



MOTOROLA



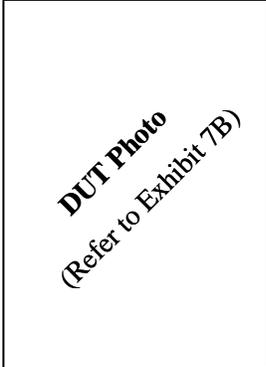
TESTING CERT # 2518.01

**FCC ID: AZ489FT7036
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 3**

Government & Public Safety
EME Test Laboratory
 8000 West Sunrise Blvd
 Fort Lauderdale, FL. 33322

Date of Report: 7/30/08
Report Revision: 0
Report ID: Mackinaw Portable_SR6522_080730

Responsible Engineer: Michael Sailsman (Senior Staff EME Eng.)
Date/s Tested: 6/27/08 – 7/17/08
Manufacturer/Location: Motorola, Plantation
Sector/Group/Div.: G&PS
Date submitted for test: 5/22/08
DUT Description: 136-174 1-6W, 764-870MHz 1-3W, Basic, 6.25K/12.5K/25K, Top Display Model W/GPS. Capable of digital and analog FM transmission and TDMA transmission.
Test TX mode(s): CW
Max. Power output: 6.6 Watts (VHF), 2.99 Watts (700 MHz), 3.6 Watts (800 MHz)
Nominal Power: 6.0 Watts (VHF), 2.5 Watts (700 MHz), 3.0 Watts (800 MHz)
Tx Frequency Bands: 136-174 MHz, 764-776 MHz, 794-806 MHz, 806-824 MHz, 851-870MHz
Signaling type: FM
Model(s) Tested: MNUR1000A
Model(s) Certified: MNUR1000A
Serial Number(s): TU098JW07N, TU098JW07M
Classification: Occupational/Controlled
Rule Part(s): 90



Approved Accessories:

Antenna(s):
 NAF5085A (700/800/GPS 764-870/1575.42 MHz ½ wave, -8.0 dBd); NAF5037A (806-870 MHz, ½ wave, -7.0 dBd);
 NAF5080A (700/800 MHz wideband Whip, 764-870 MHz, ½ wave, -7.0 dBd); NAD6563A (VHF Helical 136-174 MHz, ¼ wave, -6.5 dBd)
 PMAF4002A (700/800 MHz PSM Stubby, -10dBd)

Battery(ies):
 NNTN7038A (Hi Cap Impres Li-Ion 2500mAh), NNTN7037A (Impres NiMH 2100mAh), NNTN7035A (FM Impres NiMH 2000mAh – A81 Rugged)

Body worn accessory(ies):
 PMLN5409A/NTN8040B (3.0" swivel belt loop), PMLN5407A/NTN8039B (2.5" swivel belt loop), PMLN5408A (2.75" swivel belt loop),
 HLN6875A (3" belt clip), NTN8266B (2.5" belt clip), NTN5243A (carry strap), PMLN5331A (carry holder-Basic), PMLN5322A (Nylon case w/
 T strap-short), PMLN5328A (Nylon case w/ T strap-long), PMLN5323A (Leather case 3), PMLN5329A (Leather Case 3), PMLN5324A (Leather
 case hi act. swivel), PMLN5330A (Leather case hi act. swivel)

Audio/Data cable accessory(ies):
 PMLN5275A (Core H/D headset), HMN4104A (Impres display GCAI submersible RSM w/ jack & Ch), PMLN5111A (3-wire blk-1 programmable
 button), PMLN5112A (3-wire Beige-1 programmable button), PMMN4061A (PSM IP54 w/ 3.5mm jack RX 30"), PMMN4060A (PSM IP54 w/
 3.5mm jack RX 24"), PMMN4059A (PSM IP54 w/ 3.5mm jack RX 18"), PMMN4062A (Plus RSM NC IP54 3.5mm jack RX), RLN6242A (Quick
 disconnect acoustic tube), RMN5058A (Core lightweight headset w/ PTT & VOX), RLN5878A (Core 1 wire surveillance-blk), RLN5881A (Smart 2
 wire surveillance-beige), RLN5880A (Smart 2 wire surveillance-blk), RLN5882A (Smart 2 wire surveillance w/ acoustic tube-blk), RLN5883A (Smart 2
 wire surveillance w/ acoustic tube-beige), RLN4941A (Rec only earpiece w/ translucent tube/eartip-OTTO), WADN4190B (over the ear receiver for
 RSM), PMMN4024A (Core RSM), RLN6232A (Low noise kit), RLN6230A (High/Extreme noise kit), RLN5879A (Core 1 wire surveillance-beige),
 AARLN4885B (ear bud w/ coil cord & 3.5mm RT angle plug), PMMN4025A (Smart RSM)

Max. Calc. : 1-g Avg. SAR: 6.92 W/kg (Body); 10-g Avg. SAR: 4.86 W/kg (Body)
Max. Calc. : 1-g Avg. SAR: 2.89 W/kg (Face); 10-g Avg. SAR: 2.10 W/kg (Face)

The test results clearly demonstrate compliance with FCC General Population/Uncontrolled RF Exposure limits of 1.6W/kg per the requirements of 47 CFR 2.1093(d).
 The test results clearly demonstrate compliance with ICNIRP (1998) Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300GHz), Health Physics 74, 494-522 RF Exposure limits of 2W/kg averaged over 10grams of contiguous tissue.

Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 2.0 of this report. This report shall not be reproduced without written approval from an officially designated representative of the Motorola EME Laboratory.

I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested guidelines of the TIA TSB-150 December 2004. The results and statements contained in this report pertain only to the device(s) evaluated.

Signature on file
Deanna Zakharia G&PS EME Lab Senior Resource Manager,
Laboratory Director

Approval Date: 7/31/08

Certification Date:

Certification No.:

Appendix C
Dipole Calibration Certificates

**Calibration Laboratory of
Schmid & Partner
Engineering AG**
Zeughausstrasse 43, 8004 Zurich, Switzerland



S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
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S Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **Motorola CGISS**

Certificate No: **D835V2-435_Sep06**

CALIBRATION CERTIFICATE

Object **D835V2 - SN: 435**

Calibration procedure(s) **QA CAL-05.v6
Calibration procedure for dipole validation kits**

Calibration date: **September 12, 2006**

Condition of the calibrated item **In Tolerance**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	04-Oct-05 (METAS, No. 251-00516)	Oct-06
Power sensor HP 8481A	US37292783	04-Oct-05 (METAS, No. 251-00516)	Oct-06
Reference 20 dB Attenuator	SN: 5086 (20g)	10-Aug-06 (METAS, No 217-00591)	Aug-07
Reference 10 dB Attenuator	SN: 5047.2 (10r)	10-Aug-06 (METAS, No 217-00591)	Aug-07
Reference Probe ET3DV6	SN 1507	28-Oct-05 (SPEAG, No. ET3-1507_Oct05)	Oct-06
DAE4	SN 601	15-Dec-05 (SPEAG, No. DAE4-601_Dec05)	Dec-06
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (SPEAG, in house check Oct-05)	In house check: Oct-07
RF generator Agilent E4421B	MY41000675	11-May-05 (SPEAG, in house check Nov-05)	In house check: Nov-07
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (SPEAG, in house check Nov-05)	In house check: Nov-06

Calibrated by: **Name** Mike Meili **Function** Laboratory Technician **Signature** *M. Meili*

Approved by: **Name** Katja Pokovic **Function** Technical Manager **Signature** *Katja Pokovic*

Issued: September 12, 2006

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland



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S Swiss Calibration Service

Accredited by the Swiss Federal Office of Metrology and Accreditation
The Swiss Accreditation Service is one of the signatories to the EA
Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

TSL tissue simulating liquid
ConvF sensitivity in TSL / NORM x,y,z
N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- b) CENELEC EN 50361, "Basic standard for the measurement of Specific Absorption Rate related to human exposure to electromagnetic fields from mobile phones (300 MHz - 3 GHz), July 2001
- c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

- d) DASY4 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V4.9	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.7 ± 6 %	0.89 mho/m ± 6 %
Head TSL temperature during test	(23.6 ± 0.2) °C	---	---

SAR result with Head TSL

SAR averaged over 1 cm ³ (1 g) of Head TSL	condition	
SAR measured	250 mW input power	2.29 mW / g
SAR normalized	normalized to 1W	9.16 mW / g
SAR for nominal Head TSL parameters ¹	normalized to 1W	9.25 mW / g ± 17.0 % (k=2)

SAR averaged over 10 cm ³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.50 mW / g
SAR normalized	normalized to 1W	6.00 mW / g
SAR for nominal Head TSL parameters ¹	normalized to 1W	6.04 mW / g ± 16.5 % (k=2)

¹ Correction to nominal TSL parameters according to d), chapter "SAR Sensitivities"

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	50.5 Ω - 6.5 j Ω
Return Loss	- 23.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.392 ns
----------------------------------	----------

