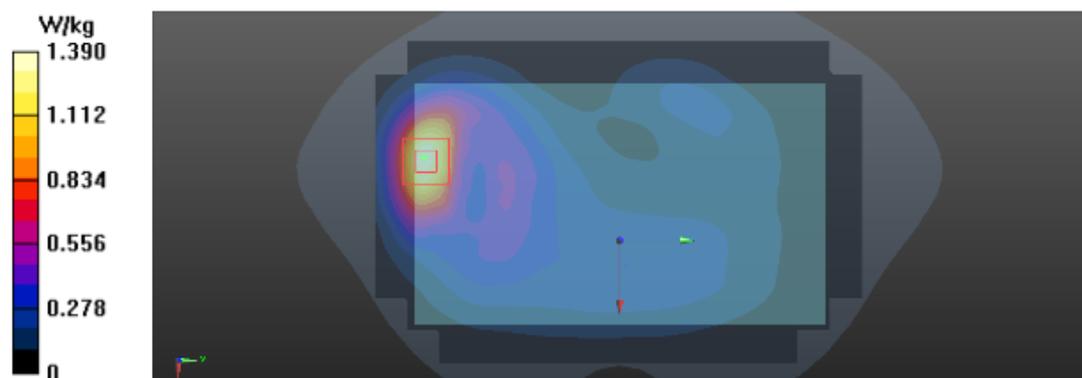
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 13.77 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 2.01 W/kg

**SAR(1 g) = 1.33 W/kg; SAR(10 g) = 0.813 W/kg**

Maximum value of SAR (measured) = 1.46 W/kg



Test Laboratory: BTL Inc.

Date: 12/16/2015

**T60\_GSM 1900\_GPRS 4TX\_CH810\_Bottom Side\_0.8cm**

**DUT: 1512C068;**

Communication System: UID 0, GPRS 4TX (0); Frequency: 1909.8 MHz; Duty Cycle: 1:2  
Medium parameters used:  $f = 1910$  MHz;  $\sigma = 1.564$  S/m;  $\epsilon_r = 53.748$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature: 23.2 °C; Liquid Temperature: 22.4 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.86, 7.86, 7.86); Calibrated: 01/30/2015;
- 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 (4x11x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 1.48 W/kg

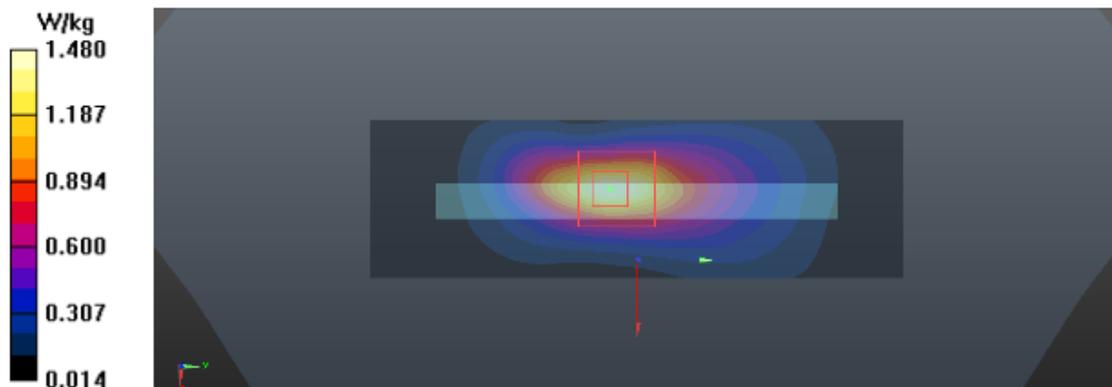
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 28.68 V/m; Power Drift = -0.04 dB

Peak SAR (extrapolated) = 2.10 W/kg

**SAR(1 g) = 1.27 W/kg; SAR(10 g) = 0.690 W/kg**

Maximum value of SAR (measured) = 1.44 W/kg



Test Laboratory: BTL Inc.

Date: 12/16/2015

**T78\_WCDMA B2\_RMC12.2K\_CH9538\_Bottom Side\_0.8cm Battery 2**

**DUT: 1512C068;**

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 1907.6 MHz; Duty Cycle: 1:1

Medium parameters used:  $f = 1908$  MHz;  $\sigma = 1.561$  S/m;  $\epsilon_r = 53.749$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.86, 7.86, 7.86); Calibrated: 01/30/2015;
- 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 (4x11x1):** Interpolated grid: dx=15 mm, dy=15 mm

