



MOTOROLA

Portable Cellular Phone Supplemental SAR Test Report

Tests Requested By: Motorola Mobility, Inc.
600 N. US Highway 45
Libertyville, IL 60048

Test Report #: 25086-1F Supplemental
Date of Report: Jul-27-2012
Date of Test: Jul-02-2012 to Jul-25-2012
FCC ID #: IHDT56NS1
Generic Name: M0D34

Test Laboratory: Motorola Mobility, Inc. - ADR Test Services Laboratory
600 N. US Highway 45
Libertyville, IL 60048

Report Author: Thomas Knipple
Senior RF Engineer

This laboratory is accredited to ISO/IEC 17025-2005 to perform the following tests:

Accreditation:



2404

Tests:

Electromagnetic Specific Absorption Rate

Procedures:

IEC 62209-1

RSS-102

IEEE 1528 - 2003

FCC OET Bulletin 65 (*including Supplement C*)

Australian Communications Authority Radio

Communications (Electromagnetic Radiation – Human Exposure) Standard 2003

CENELEC EN 50360

ARIB Std. T-56 (2002)

On the following products or types of products:

Wireless Communications Devices (Examples): Two Way Radios; Portable Phones (including Cellular, Licensed Non-Broadcast and PCS); Low Frequency Readers; and Pagers

Statement of Compliance:

Motorola declares under its sole responsibility that the portable cellular telephone model to which this declaration relates, is in conformity with the appropriate General Population/Uncontrolled RF exposure standards, recommendations and guidelines (FCC 47 CFR §2.1093) as well as with CENELEC en50360:2001 and ANSI / IEEE C95.1. It also declares that the product was tested in accordance with IEEE 1528 / CENELEC EN62209-1 (2006), as well as other appropriate measurement standards, guidelines and recommended practices. Any deviations from these standards, guidelines and recommended practices are noted below:

(none)

©Motorola Mobility, Inc. 2012

This test report shall not be reproduced except in full, without written approval of the laboratory. The results and statements contained herein relate only to the items tested. The names of individuals involved may be mentioned only in connection with the statements or results from this report. Motorola encourages all feedback, both positive and negative, on this test report.

Table of Contents

1. Introduction	3
2. Description of the Device Under Test	3
2.1 Device Signaling	3
2.2.1 Transmitter power reduction conditions and modes	4
3. Test Equipment Used	6
3.1 Dosimetric System	6
3.2 Additional Equipment	6
4. Electrical parameters of the tissue simulating liquid	7
5. System Accuracy Verification	8
6. Test Results	9
References	13

Appendix 1: SAR distribution comparison for the system accuracy verification

Appendix 2: SAR distribution plots

Appendix 3: Measurement Uncertainty Budget

Appendix 4: Probe Calibration Certificate

Appendix 5: Dipole Characterization Certificate

Revision History

Revision Version	Date	Notes
Rev. 0	Jul-27-2012	Initial report release

1. Introduction

The Motorola Mobility ADR Test Services Laboratory has performed measurements of the maximum potential exposure to the user of the portable cellular phone covered by this test report. The Specific Absorption Rate (SAR) of this product was measured. The portable cellular phone was tested in accordance with [1], [4] and [5]. The SAR values measured for the portable cellular phone are below the maximum recommended levels of 1.6 W/kg in a 1 g average set in [3] and 2.0 W/kg in a 10 g average set in [2].

Per direction of the FCC, the following SAR test data is being provided to demonstrate the device's effective utilization of power reduction conditions specified in Exhibit 12 - Operational Description. The values in the tables in Section 6.0 are provided solely for the purpose of confirming compliant power reduction operation and do not represent maximum SAR values of the product. For maximum reported SAR compliance values, refer to the Exhibit 11 SAR test report.

2. Description of the Device Under Test

2.1 Device Signaling¹

Serial Number(s) (Functional Use)	6554 (CDMA conducted power measurements, CDMA SAR testing, Wi-Fi SAR testing) 6336 (LTE conducted power measurements, LTE SAR testing, Wi-Fi SAR testing) KSL00F0065 (WLAN conducted power measurements, Bluetooth conducted power measurements)
Production Unit or Identical Prototype (47 CFR §2.908)	Identical Prototype
Device Category	Portable
RF Exposure Limits	General Population / Uncontrolled

Mode(s) of Operation	Modulation Mode(s)	Maximum Output Power Setting	Duty Cycle	Transmitting Frequency Range(s)
LTE Band 13	QPSK, 16QAM	24.0 dBm	1:1	782 MHz (1 Channel, 10 MHz wide)
CDMA 800	QPSK	25.0 dBm	1:1	824.70 – 848.31 MHz
CDMA 1900	QPSK	25.0 dBm	1:1	1851.20 – 1908.75 MHz
Wi-Fi 802.11b/g/n	BPSK	18 dBm	1:1	2412.0 - 2462.0 MHz
Wi-Fi 802.11a/n	BPSK	16 dBm	1:1	5180.0 - 5240.0 MHz, 5745.0 - 5825.0 MHz
Bluetooth	GFSK	8.63 dBm	1:1	2402.0 – 2480.0 MHz

¹ This device supports voice call functionality over GSM and WCDMA on non-US cellular networks. The GSM/WCDMA network functions have been disabled by firmware and are SIM locked for all US operators. Further information regarding this functionality is contained within Exhibit 12.

2.2.1 Transmitter power reduction conditions and modes

The DUT utilizes reduced limits for the maximum transmit power for its transmitters when operating under the following noted conditions to ensure SAR exposure compliance is maintained. Tables of the reduced limits used for testing are given below. A complete description of this functionality is provided in the “Operational Description” contained within Exhibit 12. The implementation to trigger the reduction in power requires the device to be radiating, which prevents conducted power measurements of this functionality without modification to the unit.

For the Wi-Fi transmitter, reduced power limits are enforced under any condition where the Wi-Fi transmitter is operating simultaneously with any other transmitter(s). A table of the reduced limits used for testing is given below.

Mode(s) of Operation	Wi-Fi 2.4 GHz	Wi-Fi 5 GHz
Channel Ranges	1-11	36-165
Maximum Output Power Target (dBm)	18	16
Reduced Maximum Output Power Target (dBm)	12	11

For the LTE transmitter, reduced power limits are enforced while operating in a mobile hotspot session in body-adjacent configurations. A table of the reduced limits used for testing is given below.

Mode(s) of Operation	LTE Band 13							
Test Channel	23230							
Modulation	QPSK				16QAM			
RB Allocation	1 RB @LOW EDGE	1 RB @HIGH EDGE	50%	100%	1 RB @LOW EDGE	1 RB @HIGH EDGE	50%	100%
Maximum Output Power Setting (dBm)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Output Power Setting with MPR (dBm)	24.0	24.0	23.0	23.0	23.0	23.0	22.0	22.0
Reduced Maximum Output Power Setting (dBm)	22.0	22.0	22.0	22.0	22.0	22.0	22.0	22.0

The DUT supports Simultaneous Voice and LTE (SVLTE), allowing a 1x CDMA voice call while simultaneously providing an LTE link for data transport on the cellular network. While operating in SVLTE, *if the power on the 1x CDMA transmitter for voice is operating above 18.5 dBm*, a reduced maximum LTE transmit power limit is enforced to ensure SAR exposure compliance is maintained. When the power of the 1x CDMA transmitter is operating at or below 18.5 dBm or this combination of transmitters is not in use, the LTE transmitter operates up to its maximum power limit. Note that both conditions (1x CDMA above 18.5 dBm and LTE at reduced power, or 1x CDMA at or below 18.5 dBm with LTE at full power) are demonstrated for SAR compliance in section 6. A table of the reduced limits used for testing is given below.

Mode(s) of Operation	LTE Band 13							
Test Channel	23230							
Modulation	QPSK				16QAM			
RB Allocation	1 RB @LOW EDGE	1 RB @HIGH EDGE	50%	100%	1 RB @LOW EDGE	1 RB @HIGH EDGE	50%	100%
Maximum Output Power Setting (dBm)	24.0	24.0	24.0	24.0	24.0	24.0	24.0	24.0
Output Power Setting with MPR (dBm)	24.0	24.0	23.0	23.0	23.0	23.0	22.0	22.0
Reduced Maximum Output Power Setting (dBm)	17.0	17.0	17.0	17.0	17.0	17.0	17.0	17.0

The SVLTE feature may also operate concurrently during a mobile hotspot session. When operating with these features active in a body-adjacent configuration, the reduced maximum LTE transmit power limit is strictly enforced.

While operating in head-adjacent exposure configurations simultaneously with the Wi-Fi transmitter, a reduced maximum power limit is enforced on the CDMA 1900 transmitter. A table of the reduced limit used for testing is given below.

Mode(s) of Operation	CDMA 1900
Channel Ranges	25-1175
Maximum Output Power Setting (dBm)	25.0
Reduced Maximum Output Power Setting (dBm)	22.0

This reduced limit is also enforced when using SVLTE during a mobile hotspot session with the device held against the head.

While operating in body-adjacent exposure configurations simultaneously with the Wi-Fi transmitter, a reduced maximum power limit is enforced on the CDMA 1900 transmitter. A table of the reduced limit used for testing is given below.

Mode(s) of Operation	CDMA 1900
Channel Ranges	25-1175
Maximum Output Power Setting (dBm)	25.0
Reduced Maximum Output Power Setting (dBm)	22.0

While operating in body-adjacent exposure configurations during a mobile hotspot session, a further reduced maximum power limit is enforced on the CDMA 1900 transmitter (using either 1x during SVLTE, or EVDO for data to the network). A table of the reduced limit used for testing is given below.

Mode(s) of Operation	CDMA 1900
Channel Ranges	25-1175
Maximum Output Power Setting (dBm)	25.0
Reduced Maximum Output Power Setting (dBm)	16.0

3. Test Equipment Used

3.1 Dosimetric System

The Motorola Mobility ADR Test Services Laboratory utilizes a Dosimetric Assessment System (DASY4™ v4.7 or DASY52™) manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. All the SAR measurements are taken within a shielded enclosure. The overall 10 g RSS uncertainty of the measurement system is $\pm 10.8\%$ (K=1) with an expanded uncertainty of $\pm 21.6\%$ (K=2). The overall 1 g RSS uncertainty of the measurement system is $\pm 11.1\%$ (K=1) with an expanded uncertainty of $\pm 22.2\%$ (K=2). The measurement uncertainty budget is given in Appendix 6. Per IEEE 1528, this uncertainty budget is applicable to the SAR range of 0.4 W/kg to 10 W/kg.

The list of calibrated equipment used for measurements is shown in the following tables. All equipment was brought into service and used only during its noted calibration period, except where indicated. Equipment without a calibration period was in service for the entirety of the test period.

Description	Serial Number	Cal Date	Cal Due Date	Service Notes
DASY4™ DAE V1	376	Aug-31-2011	Aug-31-2012	
E-Field Probe ES3DV3	3124	Aug-23-2011	Aug-23-2012	
DASY4™ DAE V1	1310	Jan-11-2012	Jan-11-2013	
E-Field Probe ES3DV3	3284	Jan-10-2012	Jan-10-2013	
DASY4™ DAE V1	699	Sep-22-2011	Sep-22-2012	
E-Field Probe ES3DV3	3115	Jan-11-2012	Jan-11-2013	
DASY4™ DAE V1	1312	May-29-2012	May-29-2013	Removed from service Jul-19-2012
DASY4™ DAE V1	440	May-23-2012	May-23-2013	Placed into service Jul-19-2012
E-Field Probe EX3DV4	3728	Apr-24-2012	Apr-24-2013	
Dipole Validation Kit, DV835V2	4D128	Jan-11-2012	Jan-11-2013	
Dipole Validation Kit, DV1800V2	2D190	Jan-05-2012	Jan-05-2013	
Dipole Validation Kit, DV1800V2	259TR	Oct-20-2011	Oct-20-2012	
Dipole Validation Kit, DV2450V2	877	Jan-10-2012	Jan-10-2013	
Dipole Validation Kit, DV2450V2	863	Mar-17-2011	Mar-17-2012 ²	Calibration extension, see footnote.

3.2 Additional Equipment

Description	Serial Number	Cal Date	Cal Due Date	Service Notes
Signal Generator HP8648C	3847A04810	Sep-26-2011	Sep-26-2013	
Power Meter E4419B	GB39511090	Aug-12-2011	Aug-12-2013	
Power Sensor #1 - E9301A	US39210917	Nov-16-2011	Nov-16-2012	
Power Sensor #2 - E9301A	US39210918	Nov-16-2011	Nov-16-2012	
Signal Generator HP8648C	3847M01245	Aug-23-2011	Aug-23-2013	
Power Meter E4419B	GB39511084	Mar-28-2011	Mar-28-2013	
Power Sensor #1 - E9301A	US39210931	Jan-19-2012	Jan-19-2013	
Power Sensor #2 - E9301A	US39210932	Jan-19-2012	Jan-19-2013	
Signal Generator HP8648C	3847A04632	Aug-13-2011	Aug-13-2013	
Power Meter E4419B	GB39511086	Nov-04-2011	Nov-04-2013	
Power Sensor #1 - E9301A	US39210915	Sep-09-2011	Sep-09-2012	
Power Sensor #2 - E9301A	US39210916	Sep-09-2011	Sep-09-2012	
Signal Generator N5181A	MY50143026	Oct-27-2011	Oct-27-2014	
Power Meter E4419A	GB41293246	Nov-05-2011	Nov-05-2013	
Power Sensor #1 - E9301A	US39211009	Aug-16-2011	Aug-16-2012	
Power Sensor #2 - E9301A	US39211013	Aug-16-2011	Aug-16-2012	
Network Analyzer E5071C	MY46212851	May-10-2012	May-10-2013	Placed into service May-15-2012
Dielectric Probe Kit DAK-3.5	1030			Removed from service Jul-02-2012
Dielectric Probe Kit DAK-3.5	1072			Placed into service Jul-02-2012

² Per FCC KDB 450824 D02, evaluation for the extension of the dipole calibration was carried out. Results are provided in Appendix 7 in addition to the original calibration certificate.