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	December 15, 2000

DASY4 Validation Report for Head TSL

Date/Time: 12.09.2006 17:28:03

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN: 435

Communication System: CW; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL 900 MHz;

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.893 \text{ mho/m}$; $\epsilon_r = 42.3$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ET3DV6 - SN1507 (HF); ConvF(6.09, 6.09, 6.09); Calibrated: 28.10.2005
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 15.12.2005
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; Serial: 1001
- Measurement SW: DASY4, V4.7 Build 44; Postprocessing SW: SEMCAD, V1.8 Build 171

Pin = 250 mW; d = 15 mm/Zoom Scan (7x7x7)/Cube 0:

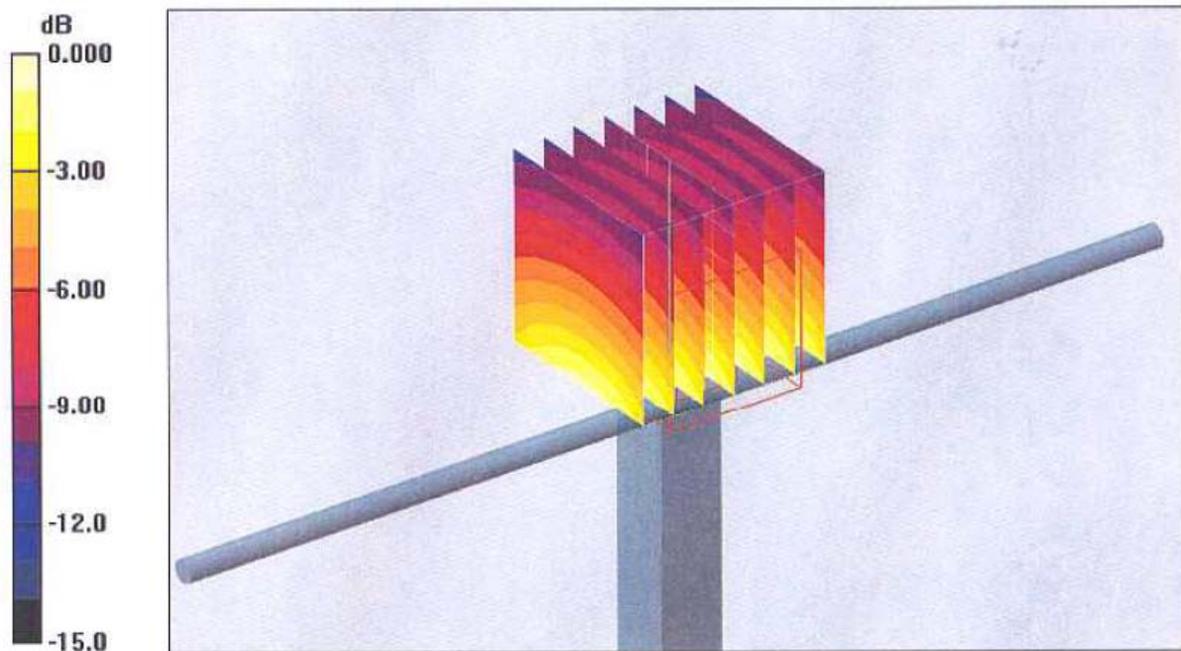
Measurement grid: $dx=5\text{mm}$, $dy=5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.8 V/m; Power Drift = -0.019 dB

Peak SAR (extrapolated) = 3.42 W/kg

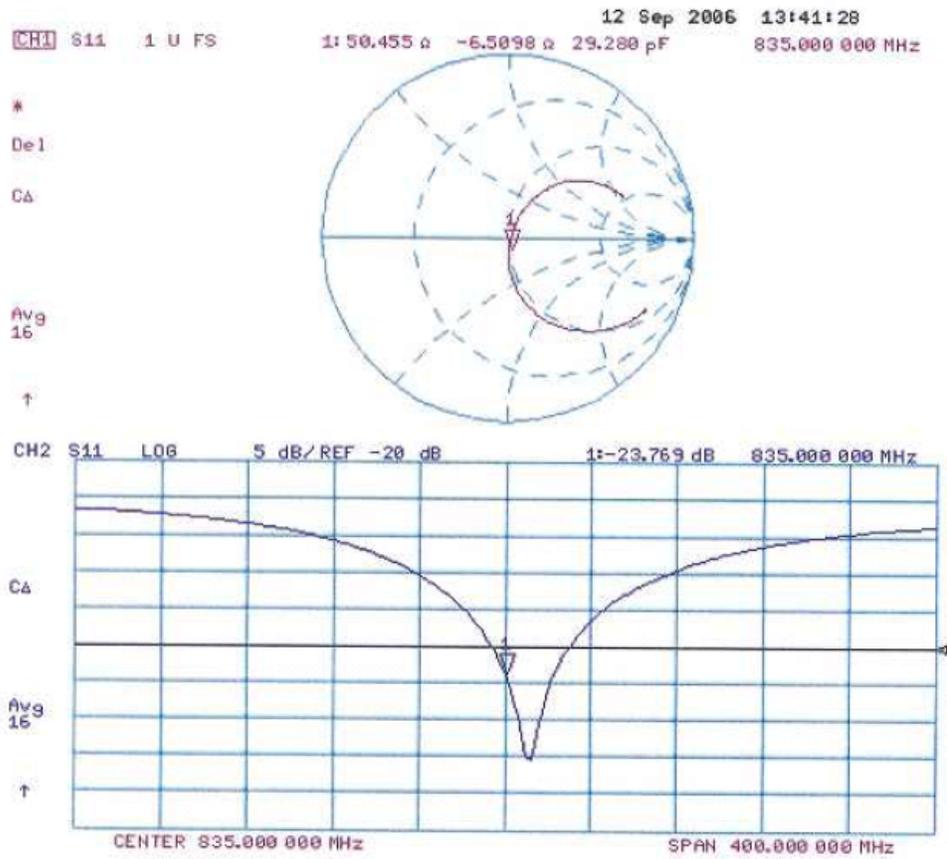
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.5 mW/g

Maximum value of SAR (measured) = 2.48 mW/g



0 dB = 2.48mW/g

Impedance Measurement Plot for Head TSL



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Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 108**

Client **Motorola CGISS**

Certificate No: **D835V2-427_May08**

CALIBRATION CERTIFICATE

Object **D835V2 - SN: 427**

Calibration procedure(s) **QA CAL-05.v7
Calibration procedure for dipole validation kits**

Calibration date: **May 19, 2008**

Condition of the calibrated item **In Tolerance**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Certificate No.)	Scheduled Calibration
Power meter EPM-442A	GB37480704	04-Oct-07 (No. 217-00736)	Oct-08
Power sensor HP 8481A	US37292783	04-Oct-07 (No. 217-00736)	Oct-08
Reference 20 dB Attenuator	SN: 5086 (20g)	07-Aug-07 (No 217-00718)	Aug-08
Type-N mismatch combination	SN: 5047.2 / 06327	08-Aug-07 (No. 217-00721)	Aug-08
Reference Probe ES3DV2	SN: 3025	28-Apr-08 (No. ES3-3025_Apr08)	Apr-09
DAE4	SN: 601	14-Mar-08 (No. DAE4-601_Mar08)	Mar-09
Secondary Standards	ID #	Check Date (in house)	Scheduled Check
Power sensor HP 8481A	MY41092317	18-Oct-02 (in house check Oct-07)	In house check: Oct-09
RF generator R&S SMT-06	100005	4-Aug-99 (in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585 S4206	18-Oct-01 (in house check Oct-07)	In house check: Oct-08

Calibrated by:	Name Claudio Leubler	Function Laboratory Technician	Signature
Approved by:	Name Katja Pokovic	Function Technical Manager	Signature

Issued: May 20, 2008

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

**Calibration Laboratory of
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Accreditation No.: **SCS 108**

Glossary:

TSL tissue simulating liquid
ConvF sensitivity in TSL / NORM x,y,z
N/A not applicable or not measured

Calibration is Performed According to the Following Standards:

- a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
- b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005
- c) Federal Communications Commission Office of Engineering & Technology (FCC OET), "Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields; Additional Information for Evaluating Compliance of Mobile and Portable Devices with FCC Limits for Human Exposure to Radiofrequency Emissions", Supplement C (Edition 01-01) to Bulletin 65

Additional Documentation:

- d) DASY4/5 System Handbook

Methods Applied and Interpretation of Parameters:

- *Measurement Conditions:* Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- *Antenna Parameters with TSL:* The dipole is mounted with the spacer to position its feed point exactly below the center marking of the flat phantom section, with the arms oriented parallel to the body axis.
- *Feed Point Impedance and Return Loss:* These parameters are measured with the dipole positioned under the liquid filled phantom. The impedance stated is transformed from the measurement at the SMA connector to the feed point. The Return Loss ensures low reflected power. No uncertainty required.
- *Electrical Delay:* One-way delay between the SMA connector and the antenna feed point. No uncertainty required.
- *SAR measured:* SAR measured at the stated antenna input power.
- *SAR normalized:* SAR as measured, normalized to an input power of 1 W at the antenna connector.
- *SAR for nominal TSL parameters:* The measured TSL parameters are used to calculate the nominal SAR result.

