

Evaluation for mini-tablet/UMPC Operations for ZTE3200 and iPod Touch 2/3

Per FCC test requirement as below, we test the worst SAR channel of WWAN on the worst SAR face, DUT Rear Face and DUT Right Side with 10 mm gap.

b) single-transmit evaluations to address mini-tablet/umpc operations of this combined-EUT

from consideration of the already available 10 mm SAR results, for only WWAN-Peel transmitting, using those channels that had highest-SAR for "rear face" and "right side" at 10 mm, rather than 5 mm spacing as FCC has been requesting for similar other umpc/mini-tablet devices, please test SAR for "rear face" and "right side" at 0 mm spacing, and EVALUATING COMPLIANCE TO HAND SAR LIMIT only, i.e. measure/report 10-g SAR to compare to 4 W/kg limit

<SAR Test Results>

ZTE3200 + iPod Touch 3

Position	ZTE3200 CDMA2000 BC0	ZTE3200 CDMA2000 BC1	Hand SAR Limit (W/kg per 10g)	Note
Rear Face	1.01	3.7	4	Pass
Right Side	1.78	2.68	4	Pass

ZTE3200 + iPod Touch 2

Position	ZTE3200 CDMA2000 BC0	ZTE3200 CDMA2000 BC1	Hand SAR Limit (W/kg per 10g)	Note
Rear Face	1.03	3.76	4	Pass
Right Side	1.78	2.56	4	Pass

<Simultaneous Transmission SAR Evaluation for 0 mm Gap>

The highest 0 mm SAR for ZTE3200 is 3.76 (W/kg per 10g). The worst case conservative of front face SAR for iPod Touch is 0.224 (W/kg per 10g).

The simultaneous transmission SAR is calculated as below.

$$3.76 + 0.224 = 3.984 < 4 \text{ W/kg}$$

<SAR Plots for mini-tablet/UMPC Operations>

Test Laboratory: Sporton International Inc. SAR/HAC Testing Lab

Date: 10/21/2010

#34 CDMA2000 BC0 Ch384_RTAP 153.6_ZTE3200 + iPod Touch 2_Rear Face_0 mm Gap

DUT: 000802-01

Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1

Medium: MSL_835_101021 Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.7$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(8.22, 8.22, 8.22); Calibrated: 11/23/2009

- Sensor-Surface: 4mm (Mechanical Surface Detection)

- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16

- Phantom: SAM2; Type: SAM; Serial: TP-1479

- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch384/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 2.08 mW/g

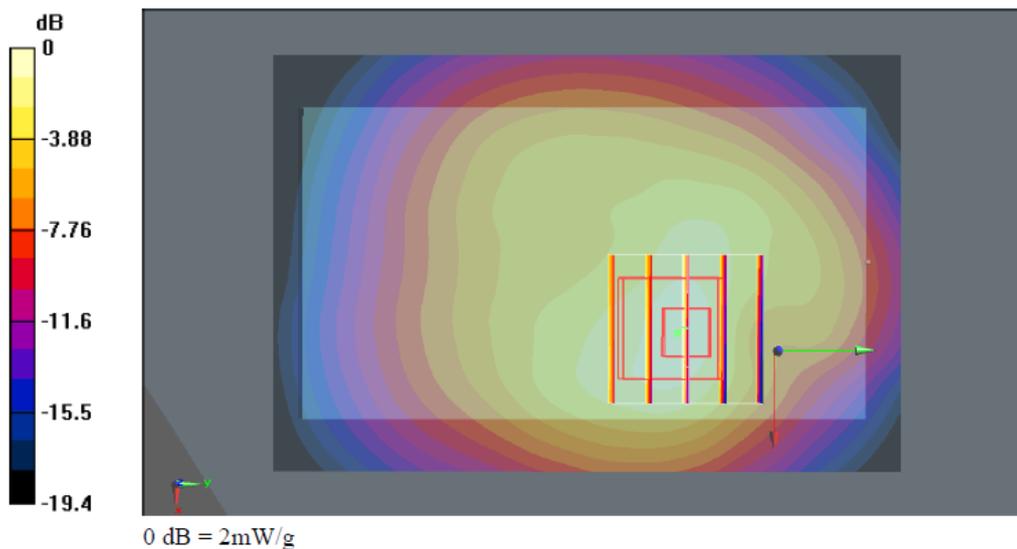
Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 35.7 V/m; Power Drift = 0.120 dB

