

Appendix 1

SAR Distribution Plots for Test System Verification

System Accuracy Verification Measurements for Head SAR Measurements

Date/Time: 8/1/2013 8:55:46 AM

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles**DUT Serial: D835V2 - SN:422tr****DASY Configuration:**

- Probe: ES3DV3 - SN3180; ConvF(6.23,6.23,6.23); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#1 - Sugar SAM (extended range), Rev.2 (24-Feb-12);
Type: SAM v4.0; Serial: TP-1156
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 835.0 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=835$ MHz; $\sigma = 0.9142$; $\epsilon_r = 40.18$ mho/m; $\rho = 1.000$ kg/m³

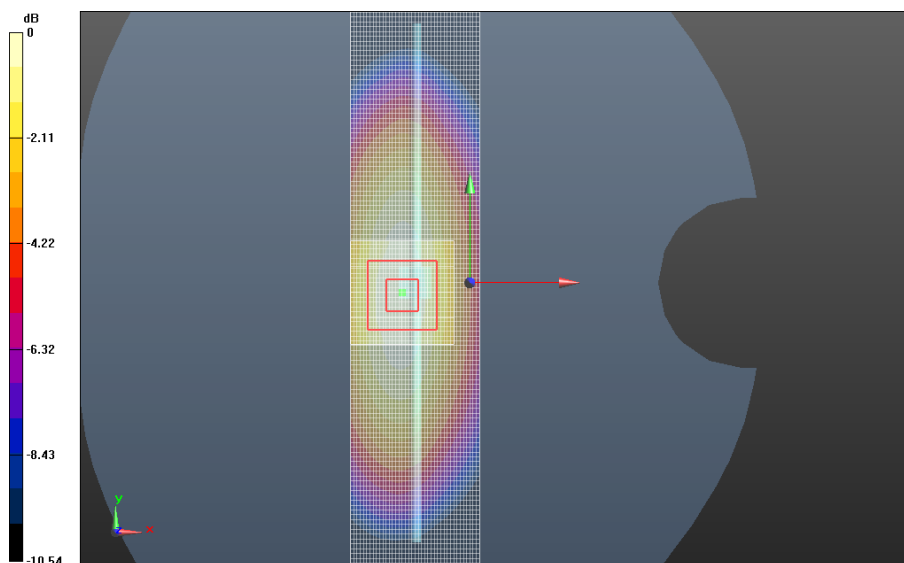
<2 GHz, SAM Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):**Interpolated grid: dx=1.000 mm, dy=1.500 mm**

Fast SAR: SAR(1g) = 1.83 W/kg; SAR(10g) = 1.22 W/kg

<2 GHz, SAM Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:**Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm**

Reference Value = 46.459 V/m, Power Drift = 0.032 dB

Averaged SAR: SAR(1g) = 1.83 W/kg; SAR(10g) = 1.20 W/kg

**Daily SPC Check**

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D1800V2 - SN:259tr ; Date/Time: 8/2/2013 7:12:05 AM

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(5.01,5.01,5.01); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 1800 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=1800$ MHz; $\sigma = 1.333$; $\epsilon_r = 38.23$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

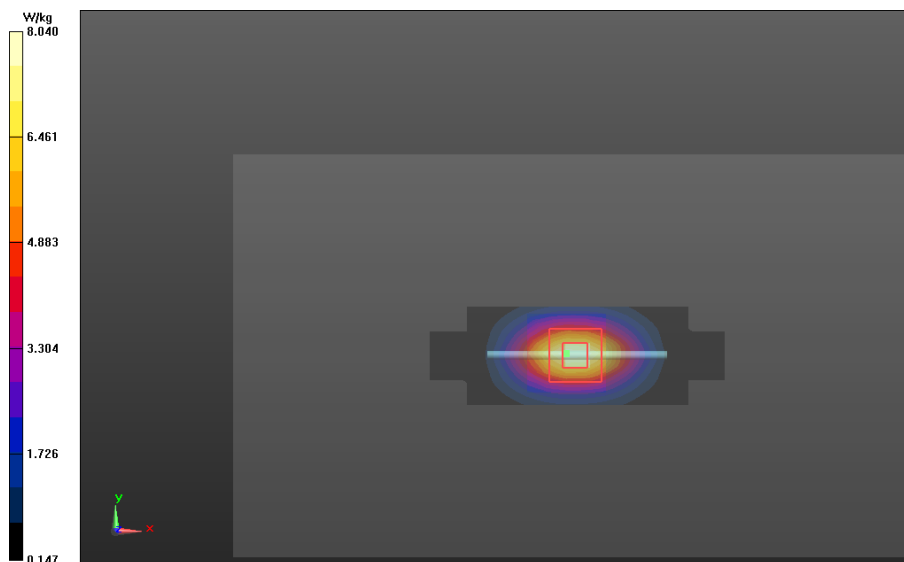
Fast SAR: SAR(1g) = 7.51 W/kg; SAR(10g) = 4.06 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 79.455 V/m, Power Drift = 0.022 dB

Averaged SAR: SAR(1g) = 7.46 W/kg; SAR(10g) = 3.93 W/kg



Daily SPC Check

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D835V2 - SN:436tr ; Date/Time: 7/25/2013 7:51:19 AM

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.01,6.01,6.01); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Sugar SAM (extended range), Rev.2 (24-Feb-12);
Type: SAM v4.0; Serial: TP-1235
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 835.0 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=835$ MHz; $\sigma = 0.9009$; $\epsilon_r = 39.18$ mho/m; $\rho = 1.000$ kg/m³

<2 GHz, SAM Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

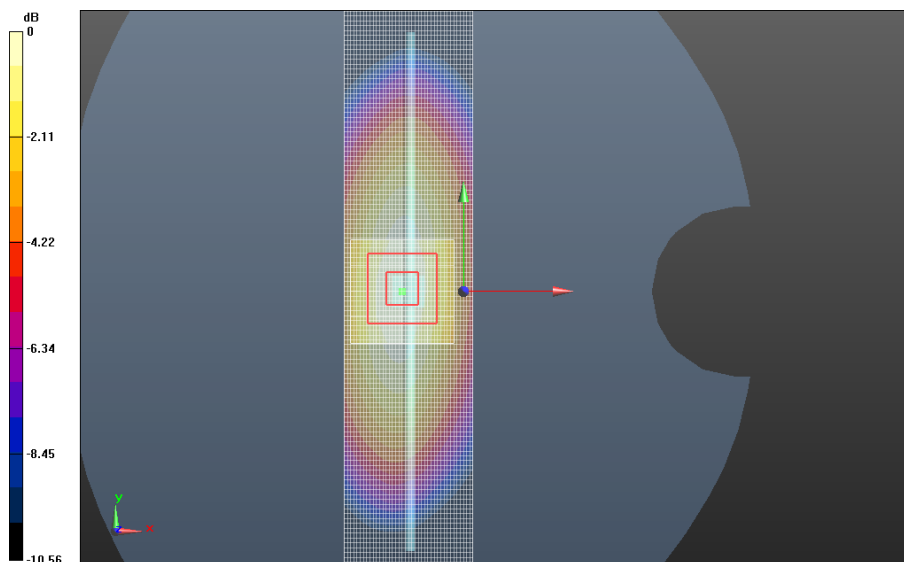
Fast SAR: SAR(1g) = 1.99 W/kg; SAR(10g) = 1.33 W/kg

<2 GHz, SAM Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 49.525 V/m, Power Drift = -0.014 dB

Averaged SAR: SAR(1g) = 1.98 W/kg; SAR(10g) = 1.30 W/kg



Daily SPC Check

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D1800V2 - SN:2d190 ; Date/Time: 7/26/2013 7:11:28 AM

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(5.07,5.07,5.07); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 1800 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=1800$ MHz; $\sigma = 1.329$; $\epsilon_r = 38.88$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

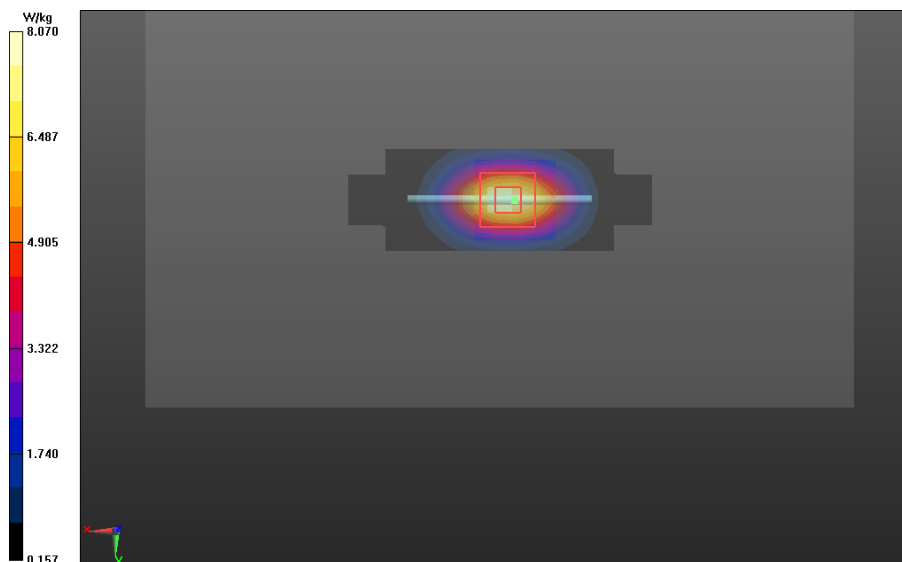
Fast SAR: SAR(1g) = 7.60 W/kg; SAR(10g) = 4.05 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 79.152 V/m, Power Drift = -0.043 dB