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

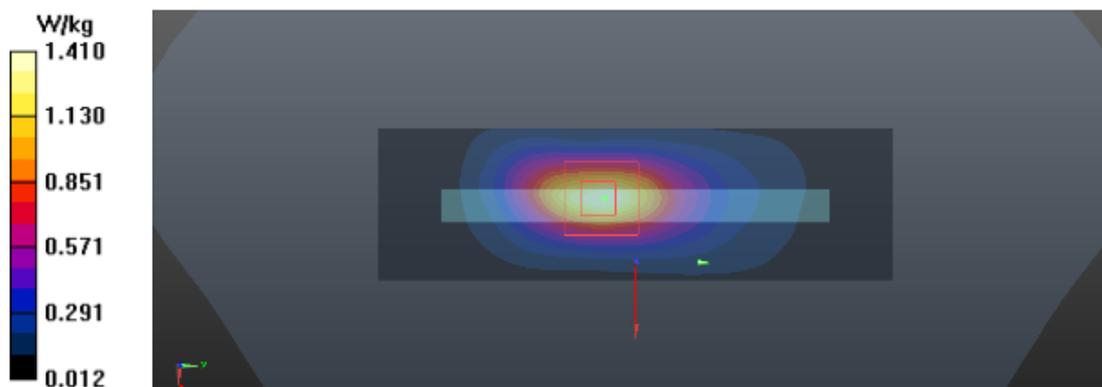
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 26.75 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 1.98 W/kg

**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.637 W/kg**

Maximum value of SAR (measured) = 1.33 W/kg



Test Laboratory: BTL Inc.

Date: 12/15/2015

**T94\_WCDMA B5\_RMC12.2K\_CH4182\_Rear Face\_0.8cm Battery 2**

**DUT: 1512C068;**

Communication System: UID 0, UMTS-FDD(WCDMA) (0); Frequency: 836.4 MHz; Duty Cycle: 1:1  
Medium parameters used:  $f = 836$  MHz;  $\sigma = 0.99$  S/m;  $\epsilon_r = 54.537$ ;  $\rho = 1000$  kg/m<sup>3</sup>  
Ambient Temperature: 23.4 °C; Liquid Temperature: 22.3 °C

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(10.19, 10.19, 10.19); Calibrated: 01/30/2015;
- 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 (11x16x1):** Interpolated grid: dx=15 mm, dy=15 mm

Maximum value of SAR (interpolated) = 0.883 W/kg

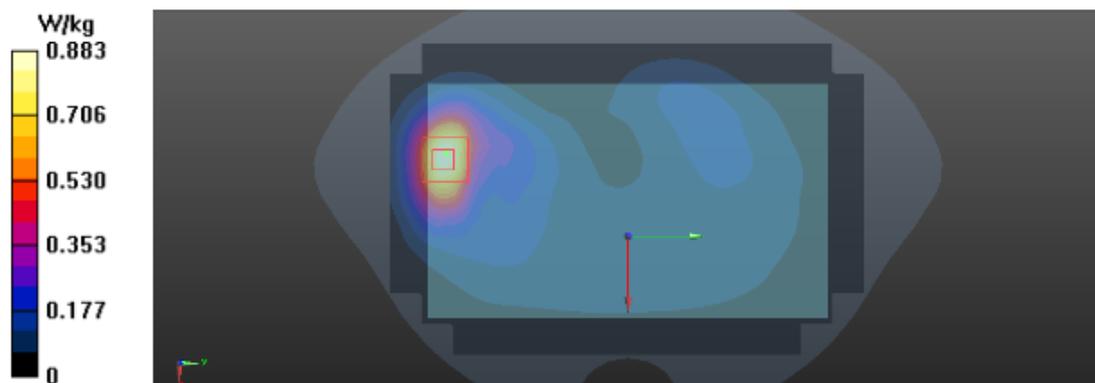
**Zoom Scan (5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 8.538 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.24 W/kg

**SAR(1 g) = 0.815 W/kg; SAR(10 g) = 0.493 W/kg**

Maximum value of SAR (measured) = 0.895 W/kg



Test Laboratory: BTL Inc.

Date: 12/16/2015

**T101\_802.11b\_CH6\_Rear Face\_0cm**

**DUT: 1512C068;**

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;  $\sigma = 1.98$  S/m;  $\epsilon_r = 51.758$ ;  $\rho = 1000$  kg/m<sup>3</sup>

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

DASY Configuration:

- Probe: EX3DV4 - SN3932; ConvF(7.6, 7.6, 7.6); Calibrated: 01/30/2015;
- 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 (13x20x1):** Interpolated grid: dx=12 mm, dy=12 mm

Maximum value of SAR (interpolated) = 1.11 W/kg

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

Reference Value = 0.6310 V/m; Power Drift = 0.03 dB

Peak SAR (extrapolated) = 1.96 W/kg

**SAR(1 g) = 0.740 W/kg; SAR(10 g) = 0.291 W/kg**

Maximum value of SAR (measured) = 0.799 W/kg