4. Electrical parameters of the tissue simulating liquid

Prior to conducting SAR measurements, the relative permittivity, ϵ_r , and the conductivity, σ , of the tissue simulating liquids were measured with a HP85070 Dielectric Probe Kit. These values, along with the temperature of the simulated tissue are shown in the table below. The recommended limits for permittivity and conductivity are also shown. A mass density of $\rho = 1 \text{ g/cm}^3$ was entered into the system in all the cases. It can be seen that the measured parameters are within tolerance of the recommended limits specified in [1] and [5].

E-field probes calibrated at 1810 MHz were used for "1900 MHz" band (1850 MHz - 1910 MHz) SAR measurements. FCC KDB 450824 provides additional requirements on page 3 of 6 for SAR testing that is performed with probe calibration points that are more than 50 MHz removed from the measured bands. The KDB requires; "(2) When nominal tissue dielectric parameters are specified in the probe calibration data, the tissue dielectric parameters measured for routine measurements should be less than the target ϵ_r and higher than the target σ values to minimize SAR underestimations". The 1900 MHz simulated tissues listed below meet this criteria.

f (MHz)	Tissue type	Limits / Measured	Dielectric Parameters		
			ϵ_r	σ (S/m)	Temp (°C)
782	Body	Measured, Jul-02-2012	54.1	0.93	19.1
		Measured, Jul-06-2012	54.5	0.94	19.1
		Recommended Limits	55.4 ±5%	0.966 ±5%	18-25
		Measured, Jul-06-2012	51.8	1.57	19.0
1880	Body	Measured, Jul-25-2012	51.1	1.58	19.5
		Recommended Limits	53.3 ±5%	1.52 ±5%	18-25
		Measured, Jul-13-2012	50.3	2.00	19.7
		Measured, Jul-23-2012	51.6	1.99	19.7
2450	Body	Recommended Limits	52.7 ±5%	1.95 ±5%	18-25
		Measured, Jul-12-2012	44.6	6.00	19.5
		Measured, Jul-14-2012	44.7	6.20	19.2
		Recommended Limits	48.2 ±10%	5.98 ±5%	18-25

The list of ingredients and the percent composition used for the simulated tissues are indicated in the table below.

Ingredient	782 / 835 / 900 MHz Head	782 / 835 / 900 MHz Body	1800 MHz / 1900 MHz Head	1800 MHz / 1900 MHz Body	2450 MHz Head	2450 MHz Body	5 GHz Body
Sugar	57	44.9	--	--	--	--	--
DGBE	--	--	47	30.8	6.89	8	--
Diacetin	--	--	--	--	--	--	--
Water	40.45	53.06	52.62	68.8	57.95	71.8	78.66
Salt	1.45	0.94	0.38	0.4	0.15	0.2	--
HEC	1	1	--	--	--	--	--
Bact.	0.1	0.1	--	--	--	--	--
Triton X-100	--	--	--	--	35.02	20	10.67
Di(ethylene glycol) Hexyl Ether	--	--	--	--	--	--	10.67

All 5 GHz Head SAR testing was performed using HBBL3500-5800V5 tissue simulating liquids from Schmid & Partner Engineering AG. Prior to conducting SAR measurements, the relative permittivity, ϵ_r , and the conductivity, σ , of the liquids were measured as shown above.

5. System Accuracy Verification

A system accuracy verification of the DASY4™ was performed using the measurement equipment listed in Section 3.1. The daily system accuracy verification occurs within the flat section of the SAM phantom.

A SAR measurement was performed to verify the measured SAR was within $\pm 10\%$ from the target SAR indicated in Appendix 7. These frequencies are within $\pm 10\%$ of the compliance test mid-band frequency as required in [1] and [5]. The test was conducted on the same days as the measurement of the DUT. Recommended limits for permittivity and conductivity, specified in [5], are shown in the table below. The obtained results from the system accuracy verification are also displayed in the table below. SAR values are normalized to 1 W forward power delivered to the dipole. It is seen that the system is operating within its specification, as the results are within acceptable tolerance of the reference values. The distributions of SAR compare well with those of the reference measurements (see Appendix 1). For frequencies below 3 GHz, the simulated tissue depth was verified to be $15.0 \text{ cm} \pm 0.5 \text{ cm}$. For frequencies above 3 GHz, the simulated tissue depth was verified to be $10 \text{ cm} \pm 0.5 \text{ cm}$. Z-axis scans showing the SAR penetration are also included in Appendix 1.

System Accuracy Verification Measurements for Body SAR Measurements								
f (MHz)	Description	Dipole	Measured SAR (W/kg), 1 gram	Normalized SAR (W/kg), 1 gram	Dielectric Parameters		Ambient Temp (°C)	Tissue Temp (°C)
					ϵ_r	σ (S/m)		
835	Measured, Jul-02-2012	4D128	2.02	10.10	53.5	0.99	20.7	19.0
	Measured, Jul-06-2012	4D128	2.05	10.25	54.0	0.99	21.2	19.1
	Recommended Limits	4D128		9.45	55.2 $\pm 5\%$	0.97 $\pm 5\%$	18-25	18-25
1800	Measured, Jul-06-2012	259TR	7.67	38.35	52.2	1.48	21.4	19.0
	Recommended Limits	259TR		39.1	53.3 $\pm 5\%$	1.52 $\pm 5\%$	18-25	18-25
	Measured, Jul-25-2012	2D190	7.74	38.7	51.4	1.48	20.8	20.1
	Recommended Limits	2D190		37.8	53.3 $\pm 5\%$	1.52 $\pm 5\%$	18-25	18-25
2450	Measured, Jul-13-2012	877	10.2	51.0	50.3	2.00	20.1	19.2
	Recommended Limits	877		52.3	52.7 $\pm 5\%$	1.95 $\pm 5\%$	18-25	18-25
	Measured, Jul-23-2012	863	10.2	51.0	51.9	1.96	20.6	20.3
	Recommended Limits	863		52.8	52.7 $\pm 5\%$	1.95 $\pm 5\%$	18-25	18-25
5800	Measured, Jul-12-2012	1088	6.91	69.1	44.5	6.03	20.0	19.5
	Measured, Jul-13-2012	1088	7.12	71.2	44.7	6.22	20.6	19.0
	Recommended Limits	1088		75.4	48.2 $\pm 10\%$	6.00 $\pm 5\%$	18-25	18-25

The following probe conversion factors were used on the E-Field probe(s) used with the system accuracy verification measurements for body SAR measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ES3DV3	3124	835	6.04	6 of 11
		1810	4.69	6 of 11
E-Field Probe ES3DV3	3284	2450	4.56	6 of 11
E-Field Probe ES3DV3	3115	1810	4.72	6 of 11
E-Field Probe EX3DV4	3728	2450	6.84	6 of 11
		5800	3.71	6 of 11

6. Test Results

For CDMA and LTE modes, the test sample was operated using an actual transmission through a base station simulator. Wi-Fi testing was conducted using manufacturer test mode software, per guidance given in FCC KDB 248227. The base station simulator or test software was set up for the proper channels, transmitter power levels and transmit modes of operation.

The phone was tested in configurations specified by the FCC for this device in order to demonstrate the effective utilization of power reduction conditions specified in Exhibit 12. The phone was positioned into these configurations using the device holder supplied with the DASY4™ SAR measurement system. The default settings for the “coarse” and “cube” scans were chosen and used for measurements. The grid spacing of the coarse scan was set to 15 mm or less as shown in the SAR plots included in Appendix 2. Please refer to the DASY4™ manual for additional information on SAR scanning procedures and algorithms used.

The SAR results shown in the tables below are maximum SAR values averaged over 1 gram of phantom tissue. Also shown is the extrapolated SAR to account for drift. The exact method of extrapolation is:

$$\text{Extrapolated SAR} = (\text{Measured SAR}) * 10^{(-\text{drift}/10)}$$

The SAR reported at the end of the measurement process by the DASY4™ measurement system can be scaled up by the measured drift to determine the SAR at the beginning of the measurement process. This is the most conservative SAR because it corresponds to the average output power at the beginning of the SAR test. This extrapolation has been done because when the DUT is operating properly it may exhibit a slump in radiated power and SAR over time. This is verified by measuring the SAR drift after the test.

The Cellular Phone model covered by this report has the following battery options:

Model SNN5916A - 2000 mAh battery

The Model SNN5916A battery is an internally-sealed battery contained within the DUT, and may not be removed by the end-user. This battery was used to do all of the SAR testing. The phone was placed in the SAR measurement system with a fully charged battery.

A SPEAG™ MFP V5.1 C Triple Modular Phantom was used for the body-adjacent (body-worn accessory or mobile hotspot) tests. The triple modular phantom consists of three identical modules that can be installed and removed separately without emptying the liquid. Each module of the triple phantom is constructed of glass-fiber reinforced vinylester (VG-GF) with a thickness at the bottom of 2.0 mm. It measures 29.2 cm(long) by 17.8 cm(wide) by 17.8 cm(tall). The simulated tissue depth was verified to be 15.0 cm ± 0.5 cm. The same device holder described above was used for positioning the phone.

The simulated tissue depth was verified to be 15.0 cm ± 0.5 cm for frequencies below 3 GHz, or 10.0 cm ± 0.5 cm for frequencies greater than 3 GHz.

The following probe conversion factors were used on the E-Field probe(s) used for the following measurements:

Description	Serial Number	f (MHz)	Conversion Factor	Cal Cert pg #
E-Field Probe ES3DV3	3124	750	6.09	6 of 11
		1810	4.69	6 of 11
E-Field Probe ES3DV3	3284	2450	4.56	6 of 11
E-Field Probe ES3DV3	3115	1810	4.72	6 of 11
E-Field Probe EX3DV4	3728	2450	6.84	6 of 11
		5800	3.71	6 of 11

Per direction of the FCC, the following SAR test data is being provided to demonstrate the device's effective utilization of power reduction conditions specified in Exhibit 12 - Operational Description. The values in the table are provided solely for purposes of confirming compliant power reduction operation and do not represent maximum SAR values of the product. For maximum reported SAR compliance values, refer to the Exhibit 11 SAR test report.

Note this report does not include conditions and test results where both the maximum and reduced power SAR values are demonstrated in the Exhibit 11 SAR test report.

Wi-Fi 2.4 GHz Maximum Power Reduction

Wi-Fi 2.4 GHz during a mobile hotspot session in body-adjacent configurations (802.11b, 1 Mbps data rate)									
f (MHz)	Configuration	Channel	1 g SAR value without Power Reduction			1 g SAR value with Power Reduction			Measured SAR Reduction (dB)
			Maximum Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	Reduced Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	
2450	Front of Phone 10 mm from Phantom	1	18	0.082	0.09	12	0.018	0.02	6.5
	Back of Phone 10 mm from Phantom	1	18	0.227	0.23	12	0.073	0.07	5.2
		6	18	0.189	0.19	12	0.042	0.04	6.8
		11	18	0.192	0.19	12	0.048	0.05	5.8
	Right Edge of Phone 10 mm from Phantom	1	18	0.024	0.02	12	0.019	0.02	0

Wi-Fi 2.4 GHz during a mobile hotspot session in body-adjacent configurations (802.11b, 5.5 Mbps data rate)									
f (MHz)	Configuration	Channel	1 g SAR value without Power Reduction			1 g SAR value with Power Reduction			Measured SAR Reduction (dB)
			Maximum Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	Reduced Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	
2450	Front of Phone 10 mm from Phantom	1	18	0.114	0.12	12	0.024	0.02	7.8
	Back of Phone 10 mm from Phantom	1	18	0.224	0.23	12	0.068	0.07	5.2
		6	18	0.380	0.38	12	0.053	0.05	8.8
		11	18	0.357	0.37	12	0.064	0.07	7.2
	Right Edge of Phone 10 mm from Phantom	1	18	0.223	0.22	12	0.037	0.04	7.4

Wi-Fi 5 GHz Maximum Power Reduction

Wi-Fi 5 GHz during a mobile hotspot session in body-adjacent configurations (802.11a, 6 Mbps data rate)									
f (MHz)	Configuration	Channel	1 g SAR value without Power Reduction			1 g SAR value with Power Reduction			Measured SAR Reduction (dB)
			Maximum Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	Reduced Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	
5785	Front of Phone 10 mm from Phantom	165	16	0.051	0.05	11	0.012	0.01	7.0
	Back of Phone 10 mm from Phantom	165	16	0.326	0.33	11	0.096	0.10	5.2
	Right Edge of Phone 10 mm from Phantom	165	16	0.376	0.38	11	0.093	0.10	5.8