Measurement Conditions

DASY system configuration, as far as not given on page 1.

DASY Version	DASY4	V4.7
Extrapolation	Advanced Extrapolation	
Phantom	Modular Flat Phantom V4.9	
Distance Dipole Center - TSL	15 mm	with Spacer
Zoom Scan Resolution	dx, dy, dz = 5 mm	
Frequency	835 MHz ± 1 MHz	

Head TSL parameters

The following parameters and calculations were applied.

	Temperature	Permittivity	Conductivity
Nominal Head TSL parameters	22.0 °C	41.5	0.90 mho/m
Measured Head TSL parameters	(22.0 ± 0.2) °C	41.1 ± 6 %	0.91 mho/m ± 6 %
Head TSL temperature during test	(22.0 ± 0.2) °C	—	—

SAR result with Head TSL

SAR averaged over 1 cm³ (1 g) of Head TSL	Condition	
SAR measured	250 mW input power	2.29 mW / g
SAR normalized	normalized to 1W	9.16 mW / g
SAR for nominal Head TSL parameters ¹	normalized to 1W	9.05 mW / g ± 17.0 % (k=2)

SAR averaged over 10 cm³ (10 g) of Head TSL	condition	
SAR measured	250 mW input power	1.51 mW / g
SAR normalized	normalized to 1W	6.04 mW / g
SAR for nominal Head TSL parameters ¹	normalized to 1W	5.99 mW / g ± 16.5 % (k=2)

Appendix

Antenna Parameters with Head TSL

Impedance, transformed to feed point	51.7 Ω - 2.8 j Ω
Return Loss	- 29.8 dB

General Antenna Parameters and Design

Electrical Delay (one direction)	1.422 ns
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After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

Additional EUT Data

Manufactured by	SPEAG
Manufactured on	September 20, 2000

DASY4 Validation Report for Head TSL

Date/Time: 19.05.2008 11:40:24

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 835 MHz; Type: D835V2; Serial: D835V2 - SN:427

Communication System: CW-835; Frequency: 835 MHz; Duty Cycle: 1:1

Medium: HSL 900 MHz;

Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.91 \text{ mho/m}$; $\epsilon_r = 41.1$; $\rho = 1000 \text{ kg/m}^3$

Phantom section: Flat Section

Measurement Standard: DASY4 (High Precision Assessment)

DASY4 Configuration:

- Probe: ES3DV2 - SN3025; ConvF(5.97, 5.97, 5.97); Calibrated: 28.04.2008
- Sensor-Surface: 3.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn601; Calibrated: 14.03.2008
- Phantom: Flat Phantom 4.9L; Type: QD000P49AA; ;
- Measurement SW: DASY4, V4.7 Build 71; Postprocessing SW: SEMCAD, V1.8 Build 184

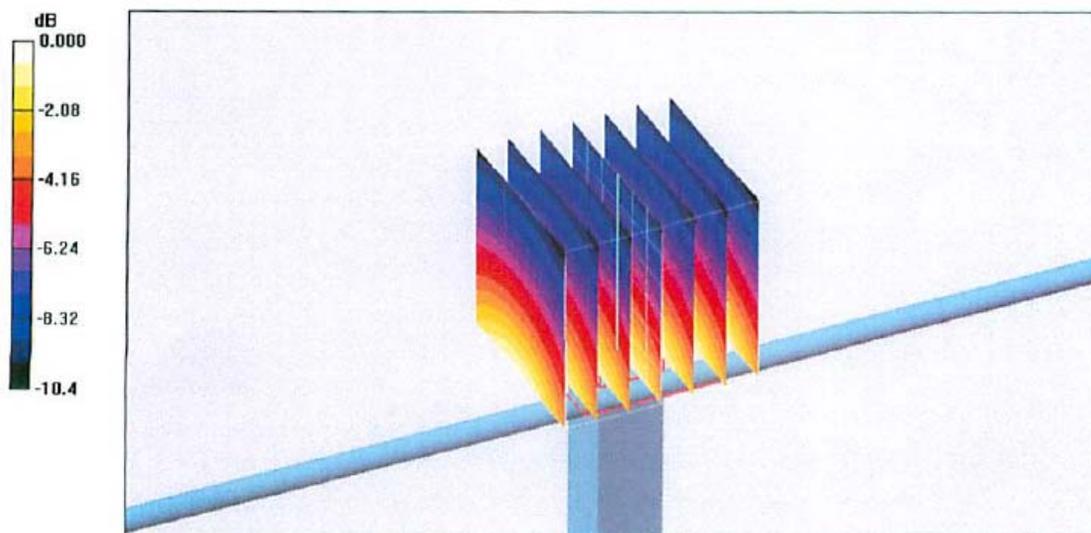
Pin=250mW; dip=15mm; dist=3.4mm/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 54.4 V/m; Power Drift = 0.017 dB

Peak SAR (extrapolated) = 3.33 W/kg

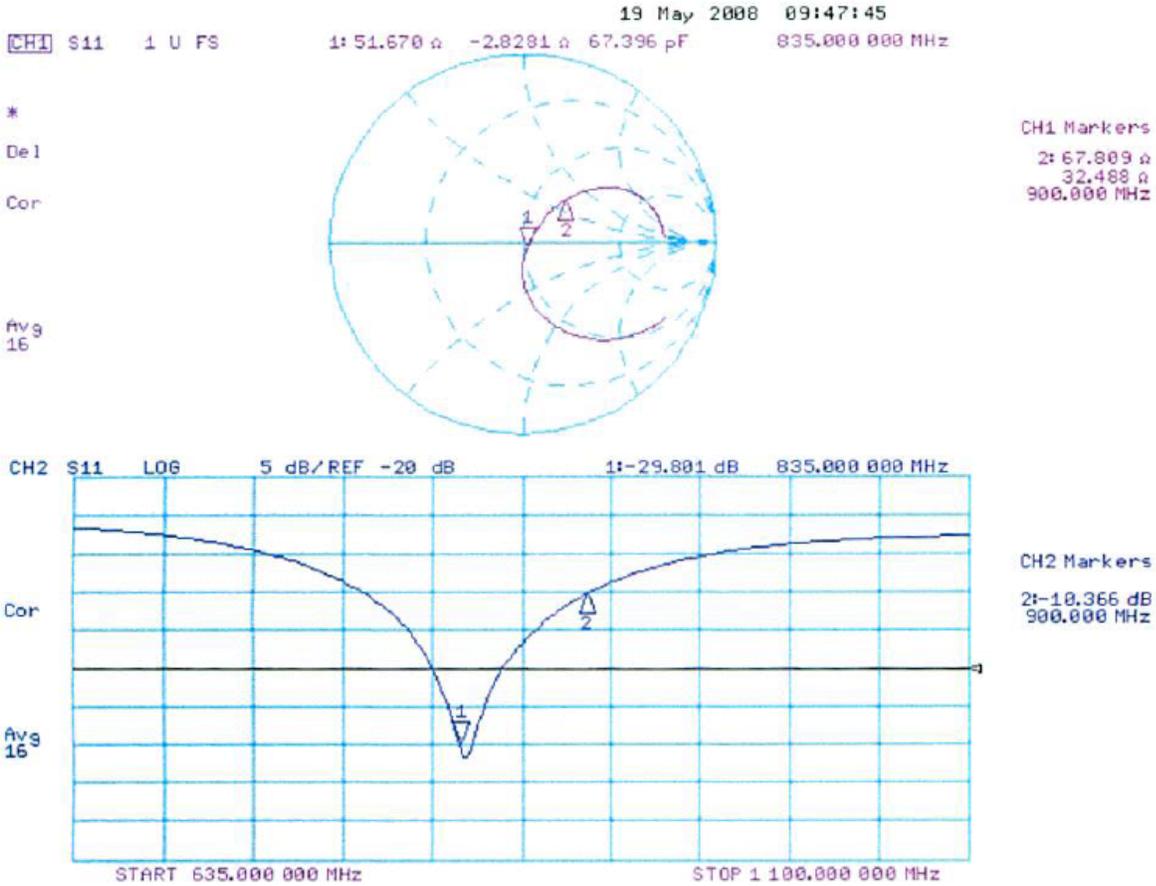
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.51 mW/g

Maximum value of SAR (measured) = 2.56 mW/g



0 dB = 2.56mW/g

Impedance Measurement Plot for Head TSL



Appendix D

Test System Verification Scans

Dipole validation scans at the head from SPEAG are provided in APPENDIX C. G&PS' EME lab validates its' dipole(s) to the applicable IEEE system performance targets. A system validation was performed using FCC body tissue parameters to generate the system performance target values for body at the applicable frequency. Dipoles are assessed using multiple probes and measurements were performed using the isotropic assessment procedure mentioned below.