Peak SAR (extrapolated) = 3.7 W/kg

SAR(1 g) = 1.83 mW/g; SAR(10 g) = 1.03 mW/g

Maximum value of SAR (measured) = 2 mW/g



#35 CDMA2000 BC0 Ch384_RTAP 153.6_ZTE3200 + iPod Touch 2_Right Side_0 mm Gap

DUT: 000802-01

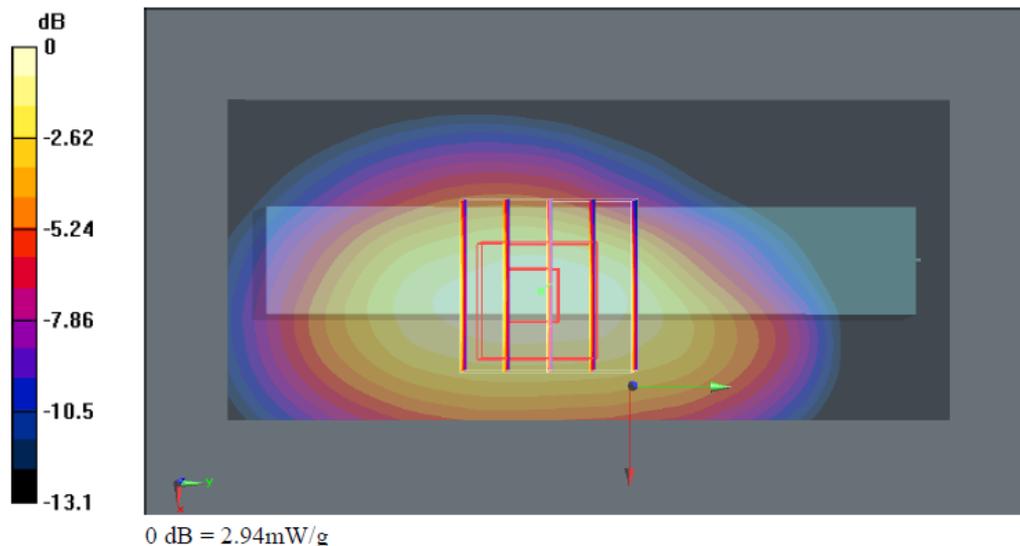
Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: MSL_835_101021 Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.7$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.5 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(8.22, 8.22, 8.22); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch384/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.03 mW/g

Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = 0.00504 dB
Peak SAR (extrapolated) = 4.17 W/kg
SAR(1 g) = 2.76 mW/g; SAR(10 g) = 1.78 mW/g
Maximum value of SAR (measured) = 2.94 mW/g



#36 CDMA2000 BC0 Ch384_RTAP 153.6_ZTE3200 + iPod Touch 3_Rear Face_0 mm Gap

DUT: 000802-01

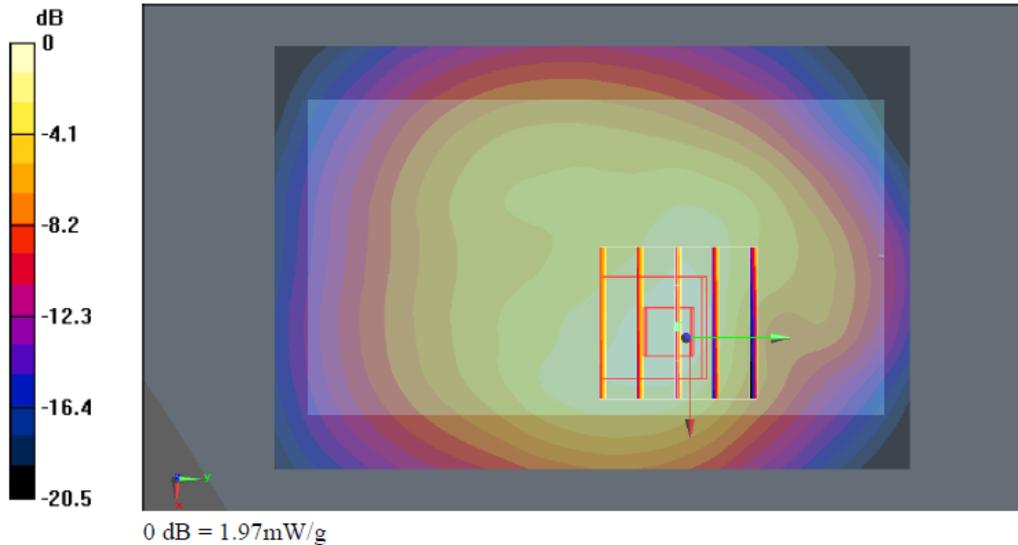
Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: MSL_835_101021 Medium parameters used: $f = 837 \text{ MHz}$; $\sigma = 0.993 \text{ mho/m}$; $\epsilon_r = 55.7$; $\rho = 1000 \text{ kg/m}^3$
Ambient Temperature : 23.5 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(8.22, 8.22, 8.22); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch384/Area Scan (61x91x1): Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$
Maximum value of SAR (interpolated) = 1.91 mW/g

Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$
Reference Value = 31.2 V/m; Power Drift = 0.021 dB
Peak SAR (extrapolated) = 3.6 W/kg
SAR(1 g) = 1.78 mW/g; SAR(10 g) = 1.01 mW/g
Maximum value of SAR (measured) = 1.97 mW/g



#37 CDMA2000 BC0 Ch384_RTAP 153.6_ZTE3200 + iPod Touch 3_Right Side_0 mm Gap

DUT: 000802-01

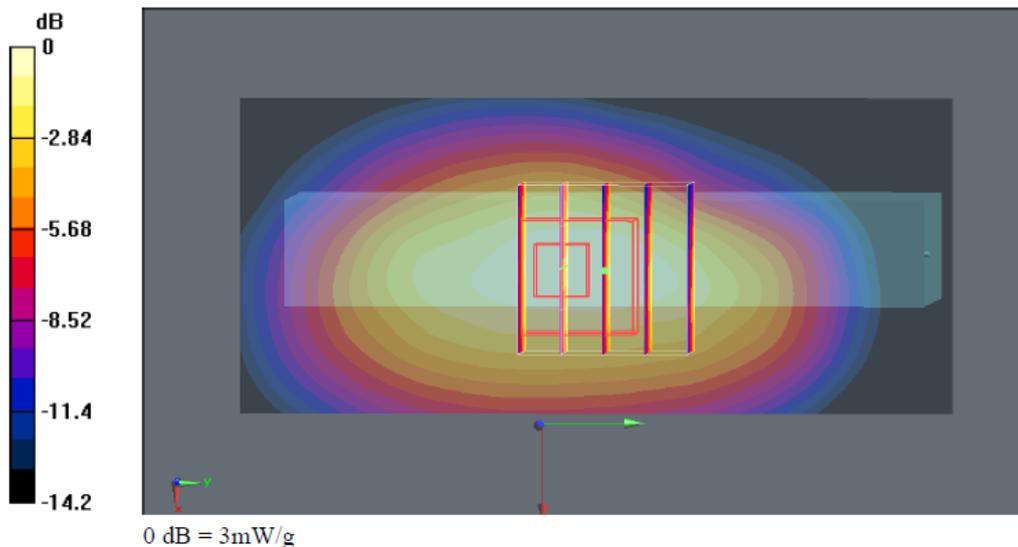
Communication System: CDMA2000; Frequency: 836.52 MHz; Duty Cycle: 1:1
Medium: MSL_835_101021 Medium parameters used: $f = 837$ MHz; $\sigma = 0.993$ mho/m; $\epsilon_r = 55.7$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.5 °C; Liquid Temperature : 21.4 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(8.22, 8.22, 8.22); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch384/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 3.12 mW/g

Ch384/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 50 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 4.21 W/kg
SAR(1 g) = 2.78 mW/g; SAR(10 g) = 1.78 mW/g
Maximum value of SAR (measured) = 3 mW/g