LTE Maximum Power Reduction

LTE Band 13 during a mobile hotspot session in body-adjacent configurations									
<i>f</i> (MHz)	Configuration	Channel	<i>1 g SAR value without Power Reduction</i>			<i>1 g SAR value with Power Reduction</i>			Measured SAR Reduction (dB)
			Maximum Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	Reduced Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	
<i>Front of Phone 10 mm from Phantom</i>									
782	QPSK (50% RB)	23230	23	0.210	0.22	22	0.235	0.24	+0.4
	QPSK (1 RB @ LOW)	23230	24	0.242	0.24	22	0.212	0.21	0.6
	QPSK (1 RB @ HIGH)	23230	24	0.217	0.22	22	0.168	0.17	1.1
	16QAM (50% RB)	23230	22	0.176	0.18	22	0.182	0.18	0
	16QAM (1 RB @ LOW)	23230	23	0.217	0.22	22	0.190	0.19	0.6
	16QAM (1 RB @ HIGH)	23230	23	0.190	0.19	22	0.156	0.16	0.7
<i>Back of Phone 10 mm from Phantom</i>									
782	QPSK (50% RB)	23230	23	1.32	1.38	22	1.25	1.32	0.2
	QPSK (1 RB @ LOW)	23230	24	1.51	1.51	22	1.15	1.15	1.2
	QPSK (1 RB @ HIGH)	23230	24	1.30	1.35	22	1.09	1.10	0.9
	16QAM (50% RB)	23230	22	1.03	1.03	22	0.996	1.00	0.1
	16QAM (1 RB @ LOW)	23230	23	1.34	1.34	22	1.09	1.09	0.9
	16QAM (1 RB @ HIGH)	23230	23	1.24	1.28	22	0.968	0.97	1.2
<i>Left Edge of Phone 10 mm from Phantom</i>									
782	QPSK (50% RB)	23230	23	0.439	0.46	22	0.393	0.41	0.5
	QPSK (1 RB @ LOW)	23230	24	0.438	0.44	22	0.323	0.32	1.4
	QPSK (1 RB @ HIGH)	23230	24	0.447	0.45	22	0.350	0.35	1.1
	16QAM (50% RB)	23230	22	0.345	0.35	22	0.320	0.32	0.4
	16QAM (1 RB @ LOW)	23230	23	0.374	0.37	22	0.316	0.33	0.5
	16QAM (1 RB @ HIGH)	23230	23	0.390	0.39	22	0.338	0.34	0.6
<i>Right Edge of Phone 10 mm from Phantom</i>									
782	QPSK (50% RB)	23230	23	0.286	0.30	22	0.246	0.25	0.8
	QPSK (1 RB @ LOW)	23230	24	0.301	0.30	22	0.211	0.21	1.5
	QPSK (1 RB @ HIGH)	23230	24	0.216	0.22	22	0.172	0.17	1.1
	16QAM (50% RB)	23230	22	0.222	0.22	22	0.194	0.19	0.6
	16QAM (1 RB @ LOW)	23230	23	0.265	0.27	22	0.202	0.20	1.3
	16QAM (1 RB @ HIGH)	23230	23	0.207	0.21	22	0.160	0.16	1.2
<i>Top Edge of Phone 10 mm from Phantom</i>									
782	QPSK (50% RB)	23230	23	0.203	0.21	22	0.152	0.16	1.2
	QPSK (1 RB @ LOW)	23230	24	0.199	0.21	22	0.124	0.12	2.4
	QPSK (1 RB @ HIGH)	23230	24	0.251	0.26	22	0.155	0.16	2.1
	16QAM (50% RB)	23230	22	0.162	0.16	22	0.148	0.15	0.3
	16QAM (1 RB @ LOW)	23230	23	0.165	0.17	22	0.116	0.12	1.5
	16QAM (1 RB @ HIGH)	23230	23	0.197	0.20	22	0.156	0.16	1.0

CDMA 1900 Maximum Power Reduction during a mobile hotspot session,
in body-adjacent exposure configurations

CDMA 1900 during a mobile hotspot session in body-adjacent configurations									
<i>f</i> (MHz)	Configuration	Channel	<i>1 g SAR value without Power Reduction</i>			<i>1 g SAR value with Power Reduction</i>			Measured SAR Reduction (dB)
			Maximum Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	Reduced Power Limit (dBm)	Measured (W/kg)	Extrapolated (W/kg)	
1880	Front of Phone 10 mm from Phantom	600	25	1.23	1.23	16	0.333	0.34	5.6
	Back of Phone 10 mm from Phantom	600	25	2.53	2.61	16	0.367	0.37	8.5
	Left Edge of Phone 10 mm from Phantom	600	25	0.176	0.18	16	0.055	0.06	4.8
	Right Edge of Phone 10 mm from Phantom	600	25	0.336	0.34	16	0.074	0.07	6.9
	Bottom Edge of Phone 10 mm from Phantom	25	25	3.95	3.97	16	0.714	0.72	7.4
		600	25	3.58	3.64	16	0.893	0.94	5.9
		1175	25	5.31	5.32	16	1.10	1.10	6.8

References

- [1] CENELEC, en62209-1:2006 “Human Exposure to Radio Frequency Fields From Hand - Held and Body - Mounted Wireless Communication Devices – Human Models, Instrumentation, and Procedures”
- [2] CENELEC, en50360:2001 “Product standard to demonstrate the compliance of mobile phones with the basic restrictions related to human exposure to electromagnetic fields (300 MHz – 3 GHz)”.
- [3] ANSI / IEEE, C95.1 1992 Edition “IEEE Standard for Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz”
- [4] FCC OET Bulletin 65 Supplement C 01-01
- [5] IEEE 1528 2003 Edition “IEEE Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques”
- [6] ICNIRP Guidelines “Guidelines for Limiting Exposure to Time-Varying Electric, Magnetic, and Electromagnetic Fields (up to 300 GHz)”

Appendix 1

SAR distribution comparison for the system accuracy verification

Date/Time: 7/2/2012 8:27:56 AM

Test Laboratory: Motorola Mobility - Jul-02-2012 835 MHz Body**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4d128; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 4d128; Input Power = 200 mW

Sim.Temp@meas = 19.0°C; Sim.Temp@SPC = 19.0°C; Room Temp @ SPC = 20.7°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 835$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3124; ConvF(6.04, 6.04, 6.04); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.97 mW/g

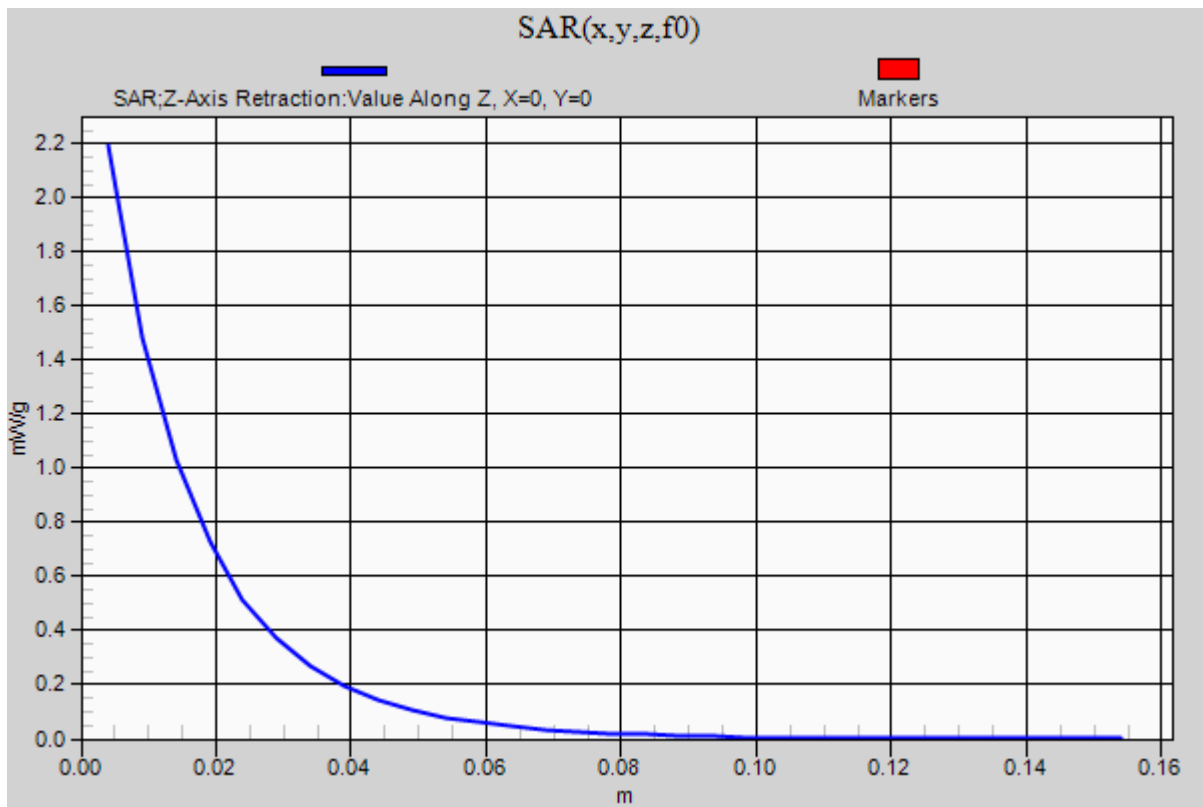
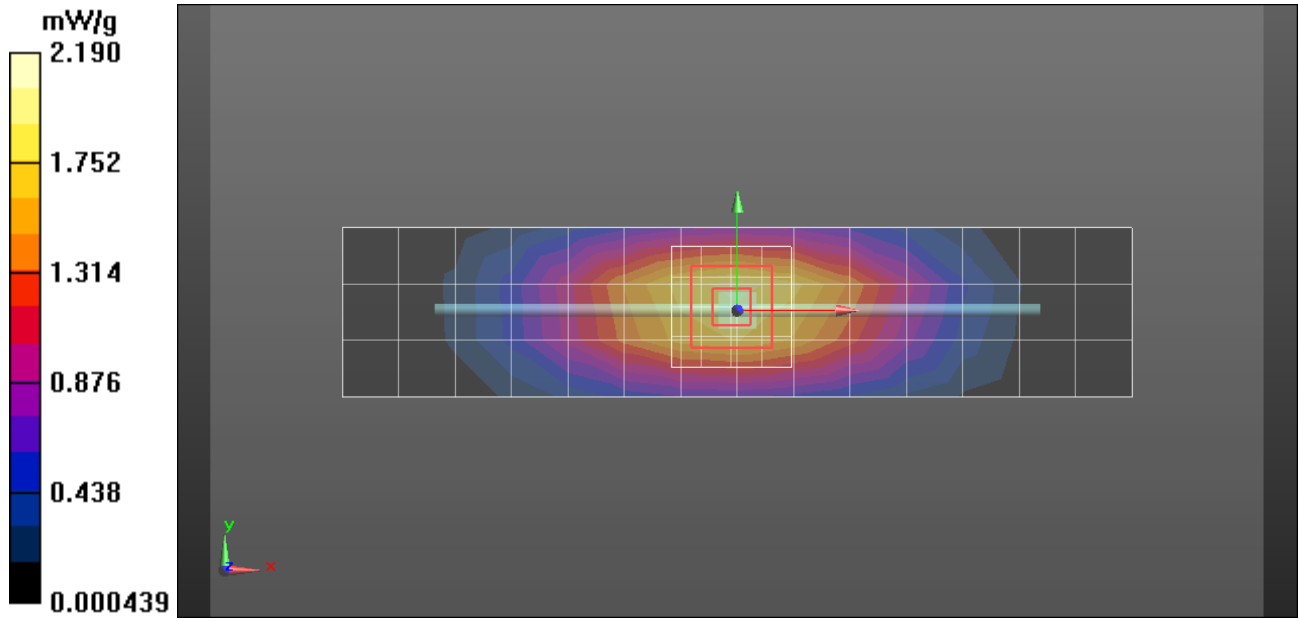
DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.342 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 3.005 mW/g

SAR(1 g) = 2.02 mW/g; SAR(10 g) = 1.32 mW/g; Maximum value of SAR (measured) = 2.19 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm



Date/Time: 7/6/2012 6:06:39 PM

Test Laboratory: Motorola Mobility - Jul-06-2012 835 MHz Body**DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 4D128; FCC ID: IHDT56NS1**

Procedure Notes: 835 MHz System Performance Check; Dipole Sn# 4D128; Input Power = 200 mW

Sim.Temp@meas = 19.1°C; Sim.Temp@SPC = 19.1°C; Room Temp @ SPC = 21.2°C

Communication System: _CW - Dipole; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 835$ MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 54$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3124; ConvF(6.04, 6.04, 6.04); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

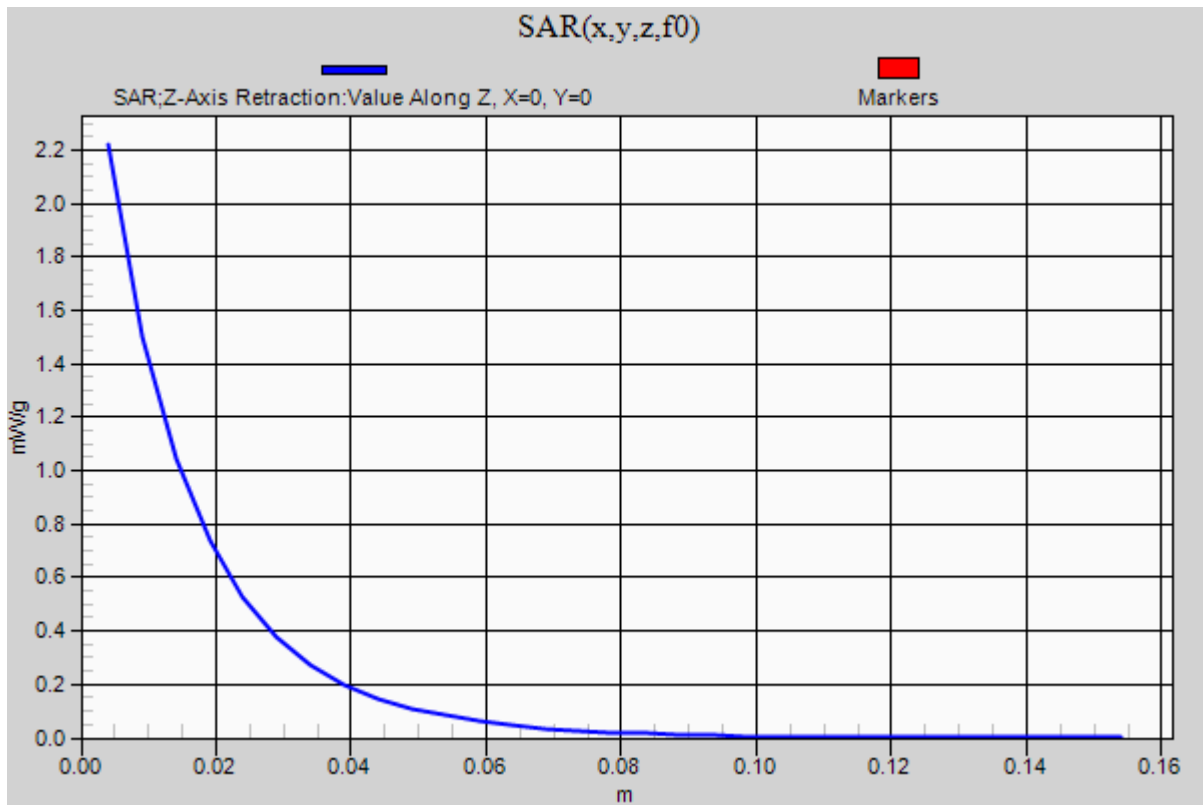
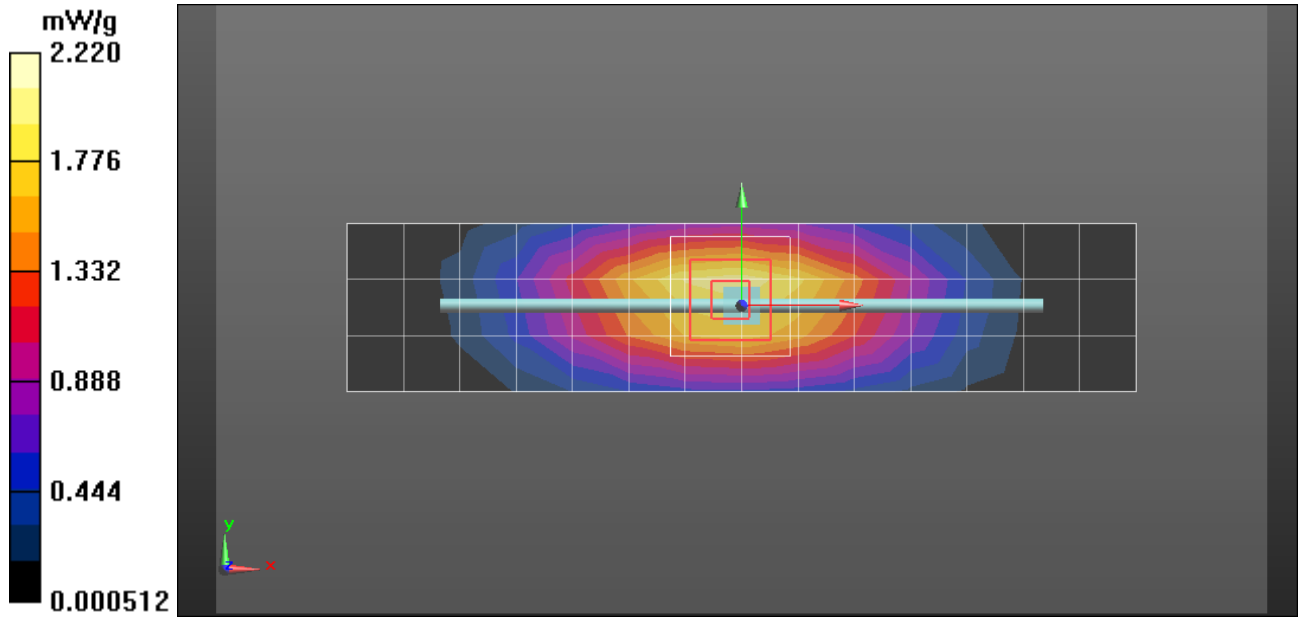
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 2.03 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 47.455 V/m; Power Drift = 0.01 dB; Peak SAR (extrapolated) = 3.051 mW/g