To assess the isotropic characteristics of the measurement probe, two system performance zoom scans (0 and 90 degrees) were measured. The measured results were averaged together in order to obtain the final calculated 1 gram results.

The results obtained from each probe were then averaged together to determine the new measured SAR target.

Motorola Government & Public Safety EME Laboratory
 Date/Time: 6/27/2008 6:47:54 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080627-01
 Phantom# / Tissue Temp.: OVAL 1021 / 20.5 (C)
 Dipole Model# / Serial#: D835V2 / 435
 TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
 Calculated: 9.12 mW/g (1g)
 Percent from Target (+/-): 9.3 % (1g)

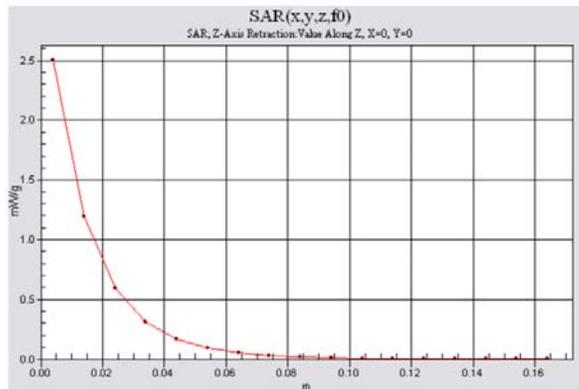
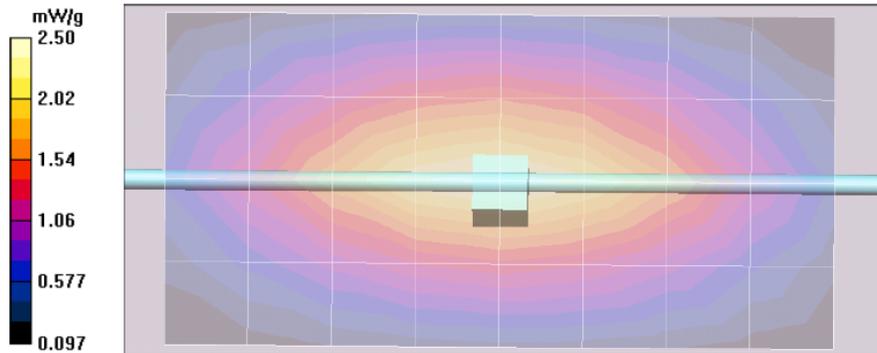
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
 Electronics: DAE3 Sn401, Calibrated: 8/28/2007
 Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
 dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 52.6 V/m; Power Drift = -0.00995 dB
 Peak SAR (extrapolated) = 3.29 W/kg
 SAR(1 g) = 2.32 mW/g; SAR(10 g) = 1.53 mW/g
 Maximum value of SAR (measured) = 2.50 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
 dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 52.6 V/m; Power Drift = -0.00995 dB
 Peak SAR (extrapolated) = 3.18 W/kg
 SAR(1 g) = 2.24 mW/g; SAR(10 g) = 1.48 mW/g
 Maximum value of SAR (measured) = 2.42 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.51 mW/g



Motorola Government & Public Safety EME Laboratory

Date/Time: 6/28/2008 5:37:14 AM

Robot# / Run#: DASY4-FL-1/ HvH-SYSP-835B-080628-02
Phantom# / Tissue Temp.: OVAL1021 / 20.7 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.50 mW/g (1g)
Percent from Target (+/-): 5.5 % (1g)

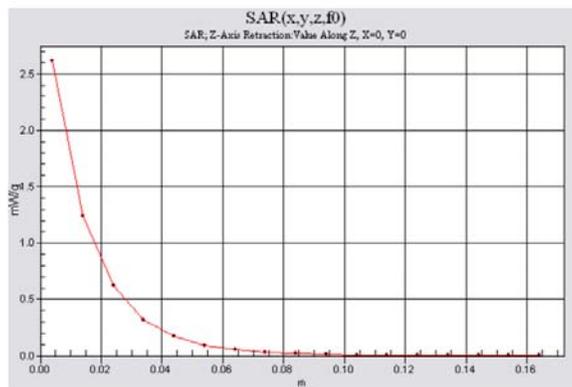
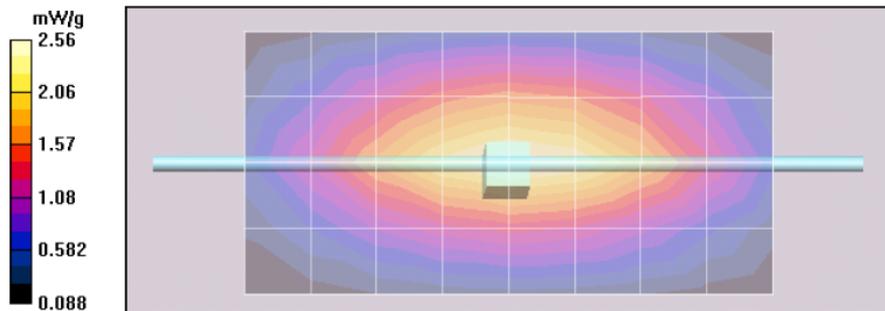
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; sigma = 0.99 mho/m; epsilon_r = 53.9; rho = 1000 kg/m^3

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.5 V/m; Power Drift = 0.00812 dB
Peak SAR (extrapolated) = 3.41 W/kg
SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.58 mW/g
Maximum value of SAR (measured) = 2.61 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.5 V/m; Power Drift = 0.00812 dB
Peak SAR (extrapolated) = 3.36 W/kg
SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.54 mW/g
Maximum value of SAR (measured) = 2.54 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.56 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm,
dz=10mm
Maximum value of SAR (measured) = 2.62 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 6/29/2008 5:33:01 AM

Robot# / Run#: DASY4-FL-1/ HvH-SYSP-835B-080629-01
Phantom# / Tissue Temp.: OVAL1021 / 20.3 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.36 mW/g (1g)
Percent from Target (+/-): 6.9 % (1g)

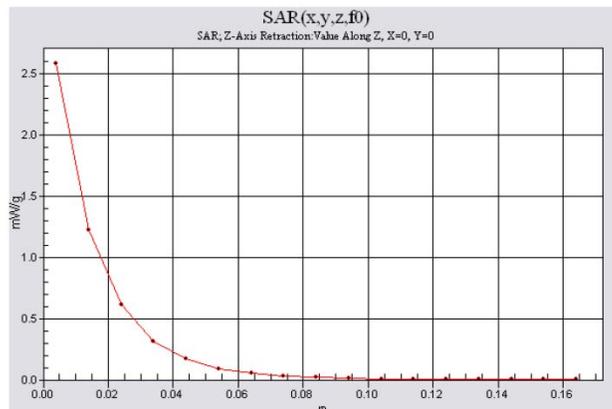
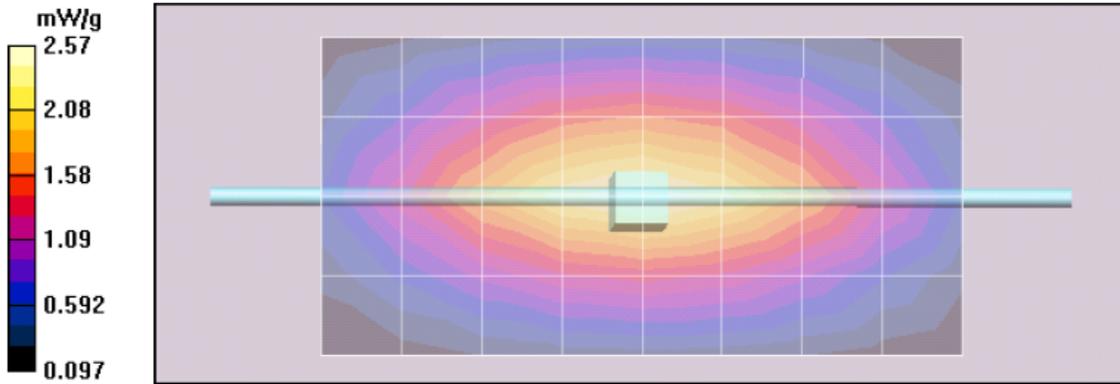
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 53.6$; $\rho = 1000 \text{ kg/m}^3$

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.5 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 3.38 W/kg
SAR(1 g) = 2.37 mW/g; SAR(10 g) = 1.56 mW/g
Maximum value of SAR (measured) = 2.58 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.5 V/m; Power Drift = -0.102 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 2.31 mW/g; SAR(10 g) = 1.52 mW/g
Maximum value of SAR (measured) = 2.50 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.57 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.59 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 6/30/2008 11:53:28 AM

Robot# / Run#: DASY4-FL-1/ HvH-SYSP-835B-080630-01
Phantom# / Tissue Temp.: OVAL1021 / 20.5 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.46 mW/g (1g)
Percent from Target (+/-): 5.9 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007