Averaged SAR: SAR(1g) = 7.41 W/kg; SAR(10g) = 3.91 W/kg



Daily SPC Check

Date/Time: 1/31/2014 10:57:32 AM

Test Lab: Motorola Mobility – CW System Verification for SAR using Dipoles

DUT Serial: D2450V2 - SN:740;

DASY Configuration:

- Probe: EX3DV4 - SN3728; ConvF(6.91,6.91,6.91); Calibrated: 5/30/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn784; Calibrated: 3/6/2013
- Phantom: R#3, 2450 WiFi SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1153
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.8 (7028)

Communication System: CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=2450$ MHz; $\sigma = 1.787$; $\epsilon_r = 35.76$ mho/m; $\rho = 1.000$ kg/m³

2-3 GHz, SAM Daily SPC Check/fastSAR, Dipole Area Scan (41x221x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

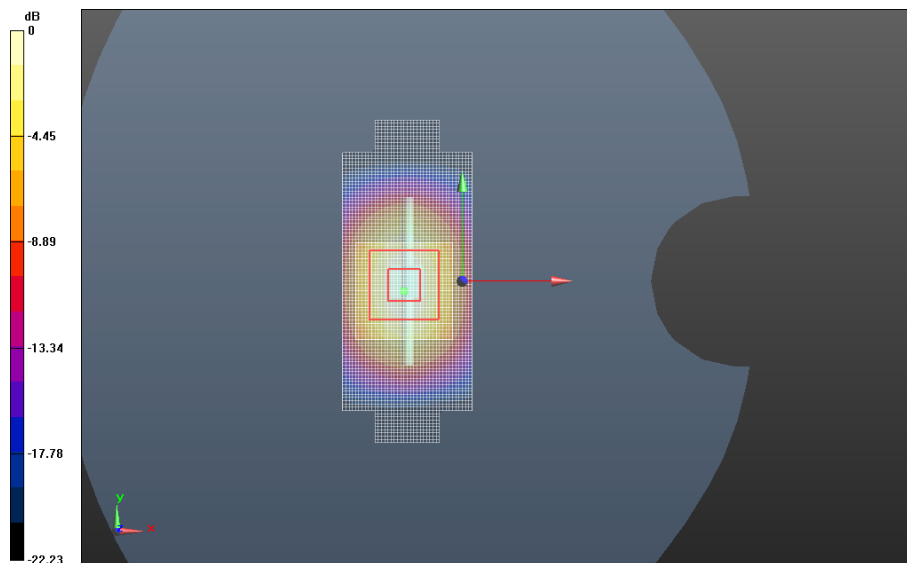
Fast SAR: SAR(1g) = 5.39 W/kg; SAR(10g) = 2.56 W/kg

2-3 GHz, SAM Daily SPC Check/CUBE SAR, 7x7x7 (31x31x36)/Cube 0:

Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 59.560 V/m, Power Drift = -0.079 dB

Averaged SAR: SAR(1g) = 5.37 W/kg; SAR(10g) = 2.49 W/kg



2-3 GHz, SAM Daily SPC Check

System Accuracy Verification Measurements for Body SAR Measurements

Date/Time: 8/6/2013 9:41:38 PM

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles**DUT Serial: D835V2 - SN:422tr****DASY Configuration:**

- Probe: ES3DV3 - SN3180; ConvF(6.05,6.05,6.05); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 835.0 MHz; Duty Cycle: 1:1.000
 Medium Parameters used: $f=835$ MHz; $\sigma = 0.9978$; $\epsilon_r = 54.04$ mho/m; $\rho = 1.000$ kg/m³

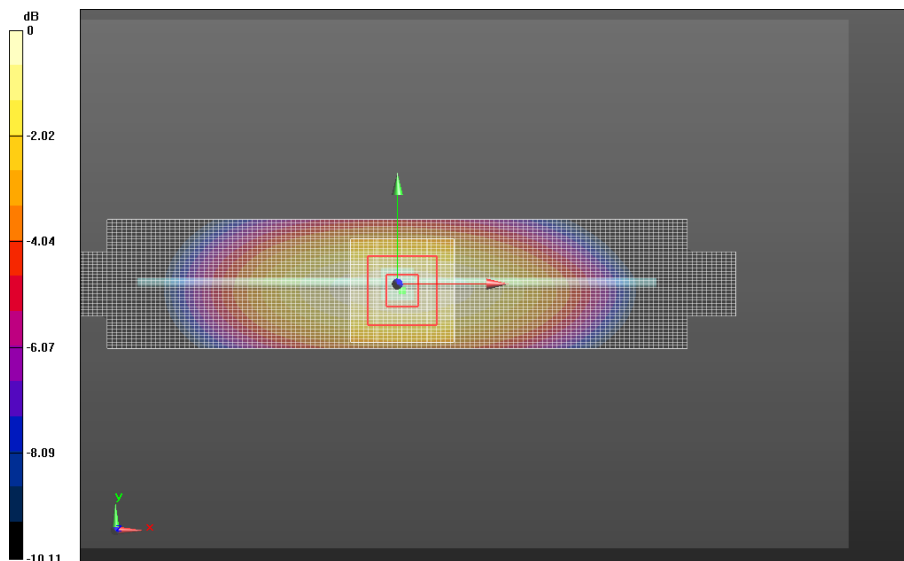
< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):**Interpolated grid: dx=1.000 mm, dy=1.500 mm**

Fast SAR: SAR(1g) = 1.91 W/kg; SAR(10g) = 1.27 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:**Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm**

Reference Value = 46.662 V/m, Power Drift = 0.043 dB

Averaged SAR: SAR(1g) = 1.92 W/kg; SAR(10g) = 1.28 W/kg

**Daily SPC Check**

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D1800V2 - SN:259tr ; Date/Time: 8/5/2013 7:50:24 PM

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(4.78,4.78,4.78); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 1800 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=1800$ MHz; $\sigma = 1.456$; $\epsilon_r = 52.36$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

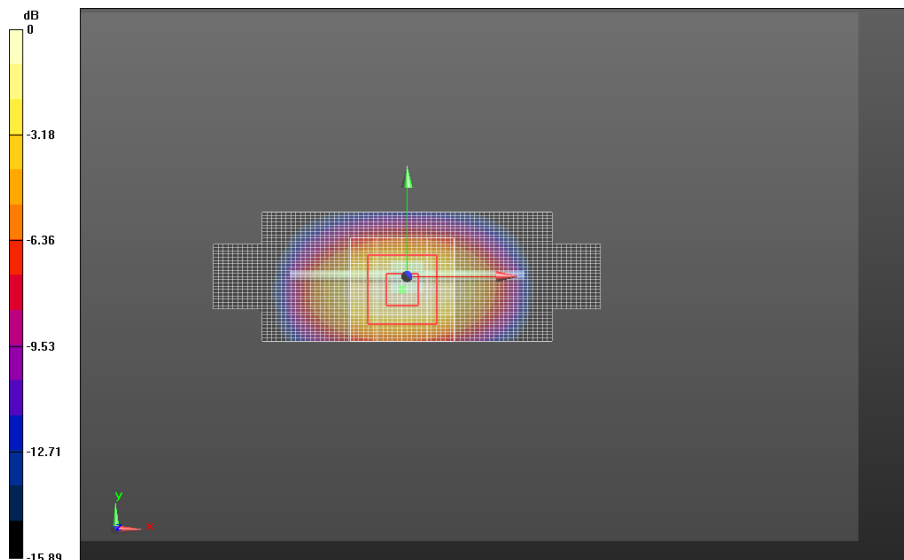
Fast SAR: SAR(1g) = 7.44 W/kg; SAR(10g) = 3.95 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 73.747 V/m, Power Drift = -0.028 dB

Averaged SAR: SAR(1g) = 7.31 W/kg; SAR(10g) = 3.90 W/kg



Daily SPC Check

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D1800V2 - SN:259tr ; Date/Time: 8/7/2013 12:56:22 AM

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(4.78,4.78,4.78); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 1800 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=1800$ MHz; $\sigma = 1.451$; $\epsilon_r = 52.74$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