SAR(1 g) = 2.05 mW/g; SAR(10 g) = 1.34 mW/g; Maximum value of SAR (measured) = 2.21 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 2.22 mW/g



Date/Time: 7/6/2012 11:32:10 AM

Test Laboratory: Motorola Mobility - Jul-06-2012 1800 MHz Body**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 259TR; FCC ID: IHDT56NS1**

Procedure Notes: 1800 MHz System Performance Check; Dipole Sn# 259TR; Input Power = 200 mW

Sim.Temp@meas = 19.1°C; Sim.Temp@SPC = 19.0°C; Room Temp @ SPC = 21.4°C

Communication System: _CW - Dipole; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 52.2$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.69, 4.69, 4.69); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

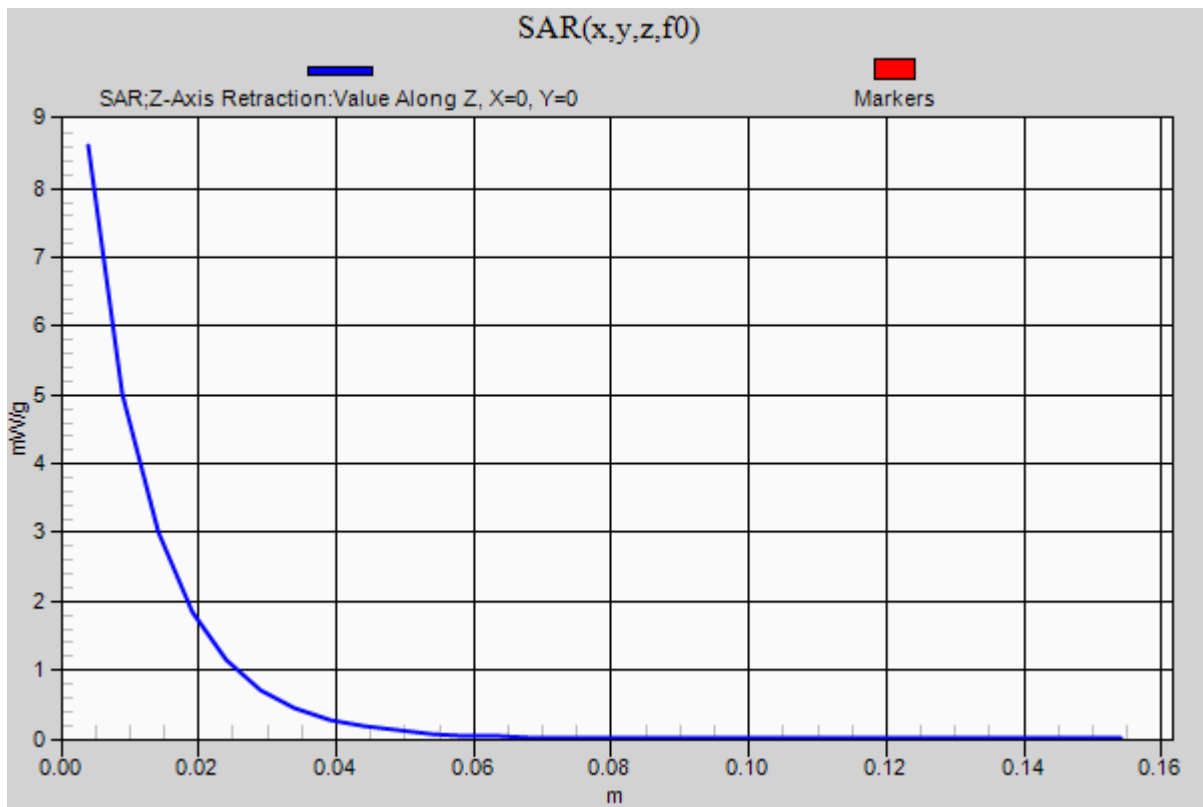
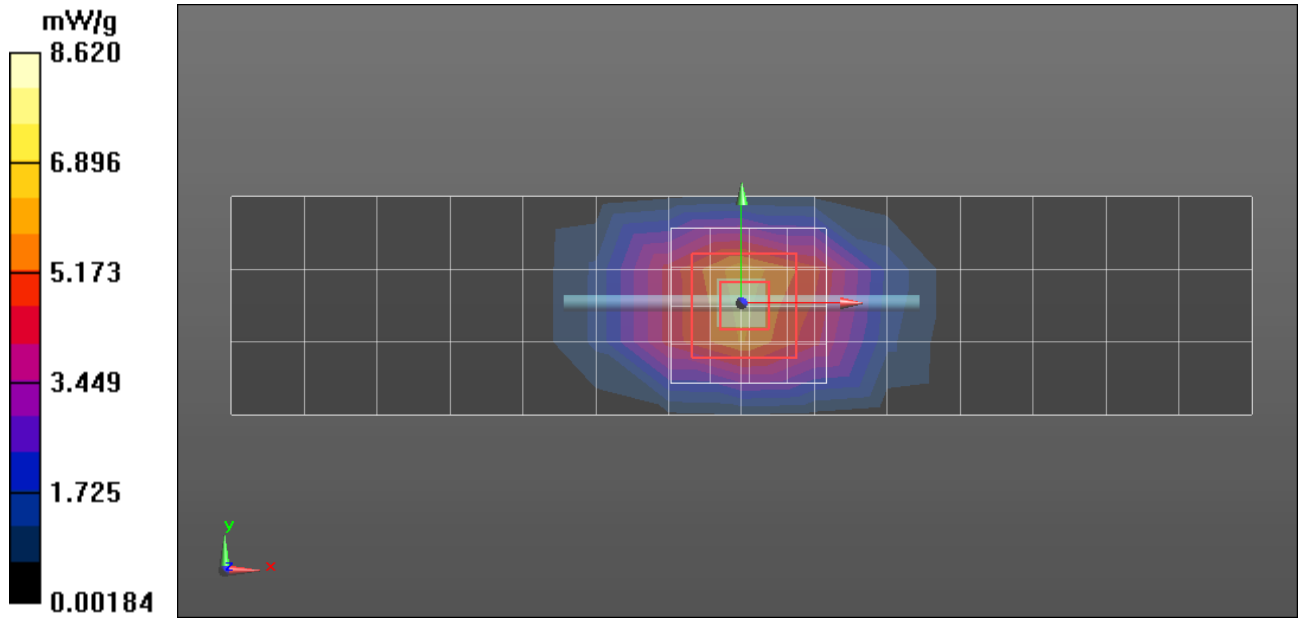
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 6.20 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 77.645 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 13.629 mW/g

SAR(1 g) = 7.67 mW/g; SAR(10 g) = 4.11 mW/g; Maximum value of SAR (measured) = 8.60 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 8.62 mW/g



Date/Time: 7/25/2012 8:39:42 AM

Test Laboratory: Motorola Mobility - Jul-25-2012 1800 MHz Body**DUT: Dipole 1800 MHz; Type: D1800V2; Serial: D1800V2 - SN: 2D190; FCC ID: IHDT56NS1**

Procedure Notes: 1800 MHz System Performance Check; Dipole Sn# 2d190; Input Power = 200 mW

Sim.Temp@meas = 19.5°C; Sim.Temp@SPC = 20.1°C; Room Temp @ SPC = 20.8°C

Communication System: _CW - Dipole; Frequency: 1800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 1800$ MHz; $\sigma = 1.48$ mho/m; $\epsilon_r = 51.4$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3115; ConvF(4.72, 4.72, 4.72); Calibrated: 1/11/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn699; Calibrated: 9/22/2011
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Right Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

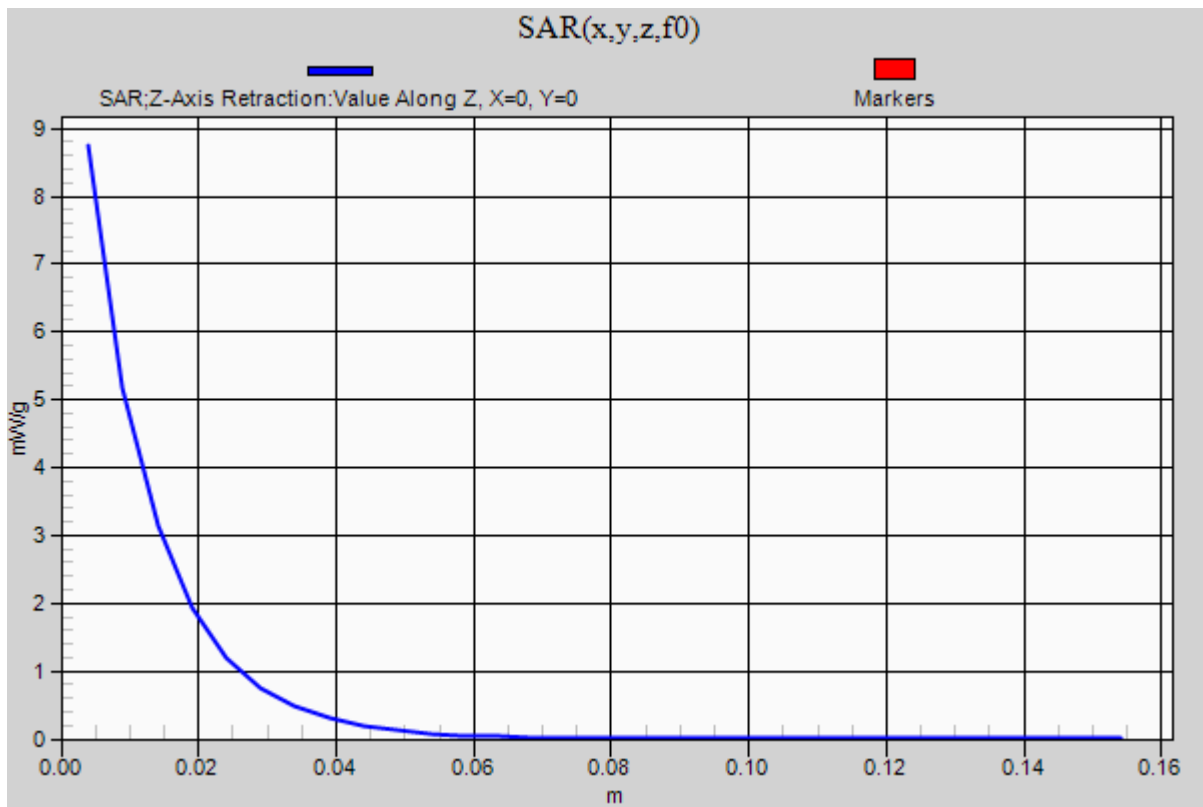
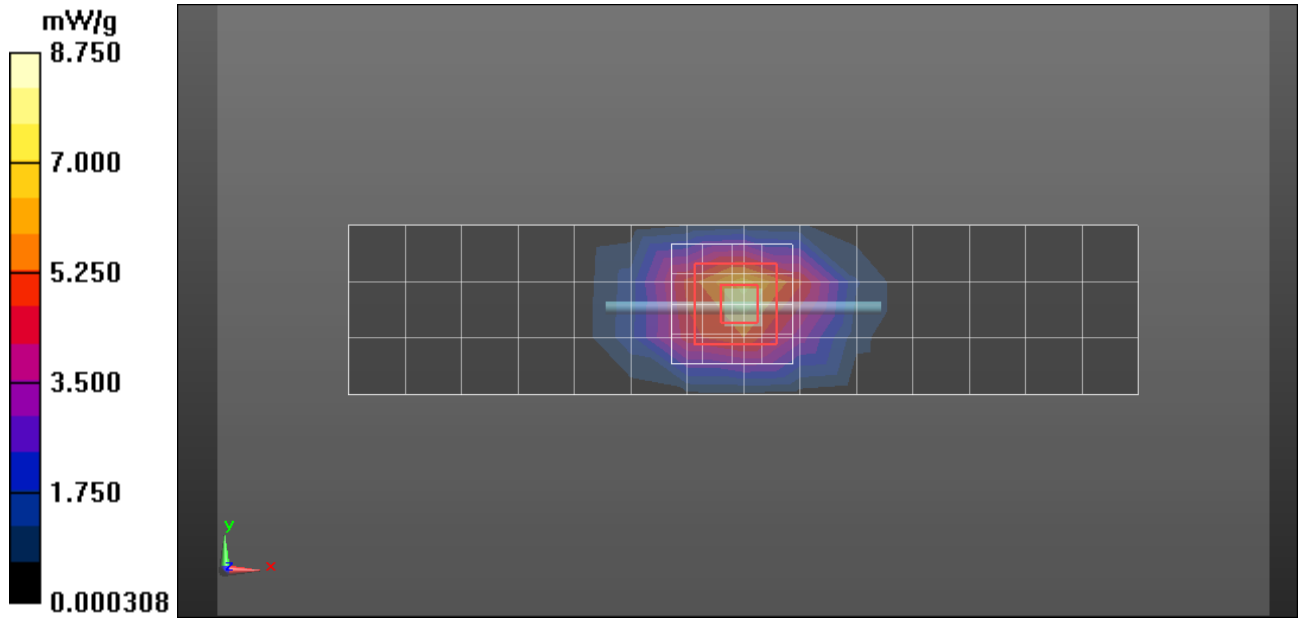
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 6.81 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 77.749 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 13.447 mW/g