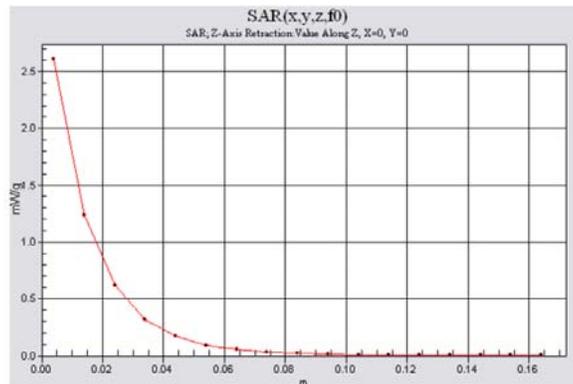
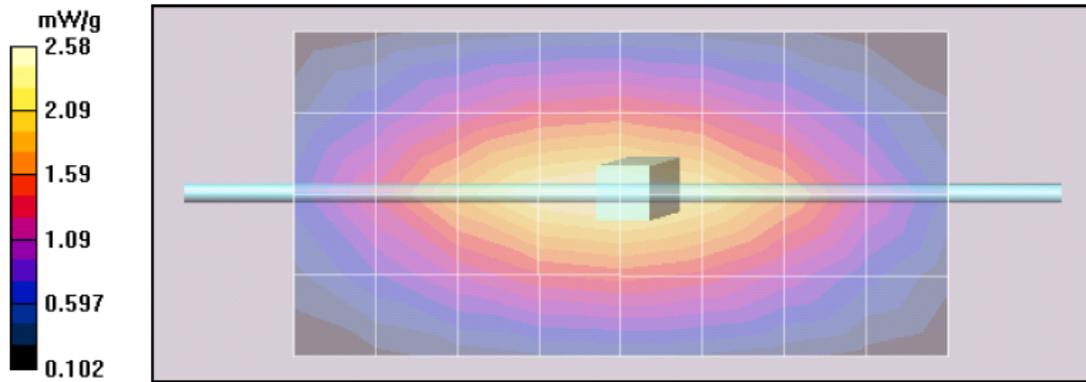
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 0.98$ mho/m; $\epsilon_r = 52.8$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.8 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 3.38 W/kg
SAR(1 g) = 2.39 mW/g; SAR(10 g) = 1.58 mW/g
Maximum value of SAR (measured) = 2.58 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.8 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 3.33 W/kg
SAR(1 g) = 2.34 mW/g; SAR(10 g) = 1.53 mW/g
Maximum value of SAR (measured) = 2.53 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.61 mW/g



Motorola Government & Public Safety EME Laboratory

Date/Time: 7/1/2008 10:34:57 AM

Robot# / Run#: DASY4-FL-1/ HvH-SYSP-835H-080701-03
Phantom# / Tissue Temp.: OVAL1022 / 20.6 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 9.56 mW/g (1g)
Calculated: 9.22 mW/g (1g)
Percent from Target (+/-): 3.6 % (1g)

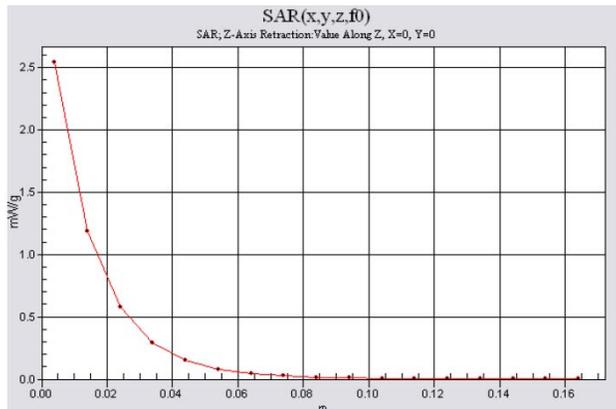
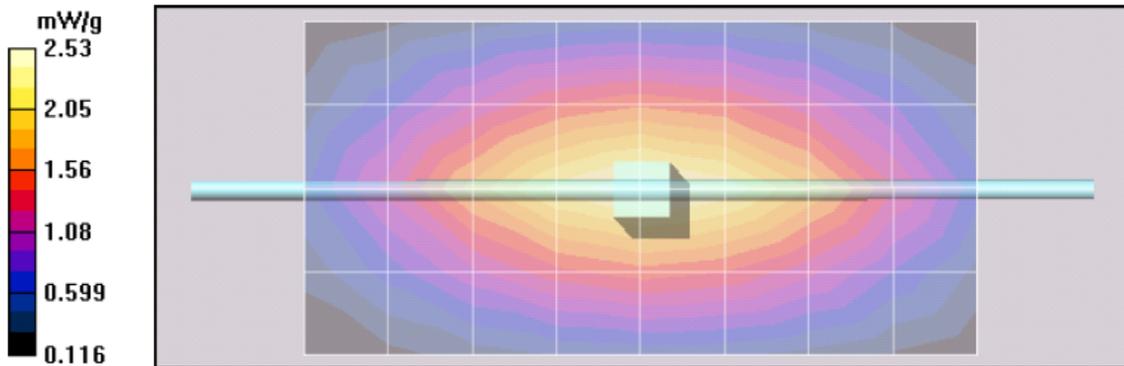
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(6, 6, 6)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; sigma = 0.92 mho/m; epsilon = 41.5; rho = 1000 kg/m^3

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 55.1 V/m; Power Drift = -0.00485 dB
Peak SAR (extrapolated) = 3.31 W/kg
SAR(1 g) = 2.33 mW/g; SAR(10 g) = 1.53 mW/g
Maximum value of SAR (measured) = 2.54 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 55.1 V/m; Power Drift = -0.00485 dB
Peak SAR (extrapolated) = 3.24 W/kg
SAR(1 g) = 2.28 mW/g; SAR(10 g) = 1.5 mW/g
Maximum value of SAR (measured) = 2.39 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.53 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/2/2008 6:29:02 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080702-01
Phantom# / Tissue Temp.: OVAL1021 / 20.4 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.86 mW/g (1g)
Percent from Target (+/-): 1.9 % (1g)

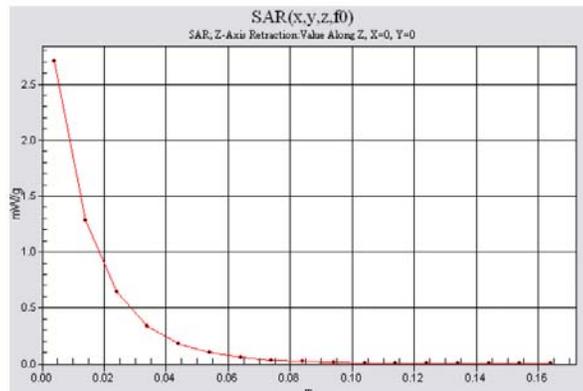
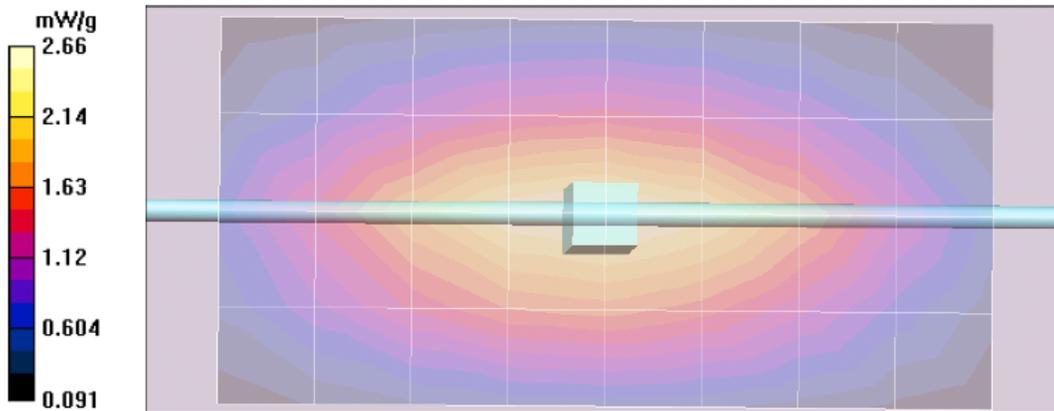
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 54.4 V/m; Power Drift = -0.0119 dB
Peak SAR (extrapolated) = 3.54 W/kg
SAR(1 g) = 2.5 mW/g; SAR(10 g) = 1.64 mW/g
Maximum value of SAR (measured) = 2.71 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 54.4 V/m; Power Drift = -0.0119 dB
Peak SAR (extrapolated) = 3.47 W/kg
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.53 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.66 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/3/2008 6:45:42 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080703-01
Phantom# / Tissue Temp.: OVAL1021 / 20.3 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 10.00 mW/g (1g)
Percent from Target (+/-): 0.5 % (1g)