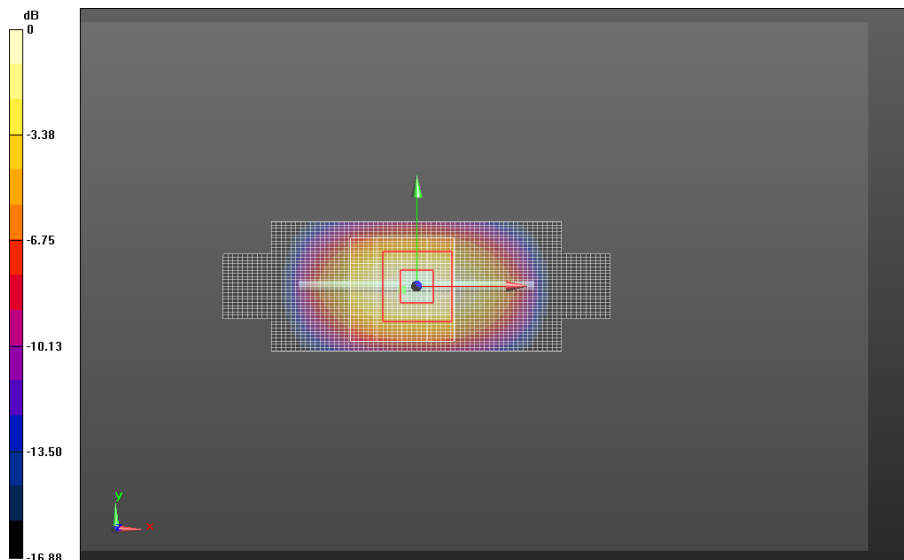
Fast SAR: SAR(1g) = 7.44 W/kg; SAR(10g) = 3.95 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 76.227 V/m, Power Drift = 0.011 dB

Averaged SAR: SAR(1g) = 7.37 W/kg; SAR(10g) = 3.93 W/kg



Daily SPC Check

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D835V2 - SN:436tr ; Date/Time: 7/25/2013 2:27:51 PM

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.02,6.02,6.02); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 835.0 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=835$ MHz; $\sigma = 0.9972$; $\epsilon_r = 53.56$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: $dx=1.000$ mm, $dy=1.500$ mm

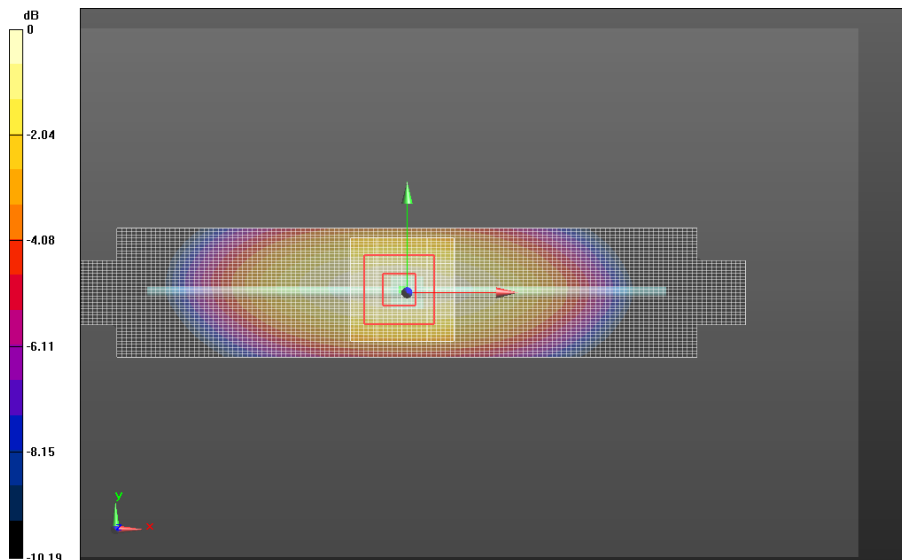
Fast SAR: SAR(1g) = 1.96 W/kg; SAR(10g) = 1.30 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: $dx=1.600$ mm, $dy=1.600$ mm, $dz=1.000$ mm

Reference Value = 47.469 V/m, Power Drift = -0.012 dB

Averaged SAR: SAR(1g) = 1.96 W/kg; SAR(10g) = 1.30 W/kg



Daily SPC Check

Test Lab: Motorola Mobility - CW System Verification for SAR using Dipoles

DUT Serial: D1800V2 - SN:2d190 ; Date/Time: 7/26/2013 9:31:02 AM

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.76,4.76,4.76); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4);
Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: CW for SAR Dipoles; Frequency: 1800 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=1800$ MHz; $\sigma = 1.541$; $\epsilon_r = 50.48$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

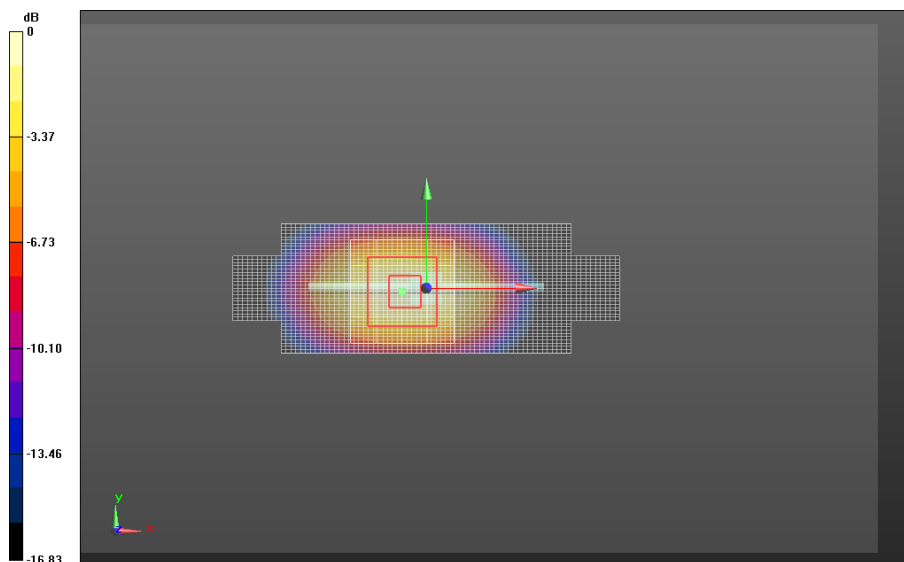
Fast SAR: SAR(1g) = 7.95 W/kg; SAR(10g) = 4.20 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 71.988 V/m, Power Drift = -0.014 dB

Averaged SAR: SAR(1g) = 7.73 W/kg; SAR(10g) = 4.10 W/kg



Daily SPC Check

Date/Time: 2/13/2014 11:52:04 AM

Test Lab: Motorola Mobility – CW System Verification for SAR using Dipoles

DUT Serial: D835V2 - SN:422tr;

DASY Configuration:

- Probe: EX3DV4 - SN3728; ConvF(7.13,7.13,7.13); Calibrated: 5/30/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn784; Calibrated: 3/6/2013
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.8 (7028)

Communication System: CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=2450$ MHz; $\sigma = 1.981$; $\epsilon_r = 47.79$ mho/m; $\rho = 1.000$ kg/m³

< 2GHz, Daily SPC Check/fastSAR, Dipole Area Scan (41x141x1):

Interpolated grid: dx=1.000 mm, dy=1.500 mm

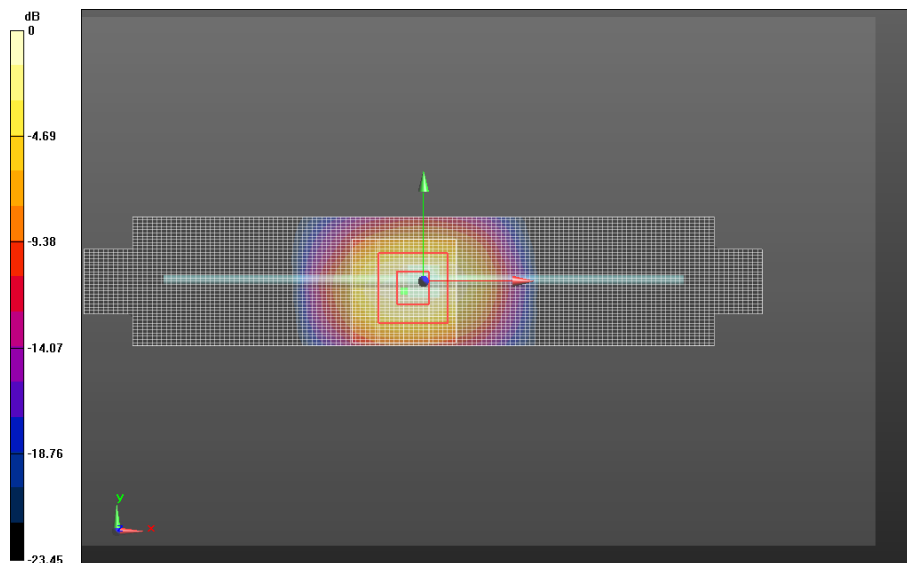
Fast SAR: SAR(1g) = 5.22 W/kg; SAR(10g) = 2.40 W/kg