#30 CDMA2000 BC1 Ch1175_RTAP 153.6_ZTE3200 + iPod Touch 2_Rear Face_0 mm Gap

DUT: 000802-01

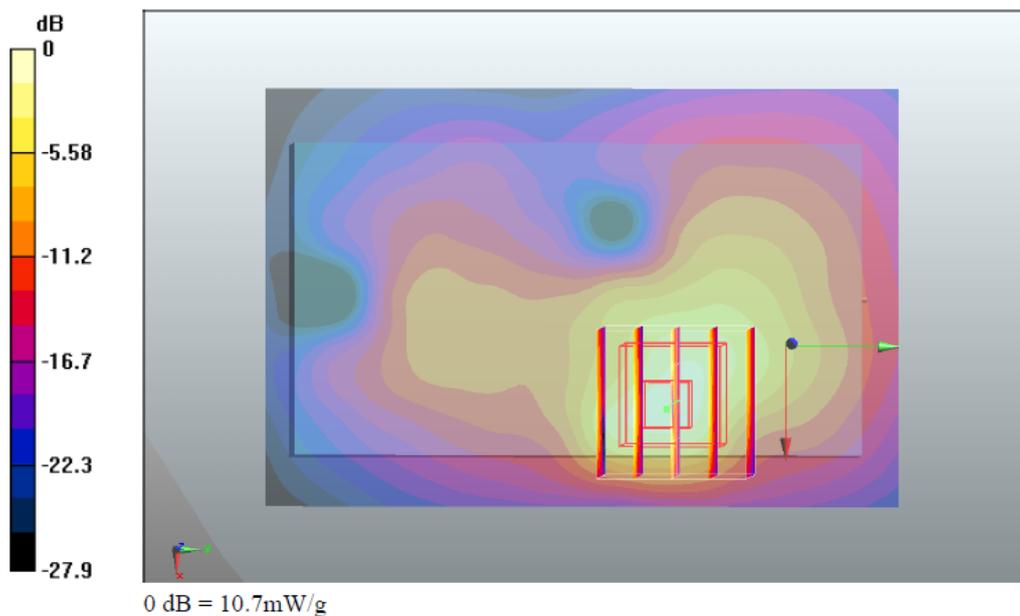
Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: MSL_1900_101018 Medium parameters used: $f = 1909$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.5 °C; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(7.04, 7.04, 7.04); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch1175/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 9.63 mW/g

Ch1175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 35.3 V/m; Power Drift = 0.047 dB
Peak SAR (extrapolated) = 26 W/kg
SAR(1 g) = 8.15 mW/g; SAR(10 g) = 3.76 mW/g
Maximum value of SAR (measured) = 10.7 mW/g



#31 CDMA2000 BC1 Ch1175_RTAP 153.6_ZTE3200 + iPod Touch 2_Right Side_0 mm Gap

DUT: 000802-01

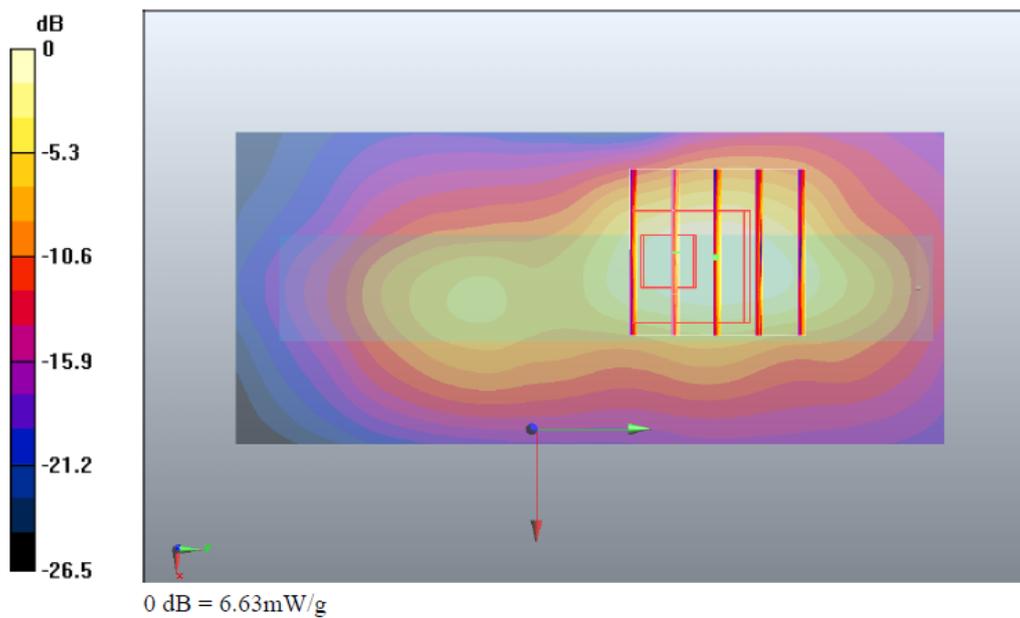
Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: MSL_1900_101018 Medium parameters used: $f = 1909$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.5 °C; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(7.04, 7.04, 7.04); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch1175/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 7.24 mW/g