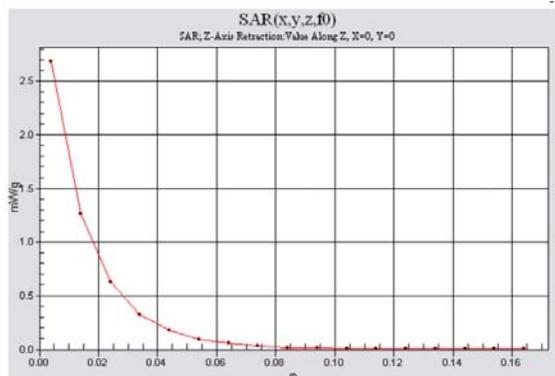
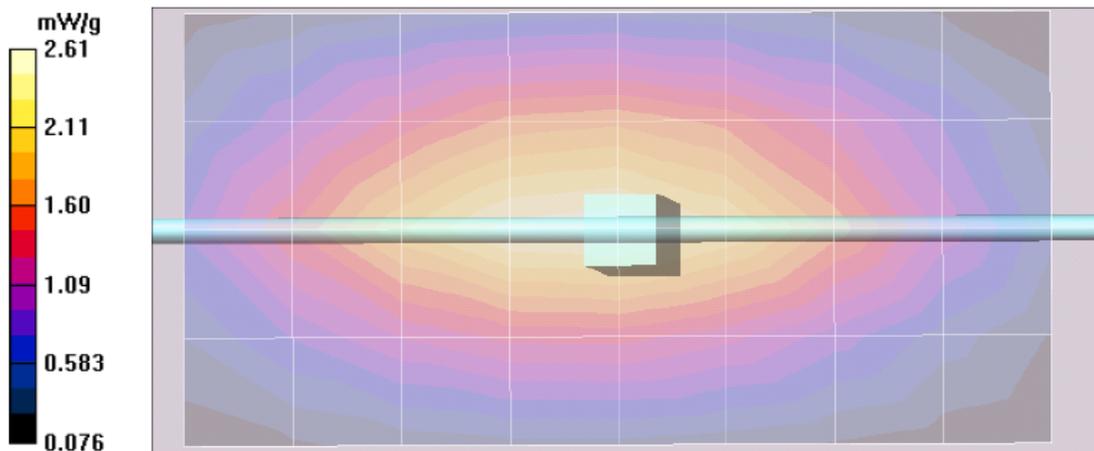
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.9 V/m; Power Drift = 0.0352 dB
Peak SAR (extrapolated) = 3.51 W/kg
SAR(1 g) = 2.47 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.69 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.9 V/m; Power Drift = 0.0352 dB
Peak SAR (extrapolated) = 3.60 W/kg
SAR(1 g) = 2.53 mW/g; SAR(10 g) = 1.66 mW/g
Maximum value of SAR (measured) = 2.76 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.61 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.68 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/5/2008 12:13:25 AM

Robot# / Run#: DASY4-FL-1/ MeC-SYSP-835B-080705-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.72 mW/g (1g)
Percent from Target (+/-): 3.3 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.4 V/m; Power Drift = 0.0148 dB
Peak SAR (extrapolated) = 3.41 W/kg
SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.58 mW/g
Maximum value of SAR (measured) = 2.60 mW/g

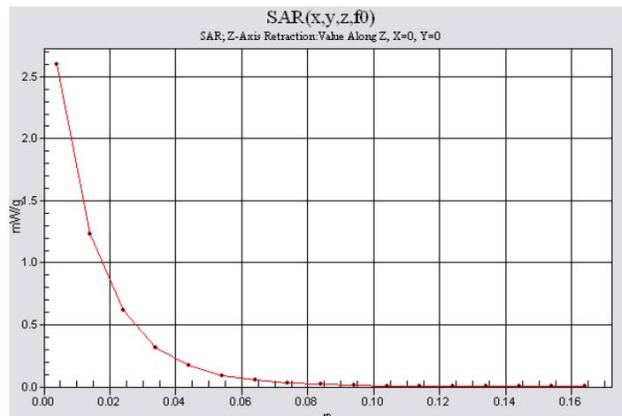
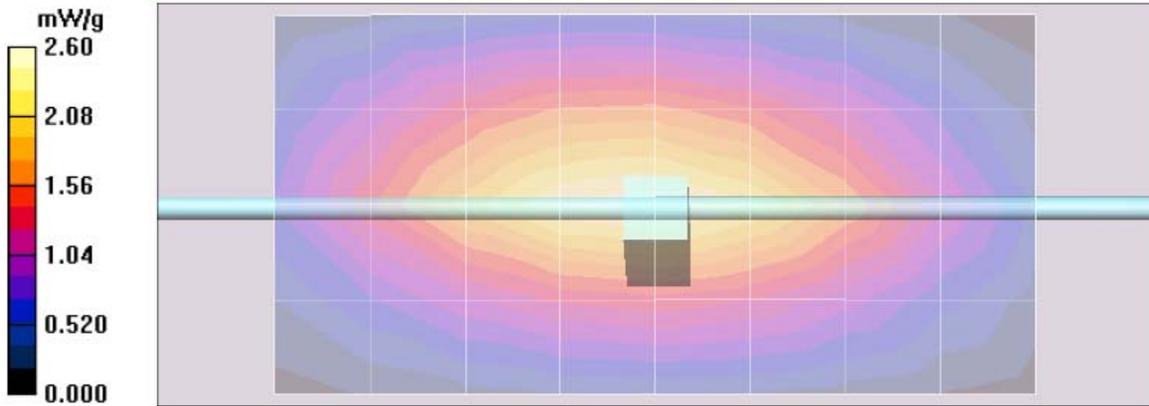
System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.4 V/m; Power Drift = 0.0148 dB
Peak SAR (extrapolated) = 3.51 W/kg
SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.67 mW/g

System Performance Check/Dipole Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 53.4 V/m; Power Drift = 0.0148 dB
Motorola Fast SAR: SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.63 mW/g
Maximum value of SAR (interpolated) = 2.59 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/6/2008 1:01:59 AM

Robot# / Run#: DASY4-FL-1/MeC-SYSP-835B-080706-02
Phantom# / Tissue Temp.: OVAL1021 / 20.5 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.94 mW/g (1g)
Percent from Target (+/-): 1.1 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.4$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.3 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.61 mW/g
Maximum value of SAR (measured) = 2.66 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.3 V/m; Power Drift = 0.063 dB
Peak SAR (extrapolated) = 3.61 W/kg
SAR(1 g) = 2.52 mW/g; SAR(10 g) = 1.66 mW/g

Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.

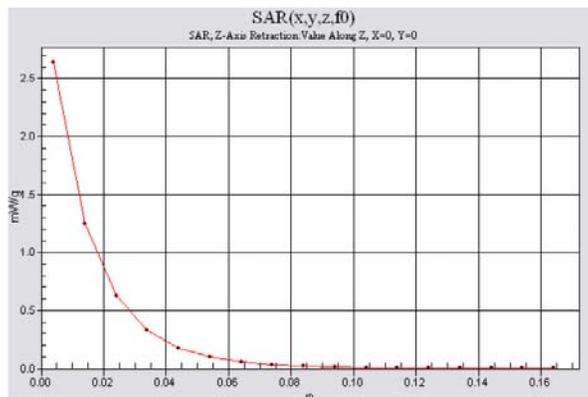
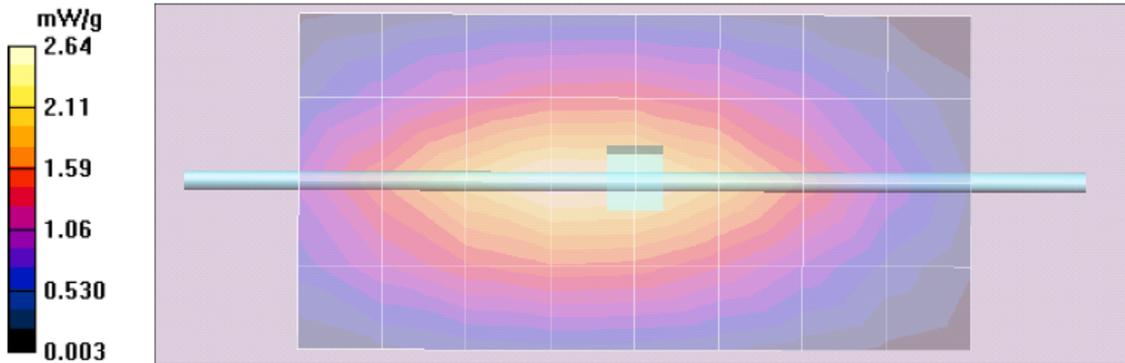
Maximum value of SAR (measured) = 2.68 mW/g

System Performance Check/Dipole Area Scan (41x81x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 53.3 V/m; Power Drift = 0.063 dB
Motorola Fast SAR: SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.67 mW/g
Maximum value of SAR (interpolated) = 2.66 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm,

dz=10mm
Maximum value of SAR (measured) = 2.64 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/7/2008 7:03:58 AM