< 2GHz, Daily SPC Check/CUBE SAR, 5x5x7 (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 53.245 V/m, Power Drift = -0.011 dB

Averaged SAR: SAR(1g) = 5.02 W/kg; SAR(10g) = 2.34 W/kg



< 2GHz, Daily SPC Check

Appendix 2

SAR Distribution Plots for Head-Adjacent Test Results

Date/Time: 8/1/2013 7:20:21 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220015;

Antenna: Internal;

Test Configuration: Cheek

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(6.23,6.23,6.23); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#1 - Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1156
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _GSM (0); Communication System Band: GSM 850; Frequency: 836.6 MHz;
Duty Cycle: 1:8.300

Medium Parameters used: $f=836.6$ MHz; $\sigma = 0.9158$; $\epsilon_r = 40.16$ mho/m; $\rho = 1.000$ kg/m³

0.6-2GHz Right Head Template/15mm, Area Scan (61x161x1):

Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

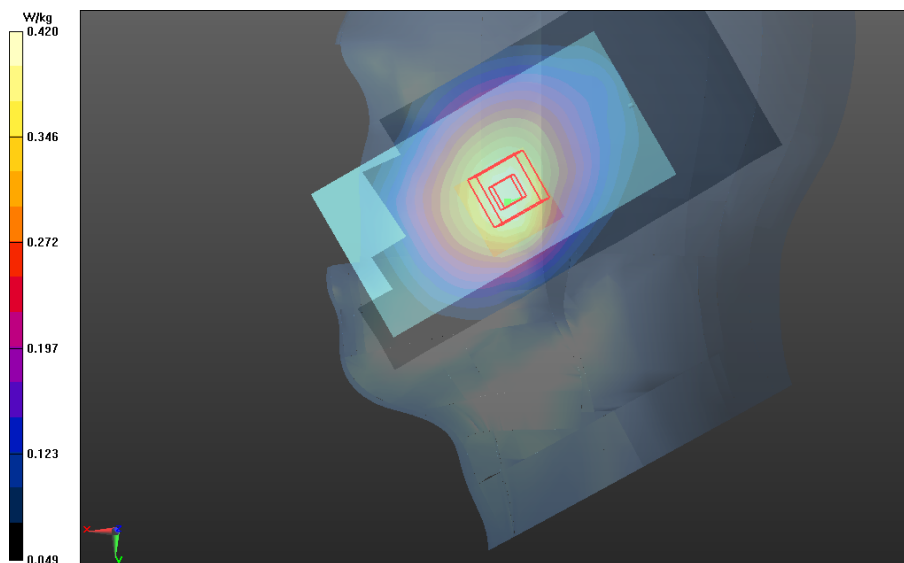
Fast SAR: SAR(1g) = 0.403 W/kg; SAR(10g) = 0.275 W/kg

0.6-2GHz Right Head Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:

Interpolated grid: $dx=1.600$ mm, $dy=1.600$ mm, $dz=1.000$ mm

Reference Value = 21.375 V/m, Power Drift = -0.00626 dB

Averaged SAR: SAR(1g) = 0.404 W/kg; SAR(10g) = 0.305 W/kg



0.6-2GHz Right Head Template

Date/Time: 8/3/2013 2:03:25 AM

Test Lab: Motorola Mobility

DUT Serial: LDXU220015;

Antenna: Internal;

Test Configuration: Cheek

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(5.01,5.01,5.01); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#1 - Glycol SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1319
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _GPRS Class 10 (0); Communication System Band: 1900 MHz; Frequency: 1880 MHz; Duty Cycle: 1:4.150

Medium Parameters used: $f=1880$ MHz; $\sigma = 1.417$; $\epsilon_r = 37.90$ mho/m; $\rho = 1.000$ kg/m³

0.6-2GHz, Left Head Template/15mm, Area Scan (61x161x1):

Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

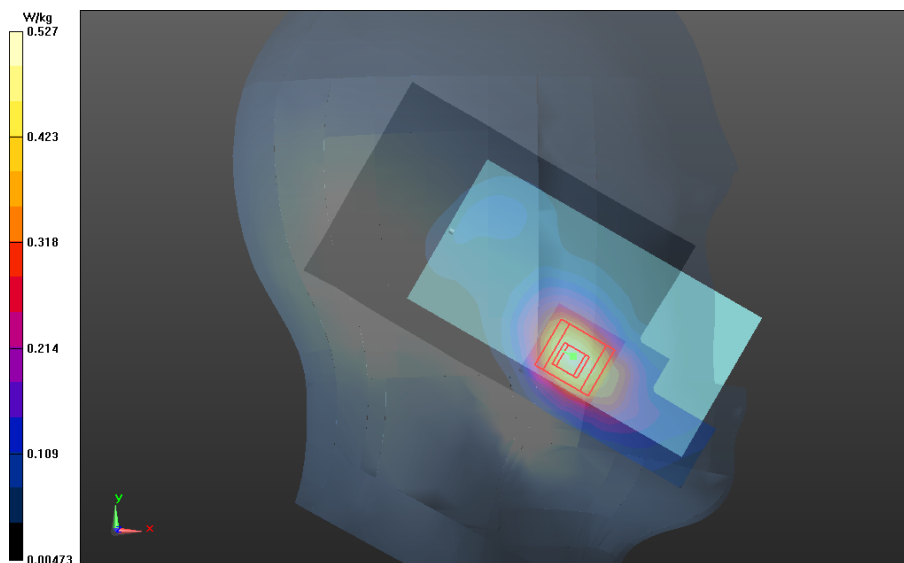
Fast SAR: SAR(1g) = 0.474 W/kg; SAR(10g) = 0.271 W/kg

0.6-2GHz, Left Head Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:

Interpolated grid: $dx=1.600$ mm, $dy=1.600$ mm, $dz=1.000$ mm

Reference Value = 15.974 V/m, Power Drift = -0.00538 dB

Averaged SAR: SAR(1g) = 0.488 W/kg; SAR(10g) = 0.288 W/kg



0.6-2GHz, Left Head Template

Date/Time: 7/25/2013 8:22:06 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220297;

Antenna: Internal;

Test Configuration: Cheek

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.01,6.01,6.01); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Sugar SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1235
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _WCDMA (0); Communication System Band: WCDMA-850, Band 5;
Frequency: 836.0 MHz; Duty Cycle: 1:1.000

Medium Parameters used: $f=836$ MHz; $\sigma = 0.9019$; $\epsilon_r = 39.17$ mho/m; $\rho = 1.000$ kg/m³

0.6-2GHz Right Head Template/15mm, Area Scan (61x161x1):

Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

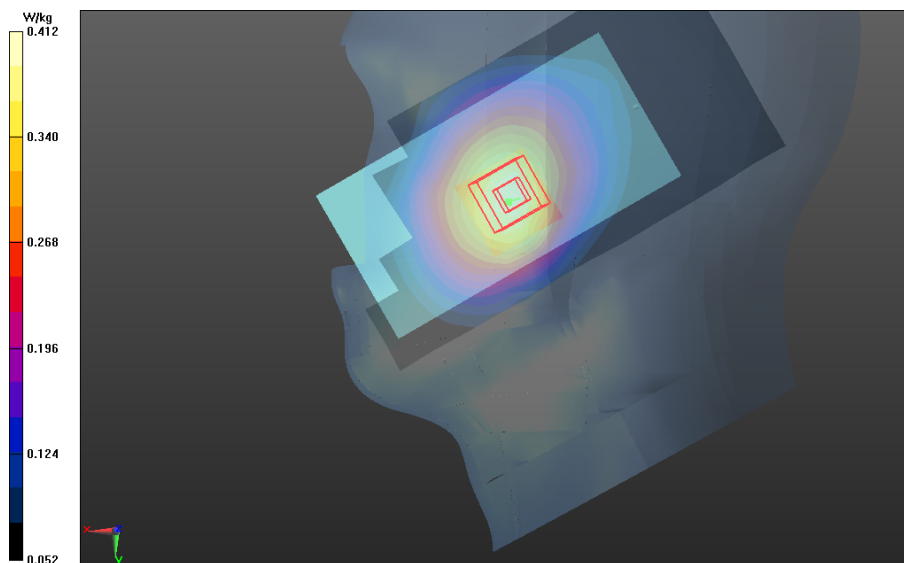
Fast SAR: SAR(1g) = 0.394 W/kg; SAR(10g) = 0.269 W/kg

0.6-2GHz Right Head Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:

Interpolated grid: $dx=1.600$ mm, $dy=1.600$ mm, $dz=1.000$ mm

Reference Value = 21.182 V/m, Power Drift = -0.107 dB

Averaged SAR: SAR(1g) = 0.392 W/kg; SAR(10g) = 0.294 W/kg



0.6-2GHz Right Head Template

Date/Time: 7/27/2013 1:47:13 AM

Test Lab: Motorola Mobility

DUT Serial: LDXU220297;