SAR(1 g) = 7.74 mW/g; SAR(10 g) = 4.15 mW/g; Maximum value of SAR (measured) = 8.69 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 8.75 mW/g



Date/Time: 7/13/2012 4:36:14 PM

Test Laboratory: Motorola Mobility - Jul-13-2012 2450 MHz Body

DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 877; FCC ID: IHDT56NS1
Procedure Notes: 2450 MHz System Performance Check; Dipole Sn# 877; Input Power = 200 mW
Sim.Temp@meas = 19.6°C; Sim.Temp@SPC = 19.2°C; Room Temp @ SPC = 20.1°C
Communication System: _CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 2450$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3284; ConvF(4.56, 4.56, 4.56); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 8.11 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube

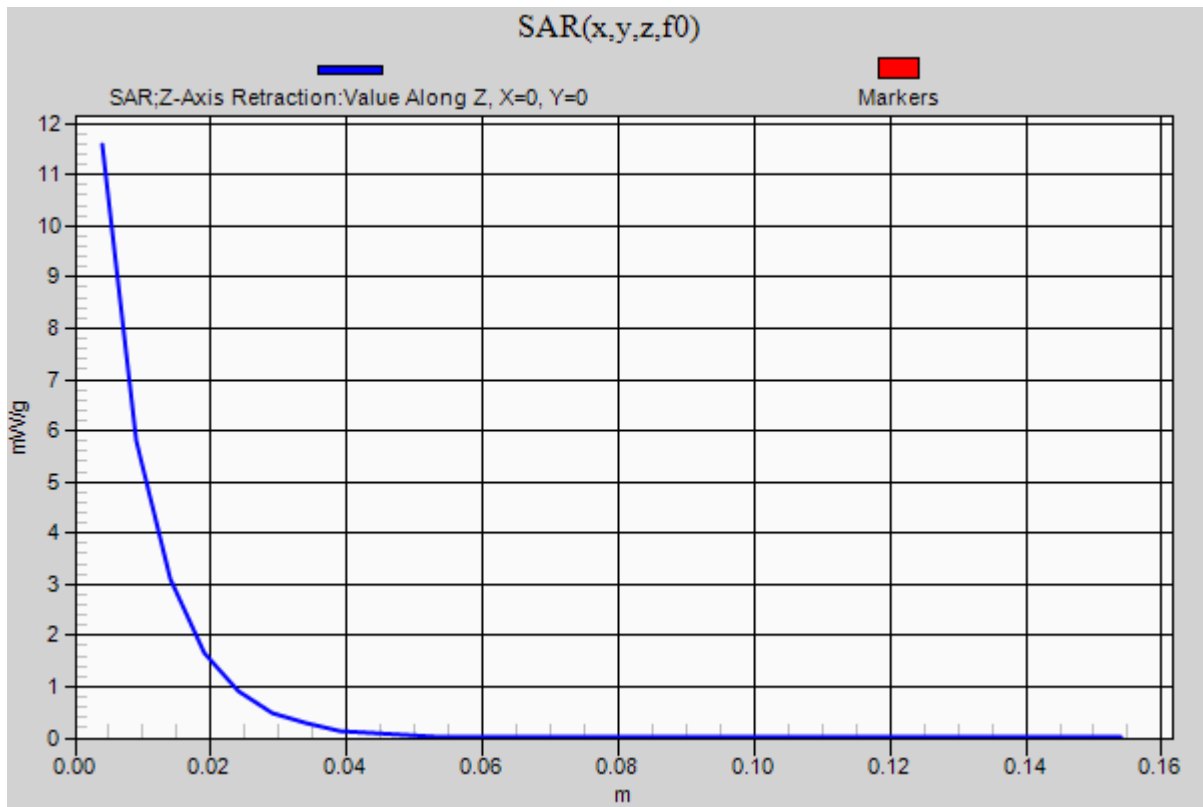
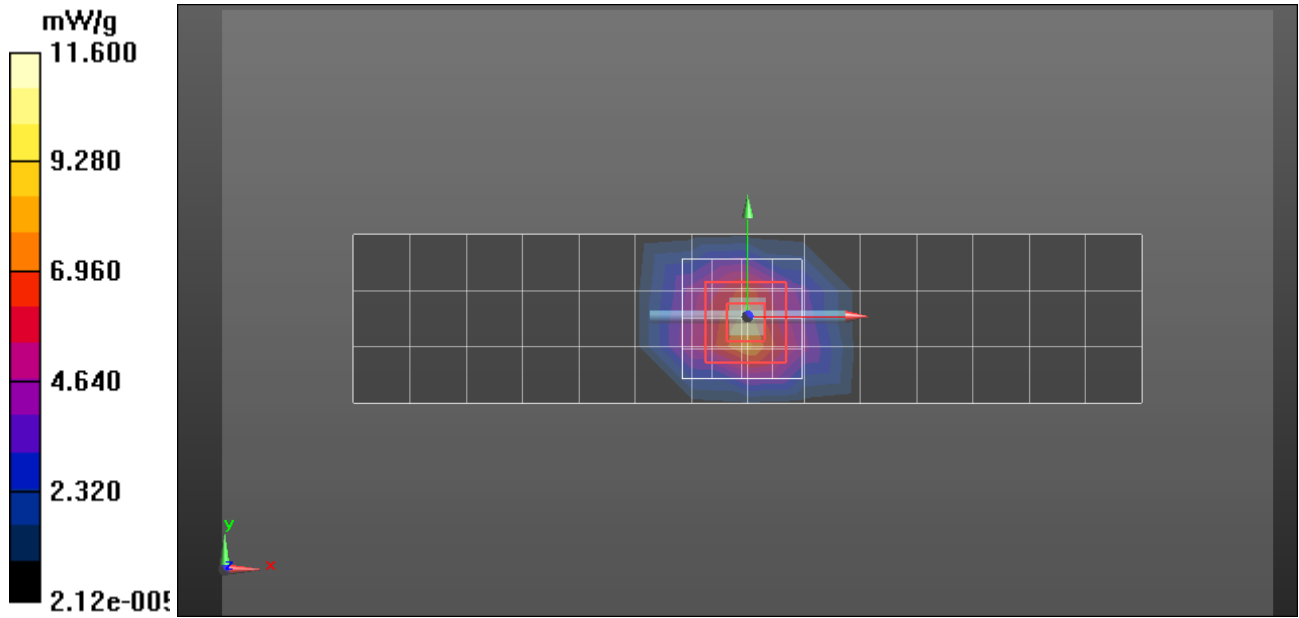
(5x5x7)/Cube 0: Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 76.236 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 21.694 mW/g

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 4.73 mW/g; Maximum value of SAR (measured) = 11.6 mW/g

DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):

Measurement grid: dx=20mm, dy=20mm, dz=5mm



Date/Time: 7/23/2012 6:36:06 AM

Test Laboratory: Motorola Mobility - Jul-23-2012 2450 MHz Body**DUT: Dipole 2450 MHz; Type: D2450V2; Serial: D2450V2 - SN: 863; FCC ID: IHDT56NS1**

Procedure Notes: 2450 MHz System Performance Check; Dipole Sn# 863; Input Power = 200 mW

Sim.Temp@meas = 19.2°C; Sim.Temp@SPC = 20.3°C; Room Temp @ SPC = 20.6°C

Communication System: _CW - Dipole; Frequency: 2450 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.96$ mho/m; $\epsilon_r = 51.9$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3728; ConvF(6.84, 6.84, 6.84); Calibrated: 4/24/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 5/23/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template - Dipole Area Scan (4x15x1):

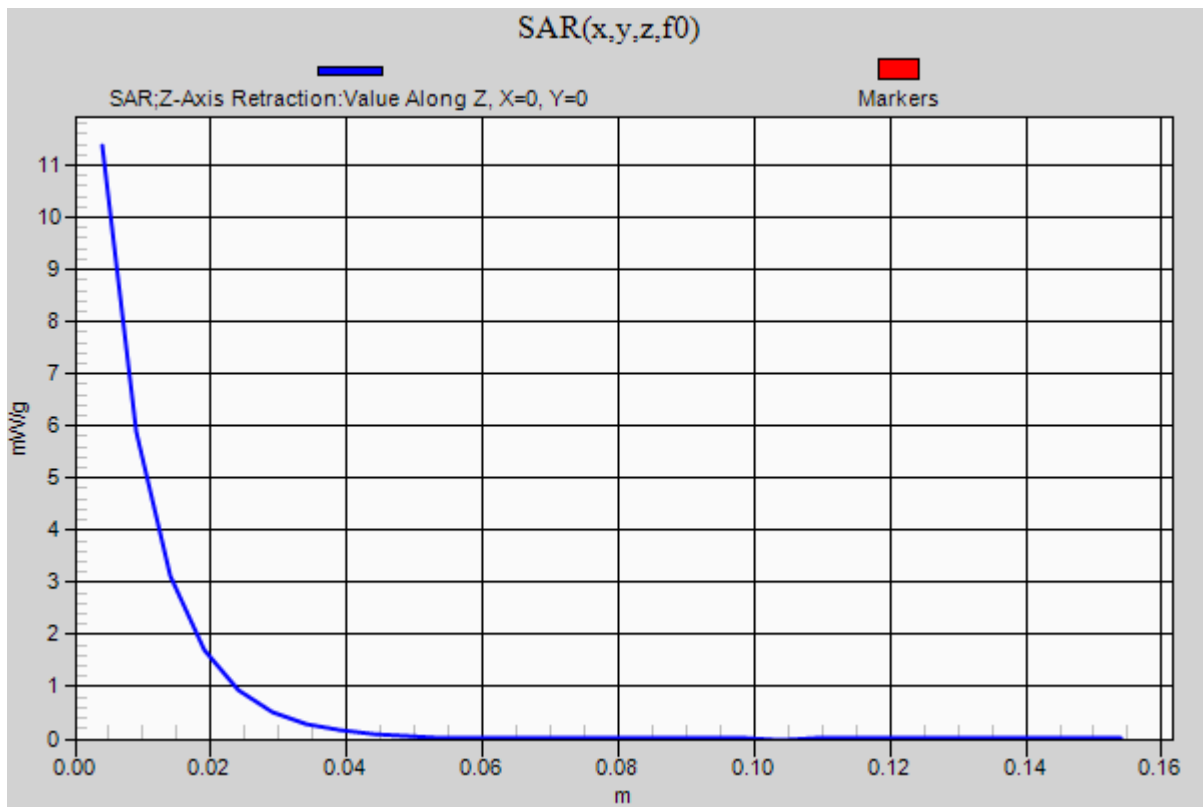
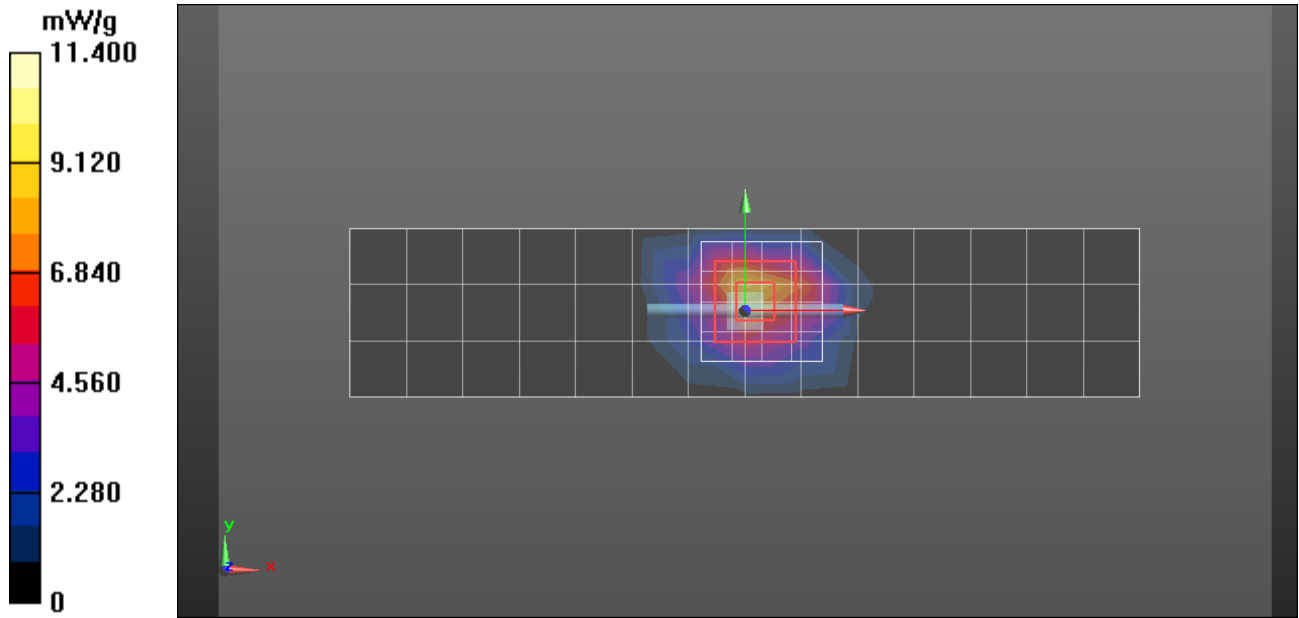
Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 9.50 mW/g