Ch1175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 26.8 V/m; Power Drift = -0.082 dB
Peak SAR (extrapolated) = 11.4 W/kg
SAR(1 g) = 5.46 mW/g; SAR(10 g) = 2.56 mW/g
Maximum value of SAR (measured) = 6.63 mW/g



#32 CDMA2000 BC1 Ch1175_RTAP 153.6_ZTE3200 + iPod Touch 3_Rear Face_0 mm Gap

DUT: 000802-01

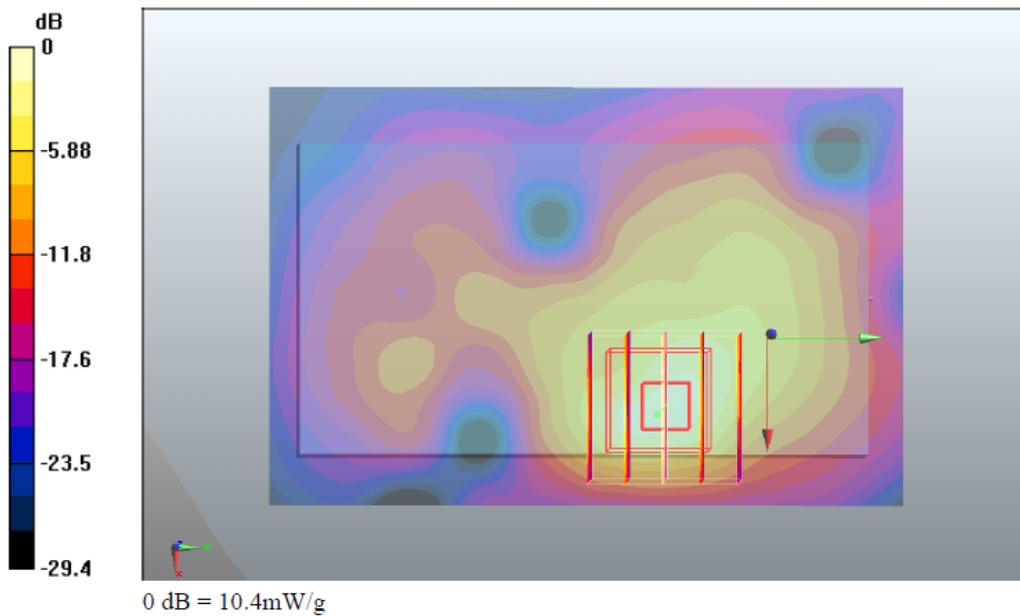
Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1
Medium: MSL_1900_101018 Medium parameters used: $f = 1909$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³
Ambient Temperature : 23.5 °C; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(7.04, 7.04, 7.04); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch1175/Area Scan (61x91x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (interpolated) = 8.9 mW/g

Ch1175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm
Reference Value = 37.5 V/m; Power Drift = -0.135 dB
Peak SAR (extrapolated) = 27.1 W/kg
SAR(1 g) = 8.97 mW/g; SAR(10 g) = 3.7 mW/g
Maximum value of SAR (measured) = 10.4 mW/g



#33 CDMA2000 BC1 Ch1175_RTAP 153.6_ZTE3200 + iPod Touch 3_Right Side_0 mm Gap

DUT: 000802-01

Communication System: CDMA2000; Frequency: 1908.75 MHz; Duty Cycle: 1:1

Medium: MSL_1900_101018 Medium parameters used: $f = 1909$ MHz; $\sigma = 1.54$ mho/m; $\epsilon_r = 52.4$; $\rho = 1000$ kg/m³

Ambient Temperature : 23.5 °C; Liquid Temperature : 21.3 °C

DASY5 Configuration:

- Probe: EX3DV4 - SN3697; ConvF(7.04, 7.04, 7.04); Calibrated: 11/23/2009
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1210; Calibrated: 2009/11/16
- Phantom: SAM2; Type: SAM; Serial: TP-1479
- Measurement SW : DASY5, V5.2 Build 162; SEMCAD X Version 14.0 Build 57

Ch1175/Area Scan (41x91x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (interpolated) = 6.98 mW/g

Ch1175/Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 22.6 V/m; Power Drift = -0.125 dB

Peak SAR (extrapolated) = 16.6 W/kg

SAR(1 g) = 5.43 mW/g; SAR(10 g) = 2.68 mW/g

Maximum value of SAR (measured) = 6.17 mW/g