Antenna: Internal;

Test Configuration: Cheek

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(5.07,5.07,5.07); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Glycol SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1136
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _WCDMA (0); Communication System Band: WCDMA-1900, Band 2;
Frequency: 1908 MHz; Duty Cycle: 1:1.000

Medium Parameters used: $f=1907.6$ MHz; $\sigma = 1.447$; $\epsilon_r = 38.42$ mho/m; $\rho = 1.000$ kg/m³

0.6-2GHz, Left Head Template/15mm, Area Scan (61x161x1):

Interpolated grid: $dx=1.500$ mm, $dy=1.500$ mm

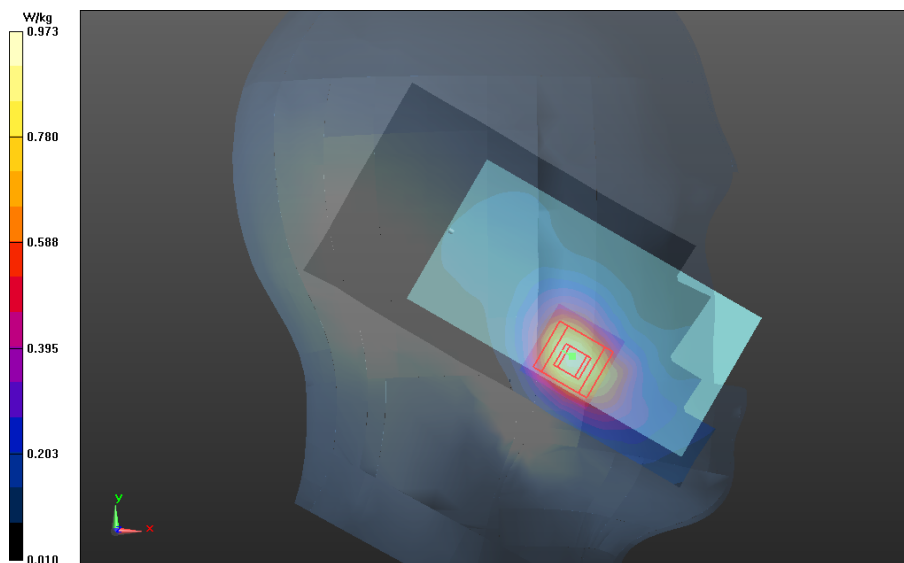
Fast SAR: SAR(1g) = 0.871 W/kg; SAR(10g) = 0.496 W/kg

0.6-2GHz, Left Head Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:

Interpolated grid: $dx=1.600$ mm, $dy=1.600$ mm, $dz=1.000$ mm

Reference Value = 22.015 V/m, Power Drift = 0.00346 dB

Averaged SAR: SAR(1g) = 0.898 W/kg; SAR(10g) = 0.525 W/kg



0.6-2GHz, Left Head Template

Date/Time: 1/31/2014 1:26:51 PM

Test Lab: Motorola Mobility

DUT Serial: TA8830NJK2;

Procedure Notes: Antenna: Internal;

Test Position: Cheek

DASY Configuration:

- Probe: EX3DV4 - SN3728; ConvF(6.91,6.91,6.91); Calibrated: 5/30/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn784; Calibrated: 3/6/2013
- Phantom: R#3, 2450 WiFi SAM (extended range), Rev.2 (24-Feb-12); Type: SAM v4.0; Serial: TP-1153
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.8 (7028)

Communication System: _Wi-Fi 2450 MHz; Band: 2450MHz WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=2412$ MHz; $\sigma = 1.753$; $\epsilon_r = 35.89$ mho/m; $\rho = 1.000$ kg/m³

2-3GHz Right Head Template/10mm, Area Scan (91x241x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

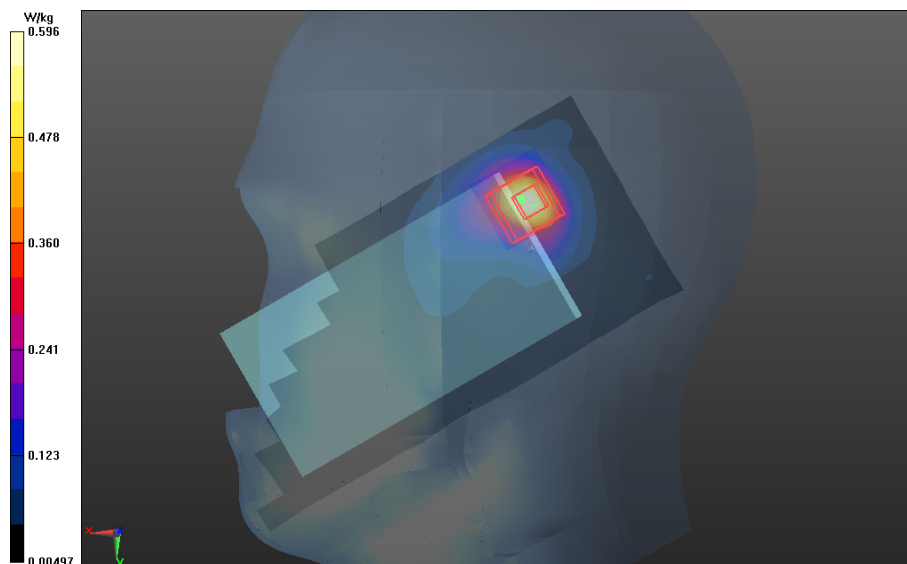
Fast SAR: SAR(1g) = 0.529 W/kg; SAR(10g) = 0.253 W/kg

2-3GHz Right Head Template/7x7x7 Zoom Scan (2-3GHz) (31x31x36)/Cube 0:

Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 17.371 V/m, Power Drift = -0.241 dB

Averaged SAR: SAR(1g) = 0.543 W/kg; SAR(10g) = 0.247 W/kg



2-3GHz Right Head Template

Appendix 3

SAR Distribution Plots for Body-Worn Accessory Test Results

Date/Time: 8/7/2013 5:24:35 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220015;

Antenna: Internal;

Test Configuration: Body Worn, Front of Phone from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(6.05,6.05,6.05); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _GPRS Class 10 (0); Communication System Band: 850 MHz; Frequency: 836.6 MHz; Duty Cycle: 1:4.150

Medium Parameters used: $f=836.6$ MHz; $\sigma = 0.9994$; $\epsilon_r = 54.02$ mho/m; $\rho = 1.000$ kg/m³

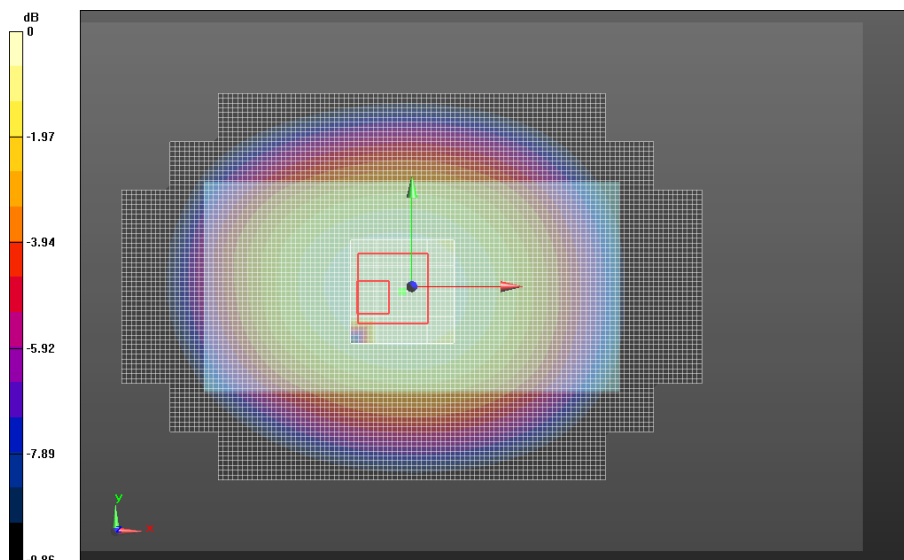
0.6-2GHz Triple Flat Phone Template/Area Scan (15mm), not for EDGES (181x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1g) = 0.612 W/kg; SAR(10g) = 0.433 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0: Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 25.886 V/m, Power Drift = -0.132 dB

Averaged SAR: SAR(1g) = 0.641 W/kg; SAR(10g) = 0.478 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 8/7/2013 5:53:42 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220015;

Antenna: Internal;

Test Configuration: Body Worn, Back of Phone from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(4.78,4.78,4.78); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _GPRS Class 10 (0); Communication System Band: 1900 MHz; Frequency: 1880 MHz; Duty Cycle: 1:4.150

Medium Parameters used: $f=1880$ MHz; $\sigma = 1.548$; $\epsilon_r = 51.99$ mho/m; $\rho = 1.000$ kg/m³

0.6-2GHz Triple Flat Phone Template/Area Scan (15mm), not for EDGES (181x101x1):