DASY5, Triple Flat System Performance Check Template - 0-Degree 5x5x7 Cube**(5x5x7)/Cube 0:** Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 73.900 V/m; Power Drift = 0.00 dB; Peak SAR (extrapolated) = 20.416 mW/g

SAR(1 g) = 10.2 mW/g; SAR(10 g) = 4.79 mW/g; Maximum value of SAR (measured) = 11.6 mW/g**DASY5, Triple Flat System Performance Check Template - Z-Axis Retraction (1x1x31):**

Measurement grid: dx=20mm, dy=20mm, dz=5mm; Maximum value of SAR (measured) = 11.4 mW/g



Date/Time: 7/12/2012 12:24:31 PM

Test Laboratory: Motorola Mobility - Jul-12-2012 5800 MHz Body**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN: 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5800 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 19.5°C; Sim.Temp@SPC = 19.5°C; Room Temp @ SPC = 20.0°C

Communication System: _CW - Dipole; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.03$ mho/m; $\epsilon_r = 44.5$; $\rho = 1000$ kg/m³

DASY4 Configuration:

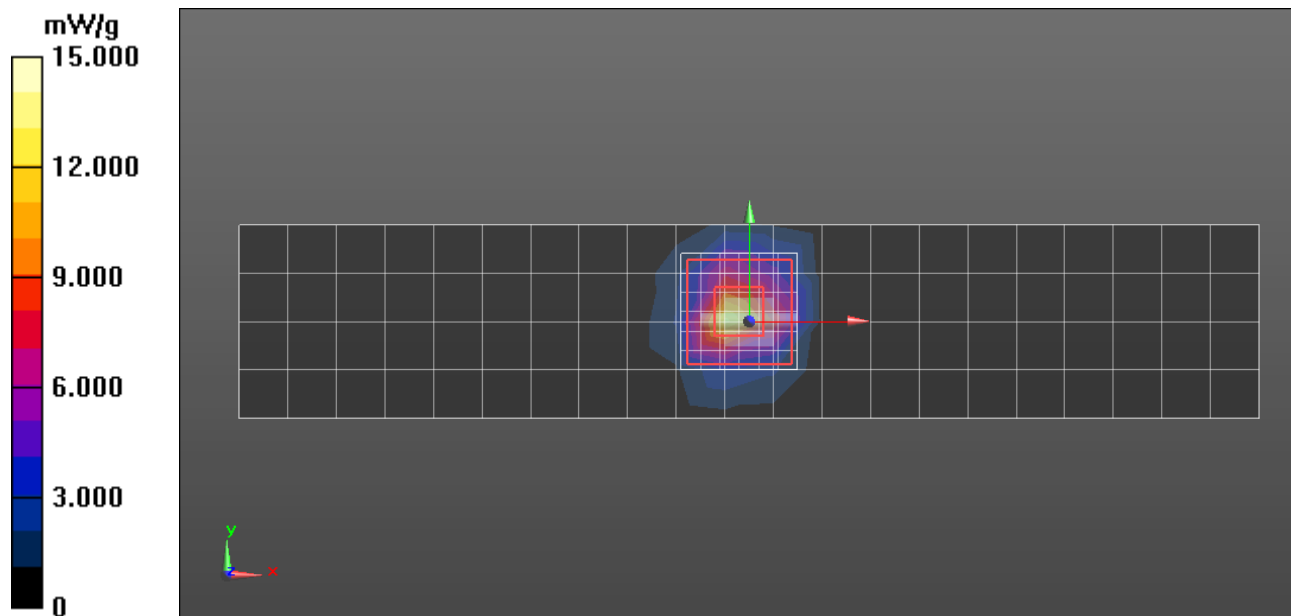
- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template, Dipole Area Scan (22x5x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 12.5 mW/g

DASY5, Triple Flat System Performance Check Template, 0-Degree, 7x7x12 Cube**(7x7x6)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 52.762 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 27.659 mW/g

SAR(1 g) = 6.91 mW/g; SAR(10 g) = 1.94 mW/g; Maximum value of SAR (measured) = 15.0 mW/g

Date/Time: 7/13/2012 3:36:25 PM

Test Laboratory: Motorola Mobility - Jul-13-2012 5800 MHz Body**DUT: Dipole 5-6GHz; Type: D5GHzV2; Serial: D5GHzV2 - SN 1088; FCC ID: IHDT56NS1**

Procedure Notes: 5800 MHz System Performance Check; Dipole Sn# 1088; Input Power = 100 mW

Sim.Temp@meas = 19.2°C; Sim.Temp@SPC = 19.0°C; Room Temp @ SPC = 20.6°C

Communication System: _CW - Dipole; Frequency: 5800 MHz; Duty Cycle: 1:1

Medium: Validation *BODY Tissue*

Medium parameters used: $f = 5800$ MHz; $\sigma = 6.22$ mho/m; $\epsilon_r = 44.7$; $\rho = 1000$ kg/m³

DASY4 Configuration:

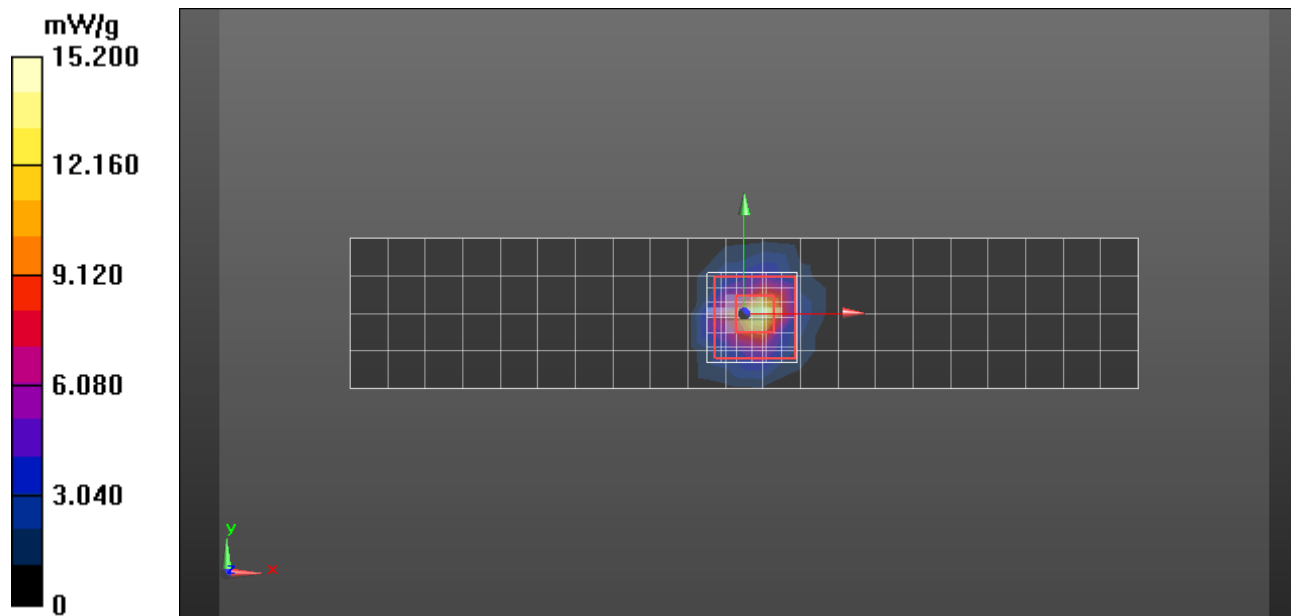
- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat System Performance Check Template, Dipole Area Scan (22x5x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 14.5 mW/g

DASY5, Triple Flat System Performance Check Template, 0-Degree, 7x7x12 Cube**(7x7x6)/Cube 0:** Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 53.520 V/m; Power Drift = -0.09 dB; Peak SAR (extrapolated) = 28.213 mW/g

SAR(1 g) = 7.12 mW/g; SAR(10 g) = 2.01 mW/g; Maximum value of SAR (measured) = 15.2 mW/g

Appendix 2

SAR distribution plots

Date/Time: 7/23/2012 4:54:42 PM

Test Laboratory: Motorola Mobility - Wi-Fi 2.4 GHz Mobile Hotspot**Serial: 6336; FCC ID: IHDT56NS1*****Unit Operating at Non-Reduced Power for Verification of Power Reduction Conditions***

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (body-adjacent) position, Back of Phone 10 mm from Phantom

Device Mode: 802.11b mode, 5.5 Mbps data rate

Communication System: _Wi-Fi 2450MHz; Frequency: 2437 MHz; Channel Number: 6; Duty Cycle: 1:1

Medium: 2450 Triton Body

Medium parameters used: $f = 2450$ MHz; $\sigma = 1.99$ mho/m; $\epsilon_r = 51.6$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3728; ConvF(6.84, 6.84, 6.84); Calibrated: 4/24/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE3 Sn440; Calibrated: 5/23/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

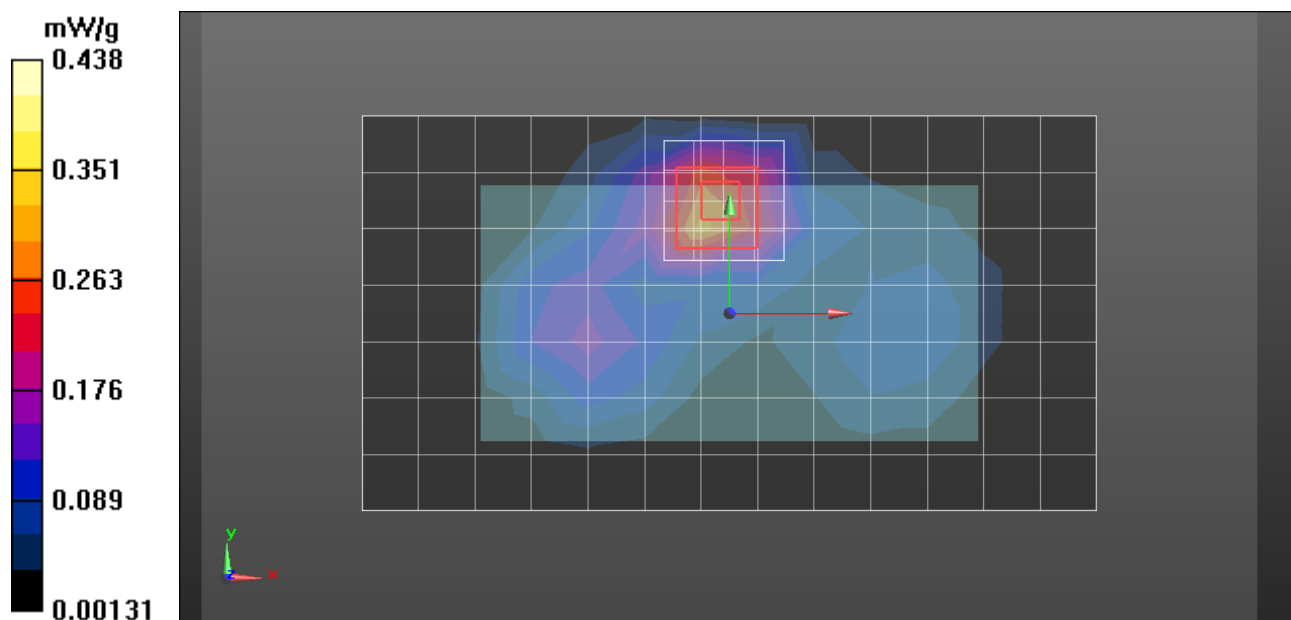
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.309 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 11.879 V/m; Power Drift = -0.03 dB; Peak SAR (extrapolated) = 0.767 mW/g

SAR(1 g) = 0.380 mW/g; SAR(10 g) = 0.182 mW/g; Maximum value of SAR (measured) = 0.438 mW/g

Date/Time: 7/13/2012 8:53:18 PM

Test Laboratory: Motorola Mobility - Wi-Fi 2.4 GHz Mobile Hotspot**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-adjacent), Back of Phone 10 mm from Phantom

Device Mode: 802.11b mode, 1 Mbps data rate

Communication System: _Wi-Fi 2450MHz; Frequency: 2412 MHz; Channel Number: 1; Duty Cycle: 1:1

Medium: 2450 Triton Body

Medium parameters used: $f = 2450$ MHz; $\sigma = 2$ mho/m; $\epsilon_r = 50.3$; $\rho = 1000$ kg/m³**DASY4 Configuration:**

- Probe: ES3DV3 - SN3284; ConvF(4.56, 4.56, 4.56); Calibrated: 1/10/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1310; Calibrated: 1/11/2012
- Phantom: R#4, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