Robot# / Run#: DASY4-FL-1/ JsT-SYSP-835H-080707-01
Phantom# / Tissue Temp.: OVAL1022 / 20.7 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 9.56 mW/g (1g)
Calculated: 10.14 mW/g (1g)
Percent from Target (+/-): 6.1 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(6, 6, 6)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 0.92$ mho/m; $\epsilon_r = 41.4$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 56.9 V/m; Power Drift = 0.0109 dB

Peak SAR (extrapolated) = 3.57 W/kg

SAR(1 g) = 2.5 mW/g; SAR(10 g) = 1.64 mW/g

Maximum value of SAR (measured) = 2.72 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 56.9 V/m; Power Drift = 0.0109 dB

Peak SAR (extrapolated) = 3.67 W/kg

SAR(1 g) = 2.57 mW/g; SAR(10 g) = 1.68 mW/g

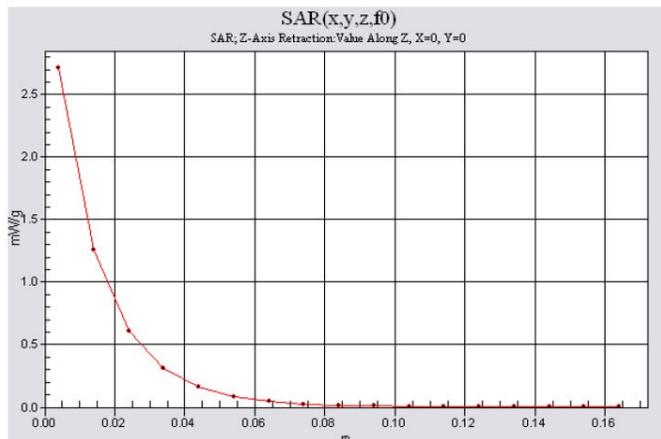
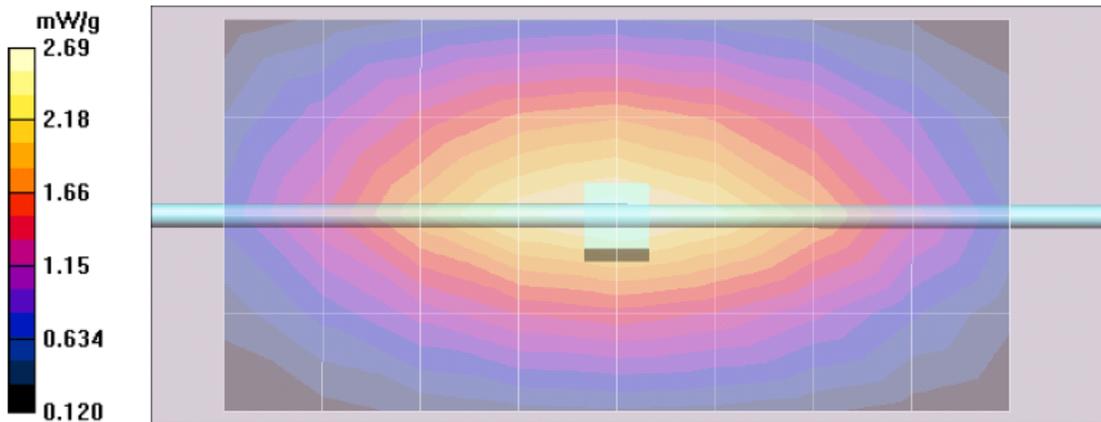
Maximum value of SAR (measured) = 2.79 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.69 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm,
dz=10mm

Maximum value of SAR (measured) = 2.71 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/8/2008 6:23:06 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080708-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.54 mW/g (1g)
Percent from Target (+/-): 5.1 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

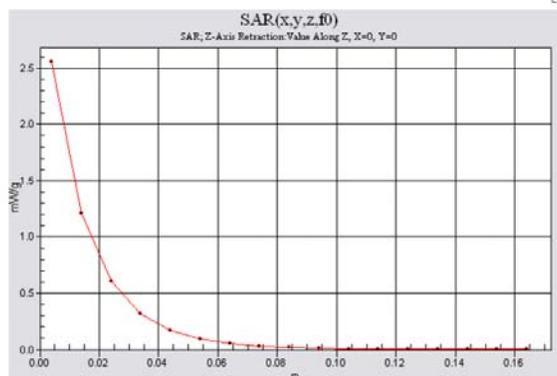
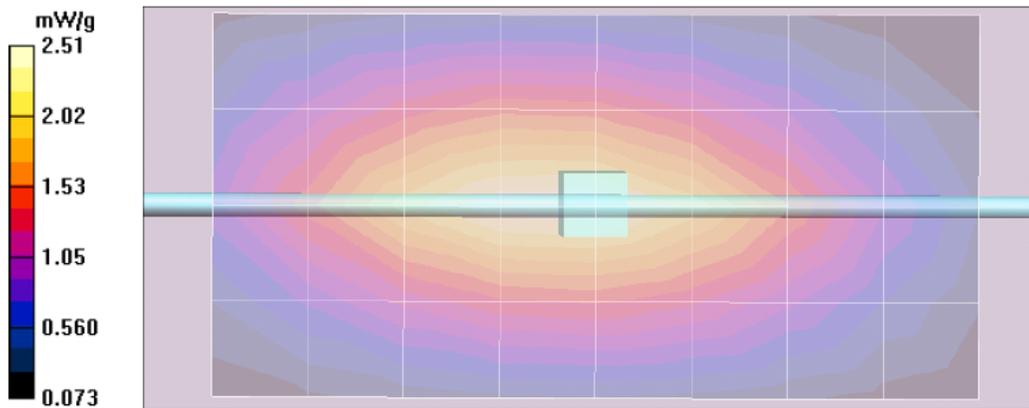
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.5$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 3.34 W/kg
SAR(1 g) = 2.35 mW/g; SAR(10 g) = 1.55 mW/g
Maximum value of SAR (measured) = 2.55 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.5 V/m; Power Drift = -0.017 dB
Peak SAR (extrapolated) = 3.45 W/kg
SAR(1 g) = 2.42 mW/g; SAR(10 g) = 1.59 mW/g
Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.
Maximum value of SAR (measured) = 2.59 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.51 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.56 mW/g



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Date/Time: 7/9/2008 6:05:37 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080709-01
Phantom# / Tissue Temp.: OVAL1021 / 20.8 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.84 mW/g (1g)
Percent from Target (+/-): 2.1 % (1g)
20.8 (C) Dipole Model# / Serial#: D835V2 / 435 TX Freq. / Start power: 835 (MHz) / 250 (mW) Target: 10.05 mW/g (1g)
Calculated: 9.84 mW/g (1g) Percent from Target (+/-): 2.1 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; sigma = 1.01 mho/m; epsilon = 53.3; rho = 1000 kg/m^3

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.2 V/m; Power Drift = 0.0723 dB
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.64 mW/g

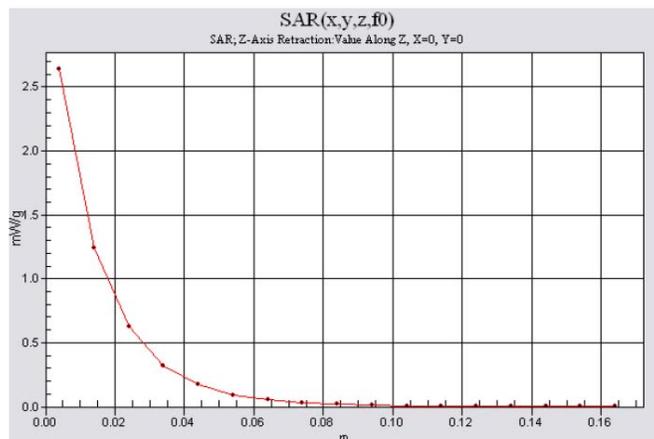
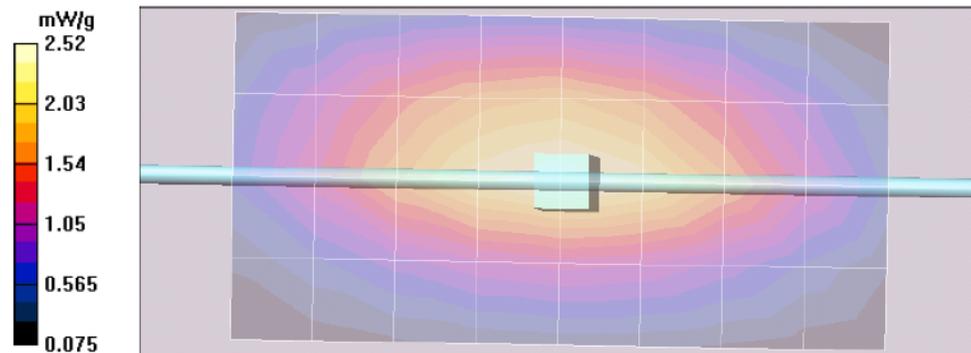
System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.2 V/m; Power Drift = 0.0723 dB
Peak SAR (extrapolated) = 3.58 W/kg
SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1.63 mW/g
Warning: Maximum averaged SAR over 10 g is located on the boundary of the measurement cube. This cube might not incorporate the absolute averaged SAR. Please consider a refinement of the Area Scan measurement.
Maximum value of SAR (measured) = 2.68 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.52 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/10/2008 6:42:32 AM