Interpolated grid: dx=1.500 mm, dy=1.500 mm

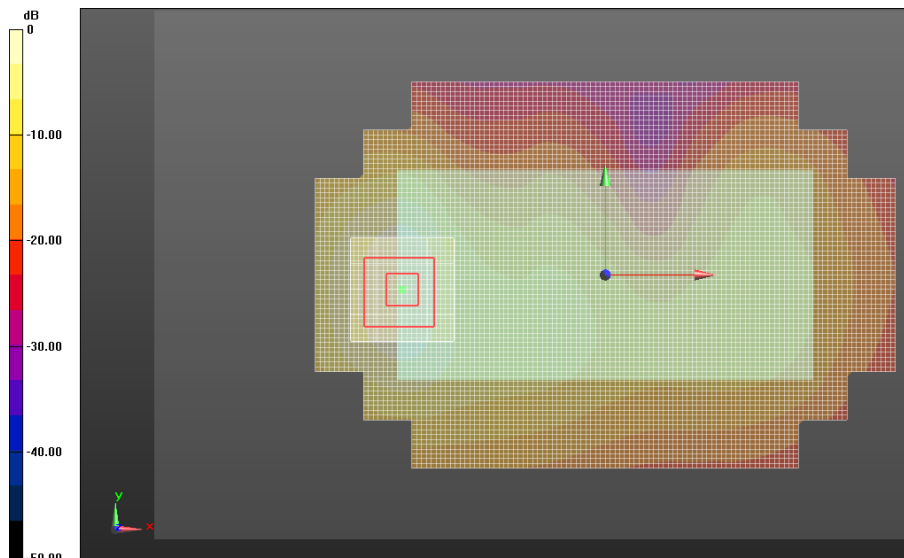
Fast SAR: SAR(1g) = 0.706 W/kg; SAR(10g) = 0.378 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 16.967 V/m, Power Drift = -0.146 dB

Averaged SAR: SAR(1g) = 0.711 W/kg; SAR(10g) = 0.409 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 7/25/2013 5:21:04 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220297;

Antenna: Internal;

Test Configuration: Body Worn, Back of Phone from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.02,6.02,6.02); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _WCDMA (0); Communication System Band: WCDMA-850, Band 5;
Frequency: 846.6 MHz; Duty Cycle: 1:1.000

Medium Parameters used: $f=846.6$ MHz; $\sigma = 1.010$; $\epsilon_r = 53.43$ mho/m; $\rho = 1.000$ kg/m³

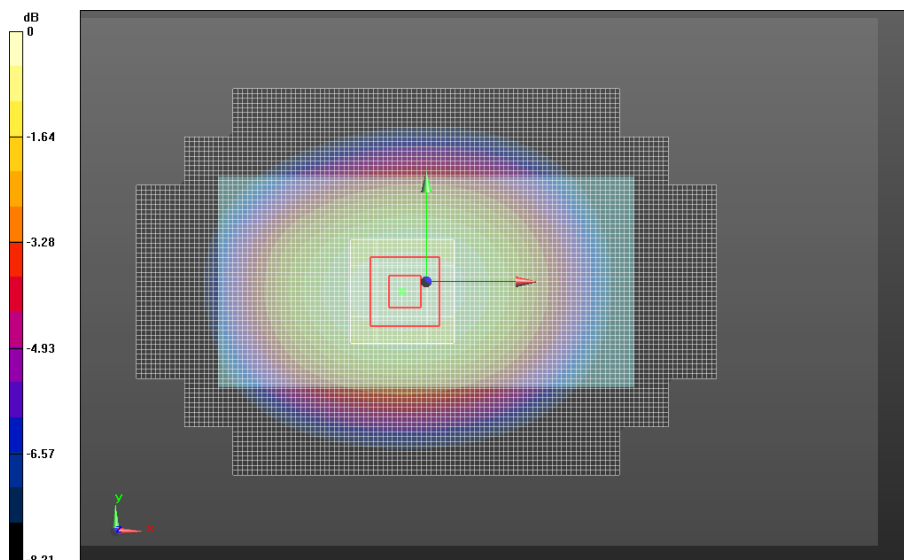
0.6-2GHz Triple Flat Phone Template/Area Scan (15mm), not for EDGES (181x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1g) = 0.704 W/kg; SAR(10g) = 0.492 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0: Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 27.241 V/m, Power Drift = -0.041 dB

Averaged SAR: SAR(1g) = 0.708 W/kg; SAR(10g) = 0.530 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 7/26/2013 11:27:46 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220297;

Antenna: Internal;

Test Configuration: Body Worn, Back of Phone from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.76,4.76,4.76); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _WCDMA (0); Communication System Band: WCDMA-1900, Band 2;
Frequency: 1908 MHz; Duty Cycle: 1:1.000

Medium Parameters used: $f=1907.6$ MHz; $\sigma = 1.572$; $\epsilon_r = 52.50$ mho/m; $\rho = 1.000$ kg/m³

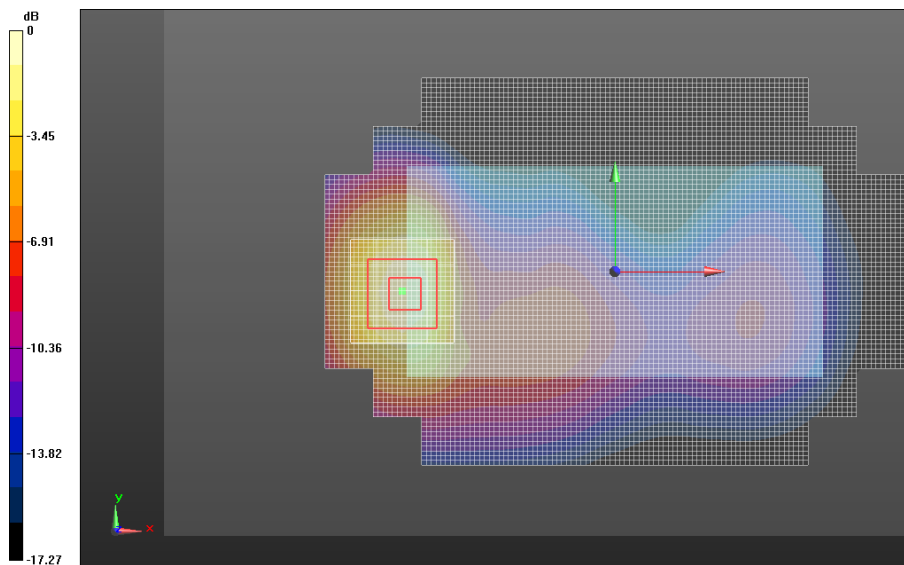
0.6-2GHz Triple Flat Phone Template/Area Scan (15mm), not for EDGES (181x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1g) = 0.781 W/kg; SAR(10g) = 0.430 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0: Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 19.616 V/m, Power Drift = -0.048 dB

Averaged SAR: SAR(1g) = 0.806 W/kg; SAR(10g) = 0.461 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 2/13/2014 2:13:55 PM

Test Lab: Motorola Mobility

DUT Serial: TA8830NJK2;

Procedure Notes: Antenna: Internal

Test Position: Body Worn, Back of Phone 15 mm from Phantom

DASY Configuration:

- Probe: EX3DV4 - SN3728; ConvF(7.13,7.13,7.13); Calibrated: 5/30/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn784; Calibrated: 3/6/2013
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.8 (7028)

Communication System: Wi-Fi 2450 MHz; Band: 2450MHz WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=2412$ MHz; $\sigma = 1.934$; $\epsilon_r = 47.87$ mho/m; $\rho = 1.000$ kg/m³

2-3GHz Triple Flat Phone Template/Area Scan (10mm) (261x141x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

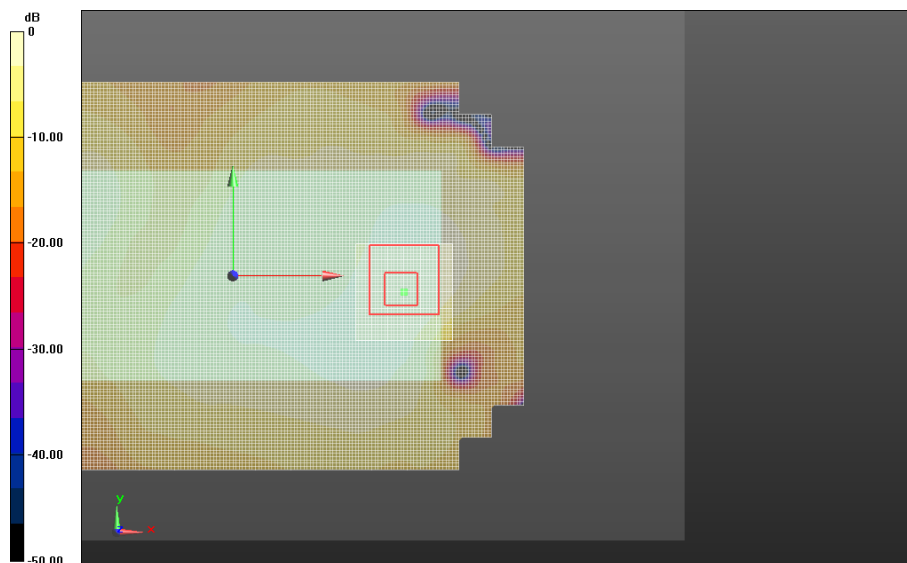
Fast SAR: SAR(1g) = 0.101 W/kg; SAR(10g) = 0.0545 W/kg