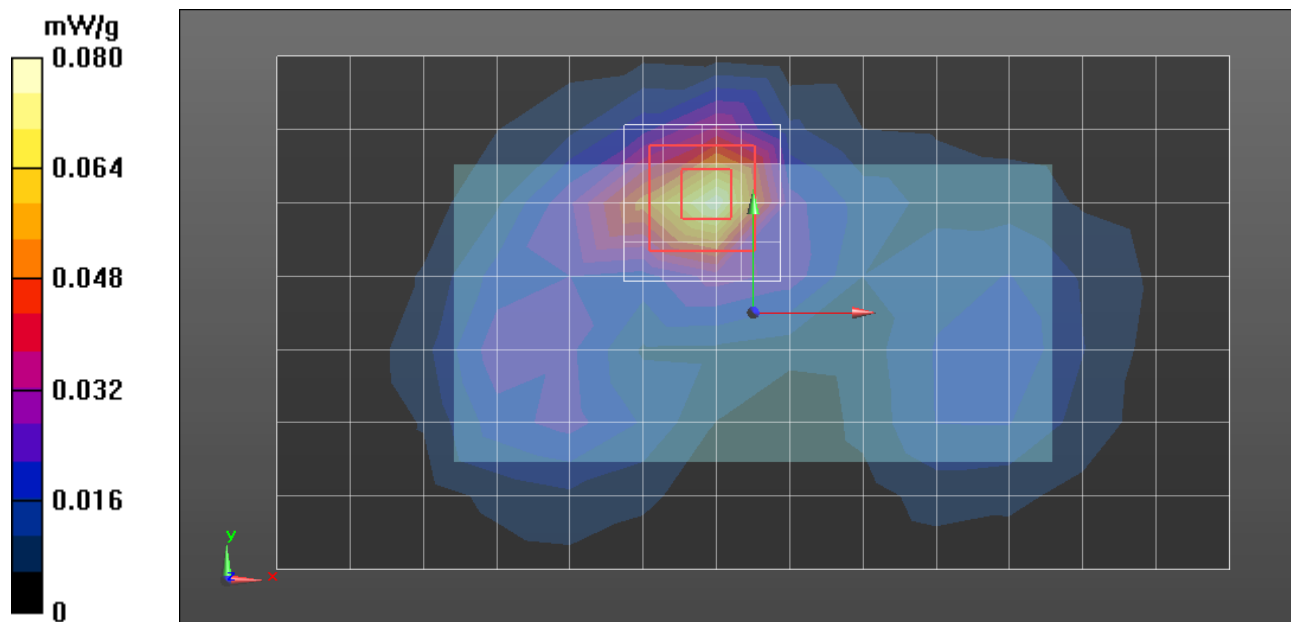
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 0.0793 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 5.487 V/m; Power Drift = -0.08 dB; Peak SAR (extrapolated) = 0.153 mW/g

SAR(1 g) = 0.073 mW/g; SAR(10 g) = 0.035 mW/g; Maximum value of SAR (measured) = 0.0796 mW/g

Date/Time: 7/12/2012 3:35:26 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.8 GHz Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1*****Unit Operating at Non-Reduced Power for Verification of Power Reduction Conditions***

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (body-adjacent) position, Back of Phone 10 mm from Phantom

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5825 MHz; Channel Number: 165; Duty Cycle: 1:1

Medium: 5.785 GHz BODY

Medium parameters used: $f = 5785$ MHz; $\sigma = 6$ mho/m; $\epsilon_r = 44.6$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

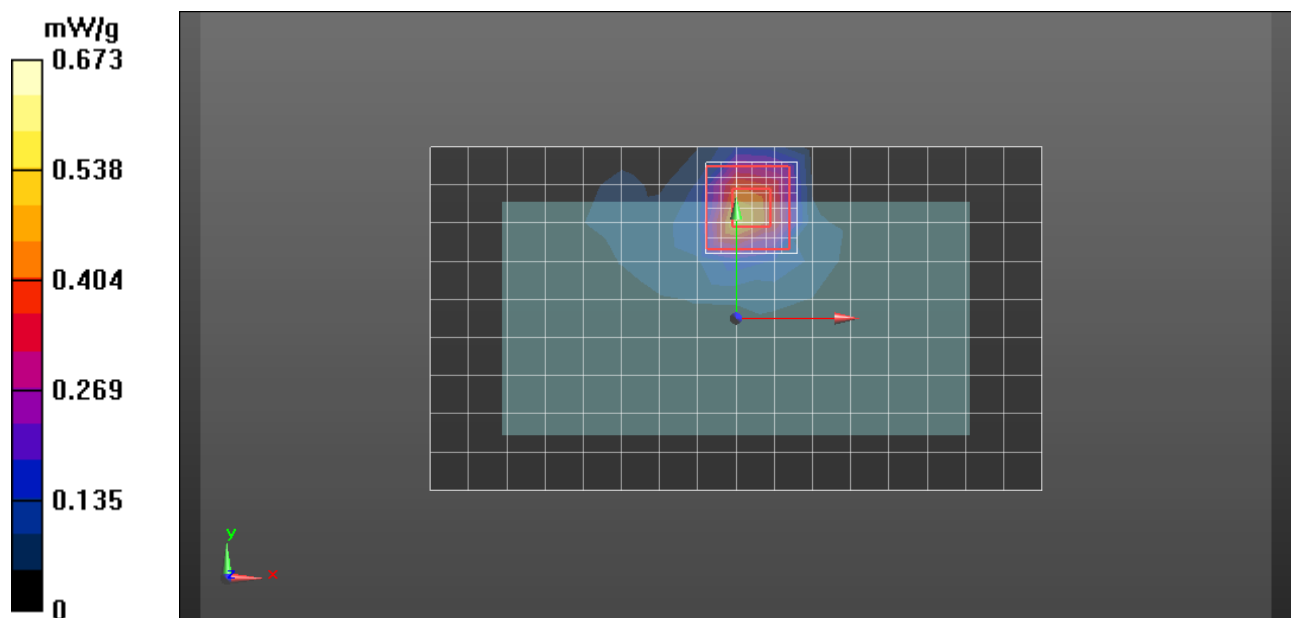
DASY5, TRIPLE Flat Phone Template, Area Scan - Normal Body (10mm) (17x10x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.525 mW/g

DASY5, TRIPLE Flat Phone Template, 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 8.149 V/m; Power Drift = 0.13 dB; Peak SAR (extrapolated) = 1.245 mW/g

SAR(1 g) = 0.326 mW/g; SAR(10 g) = 0.097 mW/g; Maximum value of SAR (measured) = 0.673 mW/g

Date/Time: 7/14/2012 1:50:07 PM

Test Laboratory: Motorola Mobility - Wi-Fi 5.8 GHz Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Back of Phone 10 mm from Phantom

Device Mode: 802.11a mode, 6 Mbps data rate

Communication System: _WIFI 5-6GHz; Frequency: 5825 MHz; Channel Number: 165; Duty Cycle: 1:1

Medium: 5.785 GHz BODY

Medium parameters used: $f = 5785$ MHz; $\sigma = 6.2$ mho/m; $\epsilon_r = 44.7$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: EX3DV4 - SN3728; ConvF(3.71, 3.71, 3.71); Calibrated: 4/24/2012;
- Sensor-Surface: 2mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn1312; Calibrated: 5/29/2012
- Phantom: R#-3, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

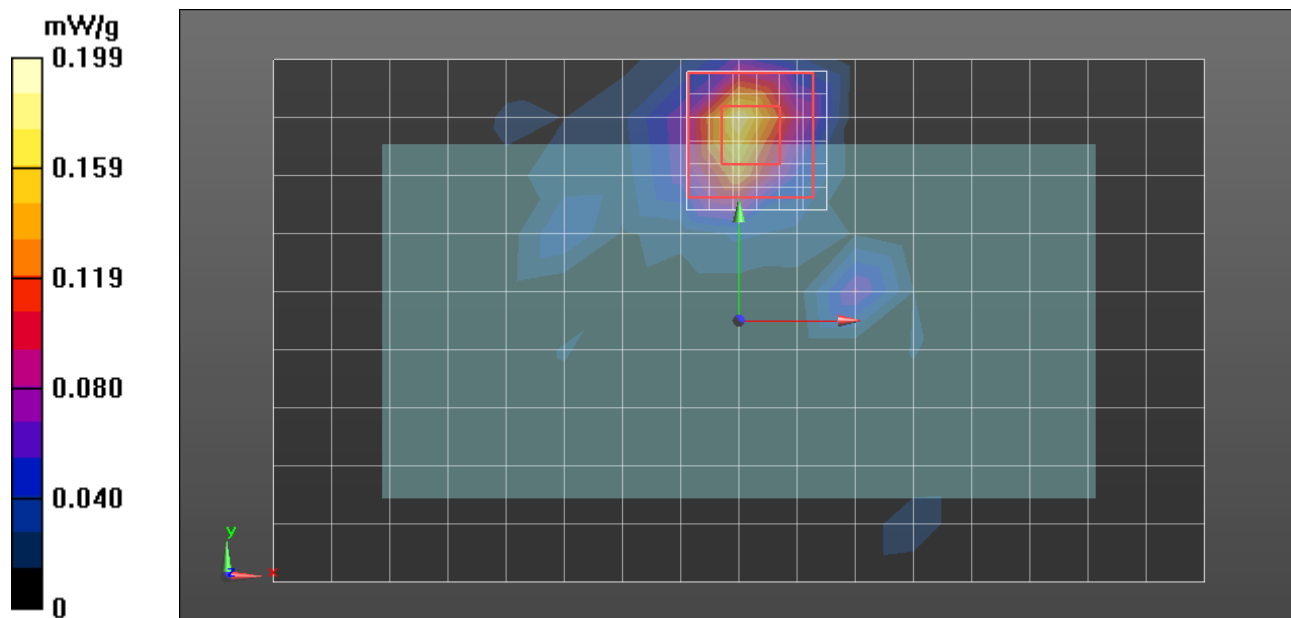
DASY5, TRIPLE Flat Phone Template, Area Scan - Normal Body (10mm) (17x10x1):

Measurement grid: dx=10mm, dy=10mm; Maximum value of SAR (measured) = 0.190 mW/g

DASY5, TRIPLE Flat Phone Template, 7x7x12 Zoom Scan (5-6GHz) (7x7x6)/Cube 0:

Measurement grid: dx=4mm, dy=4mm, dz=2mm

Reference Value = 5.488 V/m; Power Drift = -0.09 dB; Peak SAR (extrapolated) = 0.337 mW/g

SAR(1 g) = 0.096 mW/g; SAR(10 g) = 0.027 mW/g; Maximum value of SAR (measured) = 0.199 mW/g

Date/Time: 7/2/2012 1:31:15 PM

Test Laboratory: Motorola Mobility - LTE Band 13 Mobile Hotspot**Serial: 6336; FCC ID: IHDT56NS1*****Unit Operating at Non-Reduced Power for Verification of Power Reduction Conditions***

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (body-adjacent) position, Back of Phone 10 mm from Phantom

Device Mode: QPSK, 1 RB @ Low Edge of Channel

Communication System: _LTE Band 13; Frequency: 782 MHz; Channel Number: 23230; Duty Cycle: 1:1

Medium: Low Freq Body

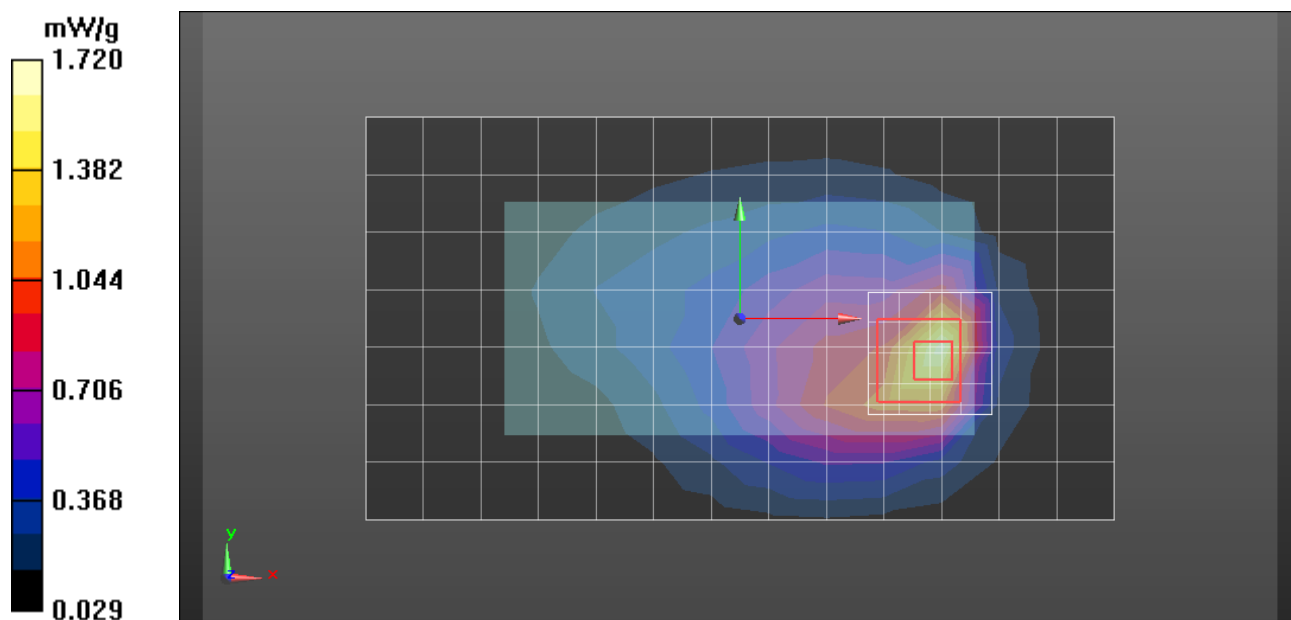
Medium parameters used: $f = 782 \text{ MHz}$; $\sigma = 0.93 \text{ mho/m}$; $\epsilon_r = 54.1$; $\rho = 1000 \text{ kg/m}^3$

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.09, 6.09, 6.09); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):Measurement grid: $dx=15\text{mm}$, $dy=15\text{mm}$; Maximum value of SAR (measured) = 1.68 mW/g**DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan ($\leq 3\text{GHz}$) (5x5x7)/Cube 0:**Measurement grid: $dx=8\text{mm}$, $dy=8\text{mm}$, $dz=5\text{mm}$

Reference Value = 34.406 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 2.869 mW/g

SAR(1 g) = 1.51 mW/g; SAR(10 g) = 0.841 mW/g; Maximum value of SAR (measured) = 1.72 mW/g

Date/Time: 7/7/2012 3:09:12 AM

Test Laboratory: Motorola Mobility - LTE Band 13 Mobile Hotspot**Serial: 6336; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: N/A; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Back of Phone 10mm from Phantom

Device Mode: QPSK, 50% RB Allocation

Communication System: _LTE Band 13; Frequency: 782 MHz; Channel Number: 23230; Duty Cycle: 1:1

Medium: Low Freq Body

Medium parameters used: $f = 782$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 54.5$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(6.09, 6.09, 6.09); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