2-3GHz Triple Flat Phone Template/7x7x7 Zoom Scan (2-3GHz) (31x31x36)/Cube 0:

Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 6.787 V/m, Power Drift = -0.063 dB

Averaged SAR: SAR(1g) = 0.102 W/kg; SAR(10g) = 0.0540 W/kg



2-3GHz Triple Flat Phone Template

Appendix 4

SAR Distribution Plots for Mobile Hotspot Test Results

Date/Time: 8/6/2013 11:37:42 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220002;

Antenna: Internal;

Test Configuration: Back of Phone 10 mm from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(6.05,6.05,6.05); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _GSM (0); Communication System Band: GSM 850; Frequency: 836.6 MHz;
Duty Cycle: 1:8.300

Medium Parameters used: $f=836.6$ MHz; $\sigma = 0.9992$; $\epsilon_r = 54.03$ mho/m; $\rho = 1.000$ kg/m³

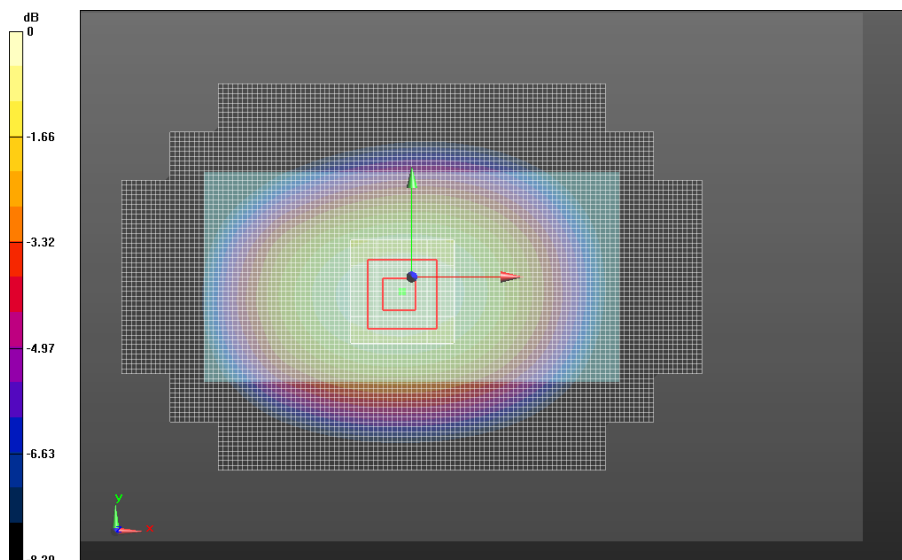
0.6-2GHz Triple Flat Phone Template/Area Scan (15mm), not for EDGES (181x101x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1g) = 0.459 W/kg; SAR(10g) = 0.320 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0: Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 21.684 V/m, Power Drift = -0.048 dB

Averaged SAR: SAR(1g) = 0.457 W/kg; SAR(10g) = 0.343 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 8/6/2013 6:36:54 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220002;

Antenna: Internal;

Test Configuration: Bottom Edge of Phone 10 mm from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3180; ConvF(4.78,4.78,4.78); Calibrated: 2/11/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn661; Calibrated: 5/21/2013
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _GPRS Class 10 (0); Communication System Band: 1900 MHz; Frequency: 1880 MHz; Duty Cycle: 1:4.150

Medium Parameters used: $f=1880$ MHz; $\sigma = 1.544$; $\epsilon_r = 52.52$ mho/m; $\rho = 1.000$ kg/m³

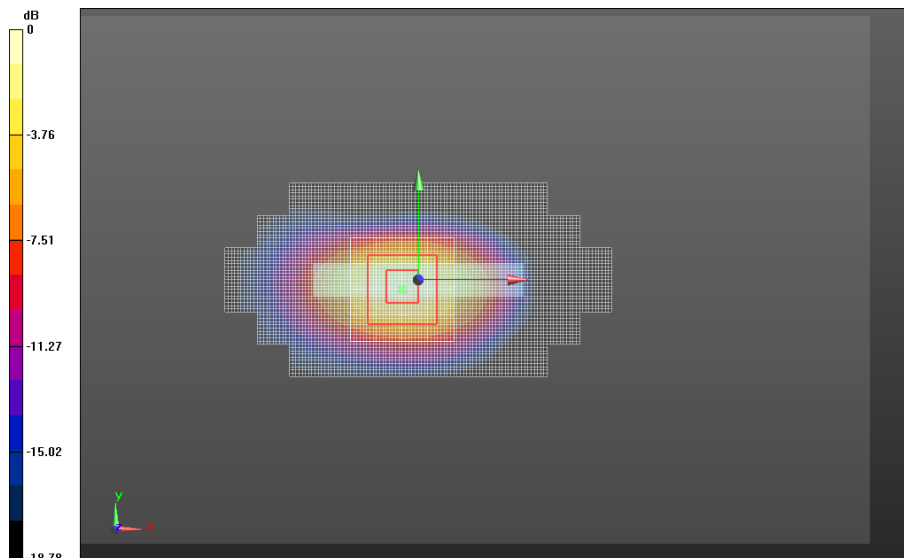
0.6-2GHz Triple Flat Phone Template/Area Scan (10mm) (261x141x1):**Interpolated grid: dx=1.000 mm, dy=1.000 mm**

Fast SAR: SAR(1g) = 1.30 W/kg; SAR(10g) = 0.642 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:**Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm**

Reference Value = 27.471 V/m, Power Drift = -0.079 dB

Averaged SAR: SAR(1g) = 1.29 W/kg; SAR(10g) = 0.655 W/kg

**0.6-2GHz Triple Flat Phone Template**

Date/Time: 7/25/2013 9:14:21 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220297;

Antenna: Internal;

Test Configuration: Back of Phone 10 mm from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.02,6.02,6.02); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _WCDMA (0); Communication System Band: WCDMA-850, Band 5;
Frequency: 836.0 MHz; Duty Cycle: 1:1.000

Medium Parameters used: $f=836$ MHz; $\sigma = 0.9983$; $\epsilon_r = 53.54$ mho/m; $\rho = 1.000$ kg/m³

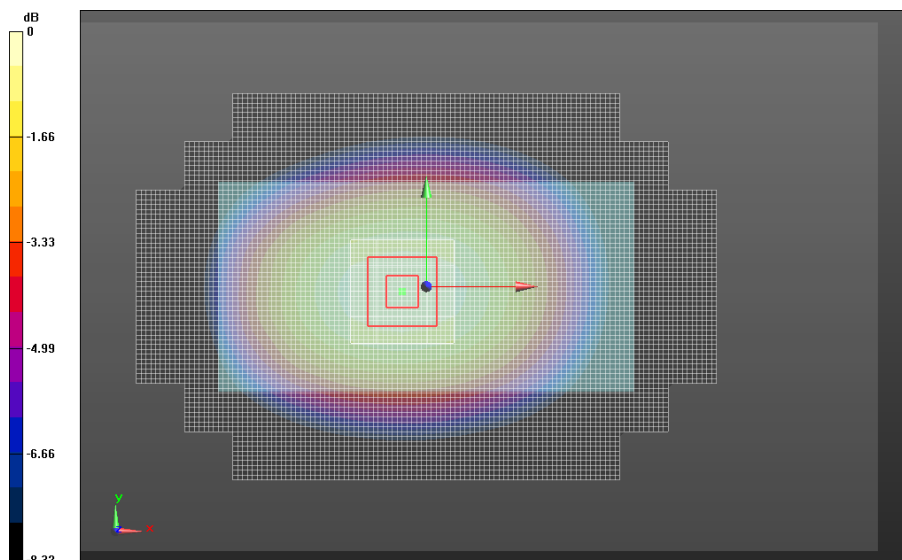
0.6-2GHz Triple Flat Phone Template/Area Scan (15mm), not for EDGES (181x101x1):
Interpolated grid: dx=1.500 mm, dy=1.500 mm

Fast SAR: SAR(1g) = 0.445 W/kg; SAR(10g) = 0.311 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:
Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 21.909 V/m, Power Drift = -0.024 dB

Averaged SAR: SAR(1g) = 0.445 W/kg; SAR(10g) = 0.337 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 7/26/2013 9:16:24 PM

Test Lab: Motorola Mobility

DUT Serial: LDXU220297;

Antenna: Internal;

Test Configuration: Bottom Edge of Phone 10 mm from Phantom

DASY Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.76,4.76,4.76); Calibrated: 8/20/2012;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 9/3/2012
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.10 (7164)

Communication System: _WCDMA (0); Communication System Band: WCDMA-1900, Band 2;
Frequency: 1908 MHz; Duty Cycle: 1:1.000

Medium Parameters used: $f=1907.6$ MHz; $\sigma = 1.572$; $\epsilon_r = 52.50$ mho/m; $\rho = 1.000$ kg/m³

0.6-2GHz Triple Flat Phone Template/Area Scan (10mm) (261x141x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

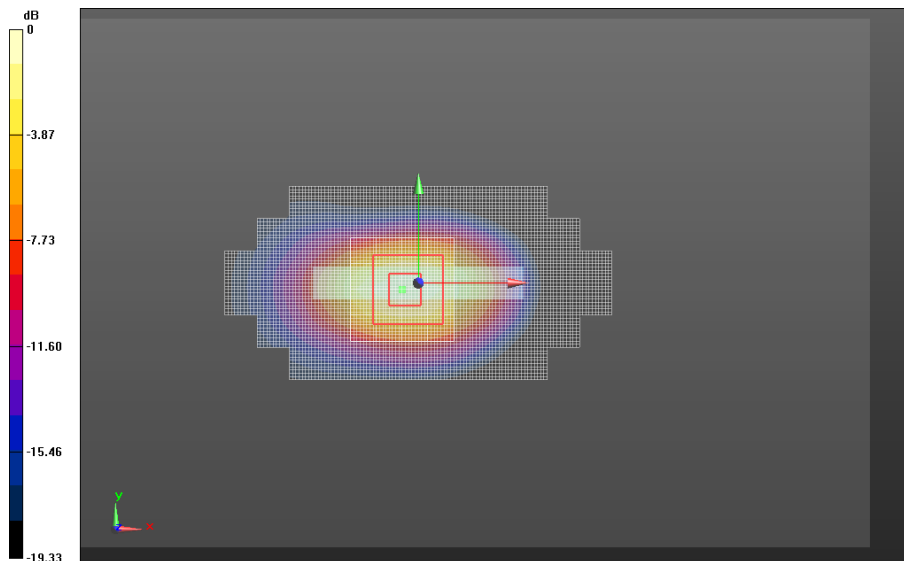
Fast SAR: SAR(1g) = 0.816 W/kg; SAR(10g) = 0.403 W/kg

0.6-2GHz Triple Flat Phone Template/5x5x7 Zoom Scan (0.6-2GHz) (21x21x36)/Cube 0:

Interpolated grid: dx=1.600 mm, dy=1.600 mm, dz=1.000 mm

Reference Value = 21.167 V/m, Power Drift = -0.023 dB

Averaged SAR: SAR(1g) = 0.814 W/kg; SAR(10g) = 0.413 W/kg



0.6-2GHz Triple Flat Phone Template

Date/Time: 2/13/2014 2:50:58 PM

Test Lab: Motorola Mobility

DUT Serial: TA8830NJK2

Procedure Notes: Antenna: Internal

Test Position: Mobile Hotspot Position, Back of Phone 10 mm from Phantom

DASY Configuration:

- Probe: EX3DV4 - SN3728; ConvF(7.13,7.13,7.13); Calibrated: 5/30/2013;
- Sensor-Surface: 4 mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn784; Calibrated: 3/6/2013
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a
- DASY52 52.8.7(1137); SEMCAD X Version 14.6.8 (7028)

Communication System: Wi-Fi 2450 MHz; Band: 2450MHz WIFI; Frequency: 2412 MHz; Duty Cycle: 1:1.000
Medium Parameters used: $f=2412$ MHz; $\sigma = 1.934$; $\epsilon_r = 47.87$ mho/m; $\rho = 1.000$ kg/m³

2-3GHz Triple Flat Phone Template/Area Scan (10mm) (261x141x1):

Interpolated grid: dx=1.000 mm, dy=1.000 mm

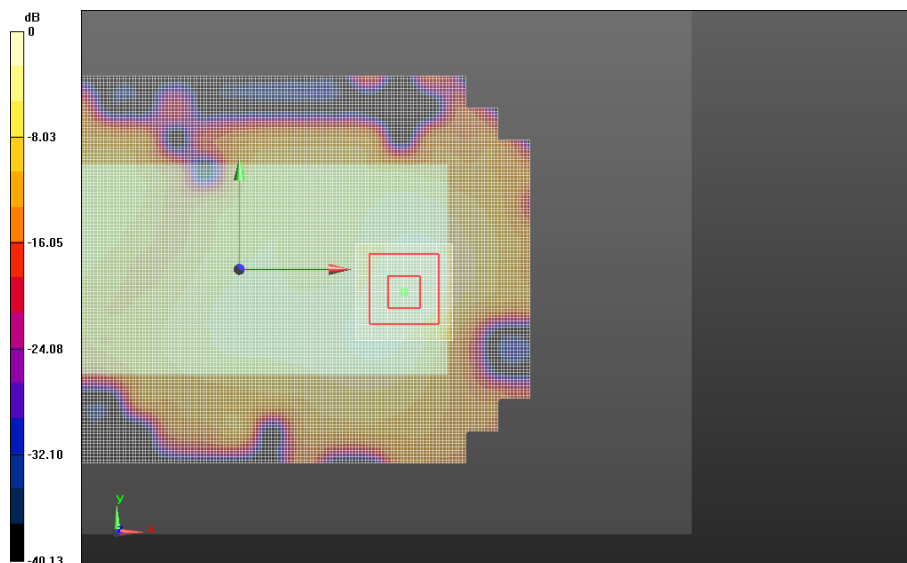
Fast SAR: SAR(1g) = 0.216 W/kg; SAR(10g) = 0.110 W/kg

2-3GHz Triple Flat Phone Template/7x7x7 Zoom Scan (2-3GHz) (31x31x36)/Cube 0:

Interpolated grid: dx=1.000 mm, dy=1.000 mm, dz=1.000 mm

Reference Value = 9.357 V/m, Power Drift = 0.051 dB

Averaged SAR: SAR(1g) = 0.220 W/kg; SAR(10g) = 0.111 W/kg



2-3GHz Triple Flat Phone Template

Appendix 5

Measurement Uncertainty Budget

Uncertainty Budget for Device Under Test, for 735 MHz to 3 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = f(d,k)</i>	<i>f</i>	<i>g</i>	<i>h = c x f / e</i>	<i>i = c x g / e</i>	<i>k</i>
Uncertainty Component	Description IEEE 1528(2003) / IEC 62209-1(2005)	Tol. (± %)	Prob Dist	Div.	<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	1 g <i>u_i</i> (±%)	10 g <i>u_i</i> (±%)	<i>v_i</i>
Measurement System									
Probe Calibration [ES3DV3]	E.2.1 / 7.2.1	6.0	N	1.00	1	1	6.0	6.0	∞
Axial Isotropy	E.2.2 / 7.2.1.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	E.2.2 / 7.2.1.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	E.2.3 / 7.2.1.5	1.0	R	1.73	1	1	0.6	0.6	∞
Linearity	E.2.4 / 7.2.1.3	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5 / 7.2.1.4	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6 / 7.2.1.6	0.3	N	1.00	1	1	0.3	0.3	∞
Response Time	E.2.7 / 7.2.1.7	1.1	R	1.73	1	1	0.6	0.6	∞
Integration Time	E.2.8 / 7.2.1.8	1.1	R	1.73	1	1	0.6	0.6	∞
RF Ambient Conditions - Noise	E.6.1 / 7.2.3.6	3.0	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1 / 7.2.3.6	3.0	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mech. Tolerance	E.6.2 / 7.2.2.1	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning w.r.t Phantom	E.6.3 / 7.2.2.3	2.9	R	1.73	1	1	1.7	1.7	∞
Max. SAR Evaluation (ext., int., avg.)	E.5 / 7.2.4	3.4	R	1.73	1	1	2.0	2.0	∞
Test sample Related									
Test Sample Positioning	E.4.2 / 7.2.2.4	3.4	N	1.00	1	1	3.4	3.4	79
Device Holder Uncertainty	E.4.1 / 7.2.2.4.2	4.5	N	1.00	1	1	4.5	4.5	11
SAR drift	6.6.2 / 7.2.3.5	0.0	R	1.73	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty	E.3.1 / 7.2.2.2	6.1	R	1.73	1	1	3.5	3.5	∞
SAR Correction		1.9	R	1.73	1	0.84	1.1	0.9	∞
Liquid Conductivity (measurement)	E.3.3 / 7.2.3.3	1.3	N	1.00	0.64	0.43	0.9	0.6	6
Liquid Permittivity (measurement)	E.3.2 / 7.2.3.4	0.7	N	1.00	0.6	0.49	0.4	0.3	6
Combined Standard Uncertainty				RSS			11	11	390
Expanded Uncertainty (95% CONFIDENCE LEVEL)				<i>k</i> =2			22	22	