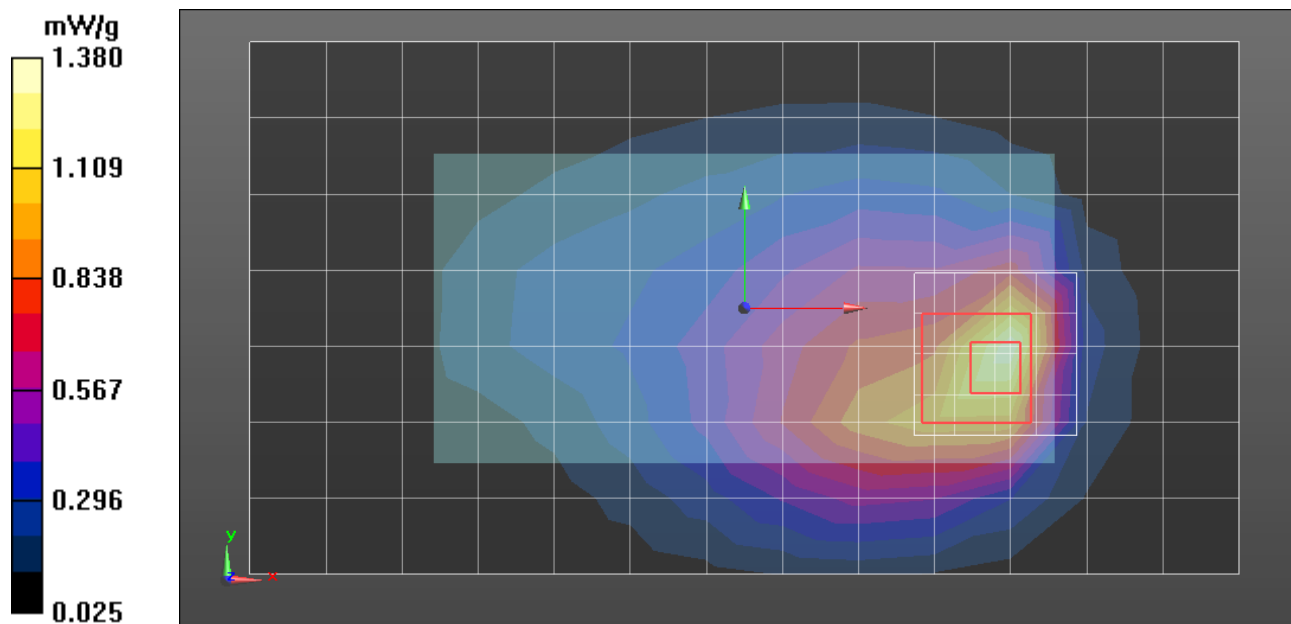
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.38 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 32.044 V/m; Power Drift = -0.24 dB; Peak SAR (extrapolated) = 2.298 mW/g

SAR(1 g) = 1.25 mW/g; SAR(10 g) = 0.709 mW/g;

Date/Time: 7/26/2012 2:05:29 AM

Test Laboratory: Motorola Mobility - CDMA 1900 Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1*****Unit Operating at Non-Reduced Power for Verification of Power Reduction Conditions***

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (body-adjacent) position, Bottom Edge of Phone 10 mm from Phantom

Communication System: _CDMA; Frequency: 1908.75 MHz; Channel Number: 1175; Duty Cycle: 1:1

Medium: Regular Glycol Body 1750/1880

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.58$ mho/m; $\epsilon_r = 51.1$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3115; ConvF(4.72, 4.72, 4.72); Calibrated: 1/11/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn699; Calibrated: 9/22/2011
- Phantom: R#2 Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

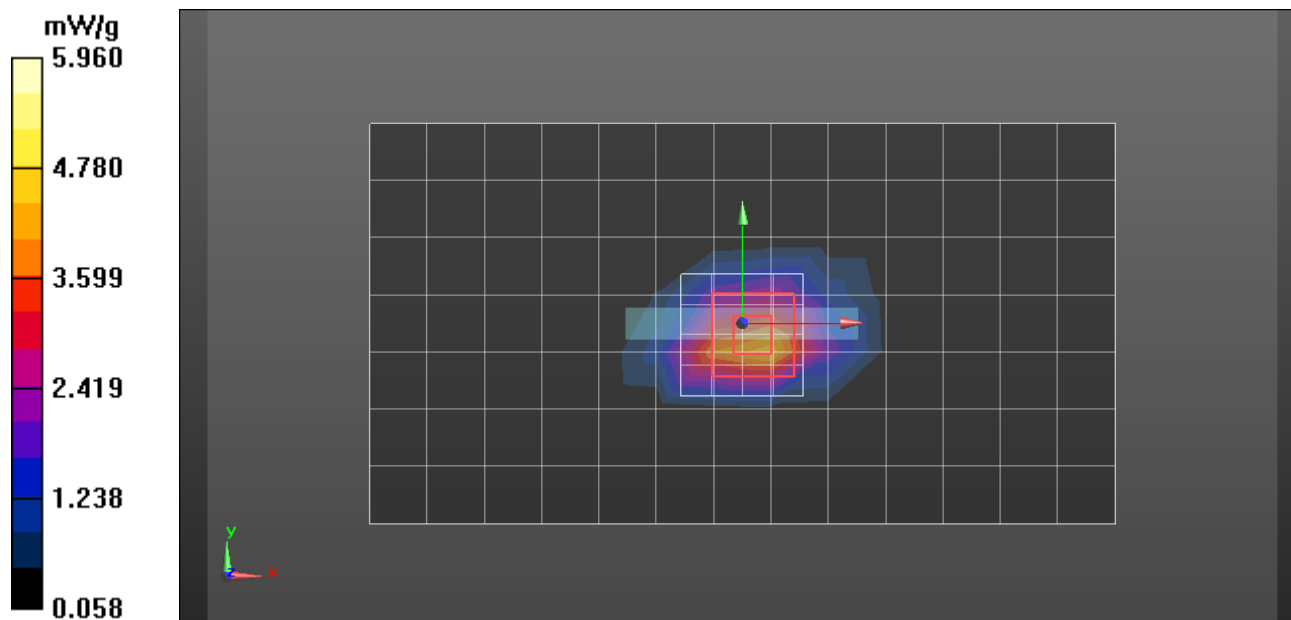
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 4.67 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 51.900 V/m; Power Drift = -0.01 dB; Peak SAR (extrapolated) = 9.802 mW/g

SAR(1 g) = 5.31 mW/g; SAR(10 g) = 2.59 mW/g; Maximum value of SAR (measured) = 5.96 mW/g

Date/Time: 7/6/2012 3:51:15 PM

Test Laboratory: Motorola Mobility - CDMA 1900 Mobile Hotspot**Serial: 6554; FCC ID: IHDT56NS1**

Procedure Notes: Pwr Step: All up Bits; Antenna Position: Internal; Battery Model #: Internal

Device Position: Mobile Hotspot (Body-Adjacent), Bottom Edge of Phone 10 mm from Phantom

Communication System: _CDMA; Frequency: 1908.75 MHz; Channel Number: 1175; Duty Cycle: 1:1

Medium: Regular Glycol Body 1750/1880

Medium parameters used: $f = 1880$ MHz; $\sigma = 1.57$ mho/m; $\epsilon_r = 51.8$; $\rho = 1000$ kg/m³

DASY4 Configuration:

- Probe: ES3DV3 - SN3124; ConvF(4.69, 4.69, 4.69); Calibrated: 8/23/2011;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn376; Calibrated: 8/31/2011
- Phantom: R#-1, Triple Flat Phantom 5.1C (Rev.4); Type: QD 000 P51 CA; Serial: n/a;
Phantom section: Center Section
- SEMCAD X Version 14.6.5 (6469)

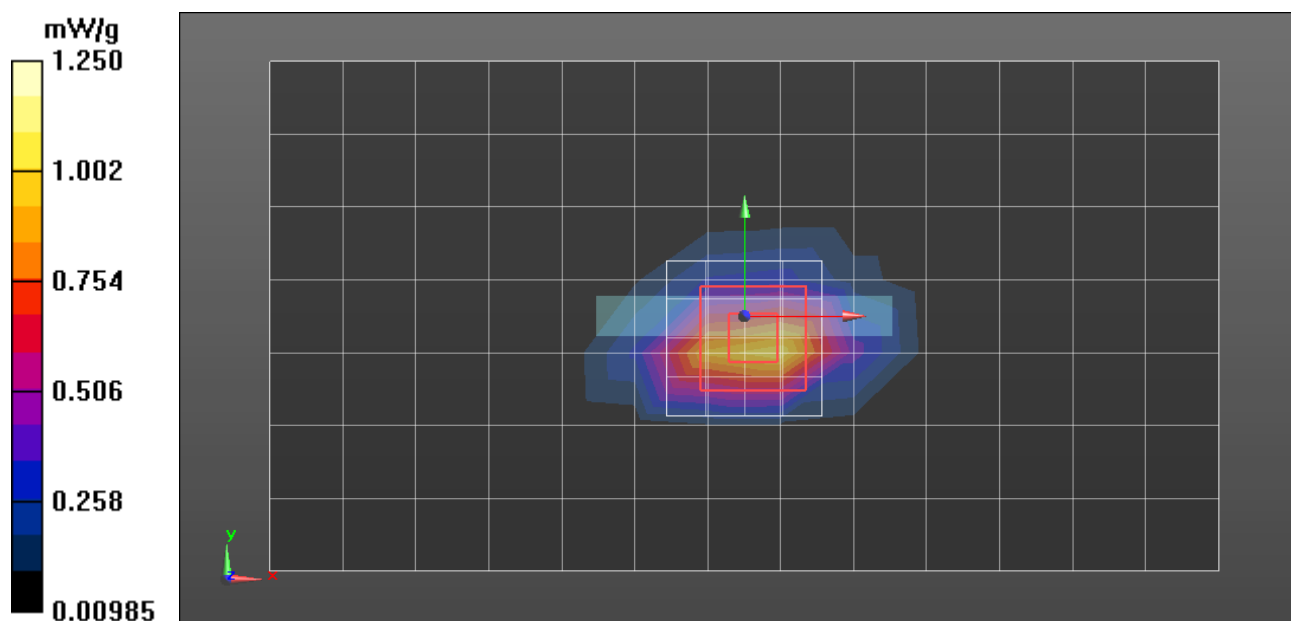
DASY5, Triple Flat Phone Template - Area Scan - Normal Body (15mm) (14x8x1):

Measurement grid: dx=15mm, dy=15mm; Maximum value of SAR (measured) = 1.08 mW/g

DASY5, Triple Flat Phone Template - 5x5x7 Zoom Scan (<=3GHz) (5x5x7)/Cube 0:

Measurement grid: dx=8mm, dy=8mm, dz=5mm

Reference Value = 21.362 V/m; Power Drift = 0.11 dB; Peak SAR (extrapolated) = 2.112 mW/g

SAR(1 g) = 1.1 mW/g; SAR(10 g) = 0.526 mW/g; Maximum value of SAR (measured) = 1.25 mW/g

Appendix 3

Measurement Uncertainty Budget

Uncertainty Budget for Device Under Test, for 735 MHz to 2 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e</i> = <i>f</i> (<i>d</i> , <i>k</i>)	<i>f</i>	<i>g</i>	<i>h</i> = <i>c x f</i> / <i>e</i>	<i>i</i> = <i>c x g</i> / <i>e</i>	<i>k</i>
Uncertainty Component	Description IEEE1528(2003) / IEC62209-1(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	5.5	N	1.00	1	1	5.5	5.5	∞
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	1.4	R	1.73	1	1	0.8	0.8	∞
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	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity (target)	E.3.2 / 7.2.3.3	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity (measurement)	E.3.3 / 7.2.3.3	2.5	N	1.00	0.64	0.43	1.6	1.1	6
Liquid Permittivity (target)	E.3.2 / 7.2.3.4	5.0	R	1.73	0.6	0.49	1.7	1.4	∞
Liquid Permittivity (measurement)	E.3.2 / 7.2.3.4	2.3	N	1.00	0.6	0.49	1.4	1.1	6
Combined Standard Uncertainty			RSS				11	11	338
Expanded Uncertainty (95% CONFIDENCE LEVEL)			<i>k</i> =2				22	21	

Uncertainty Budget for Device Under Test for 3 to 6 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	$e = f(d,k)$	<i>f</i>	<i>g</i>	$h = c \times f / e$	$i = c \times g / e$	<i>k</i>
Uncertainty Component	Description IEC62209-2(2010)	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 [EX3DV4]	7.2.2.1	6.6	N	1.00	1	1	6.6	6.6	∞
Axial Isotropy	7.2.2.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	7.2.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	7.2.2.6	2.0	R	1.73	1	1	1.2	1.2	∞
Linearity	7.2.2.5	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	7.2.2	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	7.2.2.7	0.3	N	1.00	1	1	0.3	0.3	∞
Response Time	7.2.2.8	1.1	R	1.73	1	1	0.6	0.6	∞
Integration Time	7.2.2.9	1.1	R	1.73	1	1	0.6	0.6	∞
RF Ambient Conditions - Noise	7.2.4.5	3.0	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	7.2.4.5	3.0	R	1.73	1	1	1.7	1.7	∞
Probe Positioner Mech. Tolerance	7.2.3.1	1.0	R	1.73	1	1	0.6	0.6	∞
Probe Positioning w.r.t Phantom	7.2.3.3	4.0	R	1.73	1	1	2.3	2.3	∞
Max. SAR Evaluation (ext., int., avg.)	7.2.5.3	4.0	R	1.73	1	1	2.3	2.3	∞
Test sample Related									
Test Sample Positioning	7.2.3.4	3.4	N	1.00	1	1	3.4	3.4	79
Device Holder Uncertainty	7.2.3.4	4.5	N	1.00	1	1	4.5	4.5	11
SAR drift	7.2.2.10	0.0	R	1.73	1	1	0.0	0.0	∞
Phantom and Tissue Parameters									
Phantom Uncertainty	7.2.3.2	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity (target)		5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity (measurement)	7.2.4.3	3.4	N	1.00	0.64	0.43	2.2	1.5	6
Liquid Permittivity (target)		10.0	R	1.73	0.6	0.49	3.5	2.8	∞
Liquid Permittivity (measurement)	7.2.4.3	2.6	N	1.00	0.6	0.49	1.6	1.3	6
Combined Standard Uncertainty									
			RSS				12	12	508
Expanded Uncertainty (95% CONFIDENCE LEVEL)									
			<i>k</i> =2				24	24	