Robot# / Run#: DASY4-FL-1/ JsT-SYSP-835B-080710-01
Phantom# / Tissue Temp.: OVAL1021 / 20.7 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.88 mW/g (1g)
Percent from Target (+/-): 1.7 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.4 V/m; Power Drift = 0.0198 dB
Peak SAR (extrapolated) = 3.49 W/kg
SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.61 mW/g
Maximum value of SAR (measured) = 2.67 mW/g

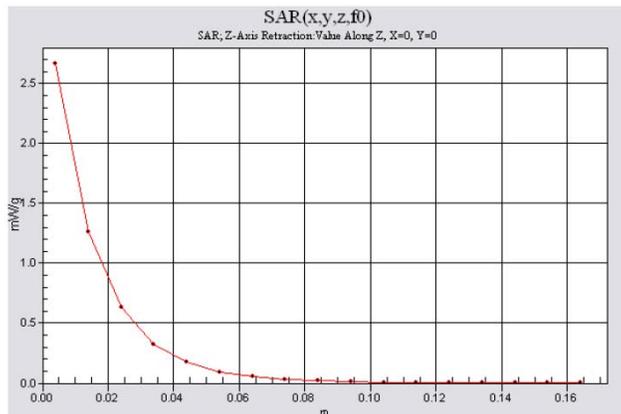
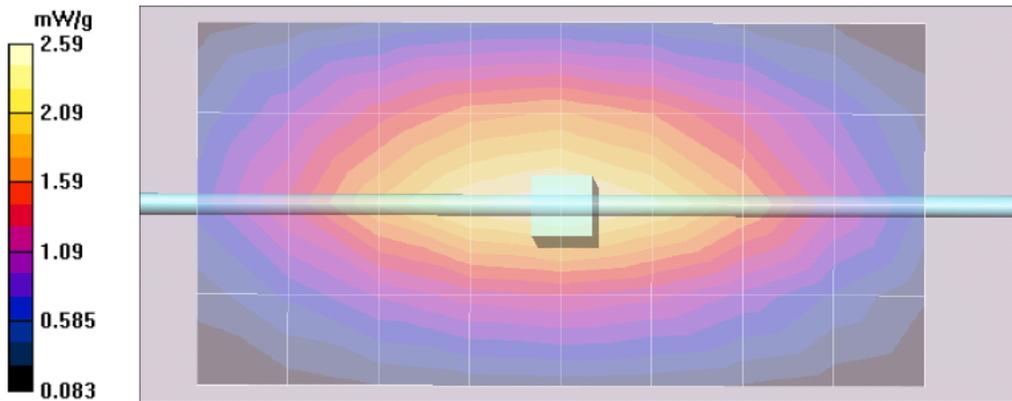
System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.4 V/m; Power Drift = 0.0198 dB
Peak SAR (extrapolated) = 3.52 W/kg
SAR(1 g) = 2.49 mW/g; SAR(10 g) = 1.64 mW/g
Maximum value of SAR (measured) = 2.68 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

Maximum value of SAR (measured) = 2.59 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/11/2008 6:24:04 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080711-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.54 mW/g (1g)
Percent from Target (+/-): 5.1 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 0.99$ mho/m; $\epsilon_r = 52.7$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

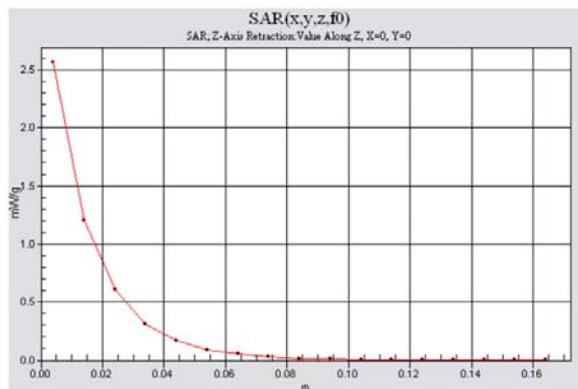
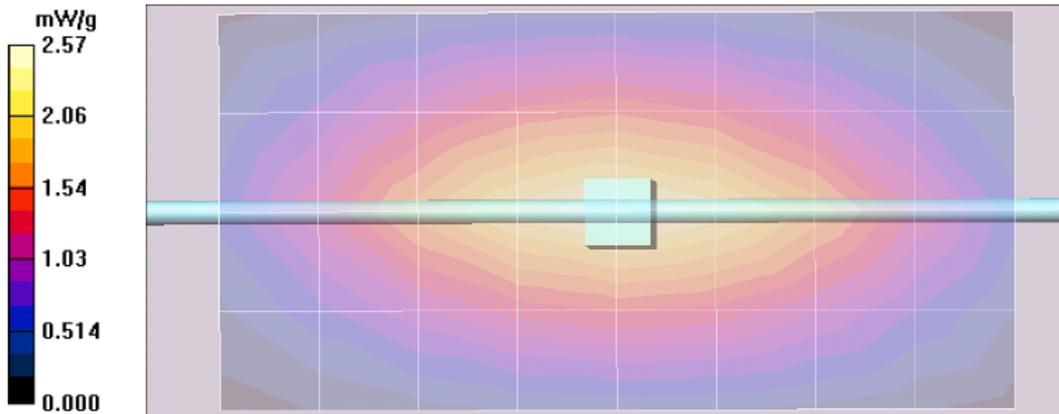
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.3 V/m; Power Drift = -0.00246 dB
Peak SAR (extrapolated) = 3.37 W/kg
SAR(1 g) = 2.36 mW/g; SAR(10 g) = 1.55 mW/g
Maximum value of SAR (measured) = 2.57 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:

dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.3 V/m; Power Drift = -0.00246 dB
Peak SAR (extrapolated) = 3.44 W/kg
SAR(1 g) = 2.41 mW/g; SAR(10 g) = 1.58 mW/g
Maximum value of SAR (measured) = 2.61 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/14/2008 1:03:01 PM

Robot# / Run#: DASY4-FL-1/ HvH-SYSP-835B-080714-01
Phantom# / Tissue Temp.: OVAL1021 / 20.7 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.62 mW/g (1g)
Percent from Target (+/-): 4.3 % (1g)

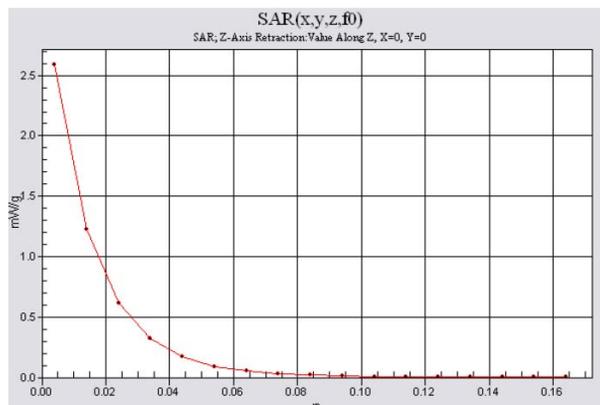
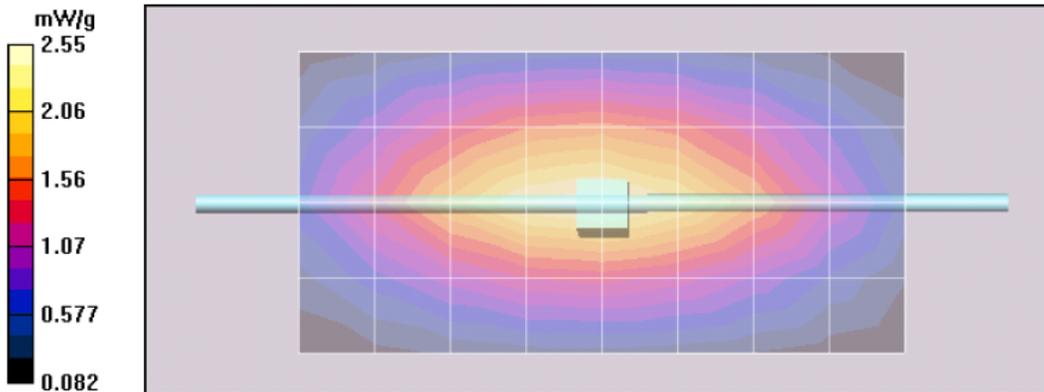
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.2$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.9 V/m; Power Drift = 0.0121 dB
Peak SAR (extrapolated) = 3.37 W/kg
SAR(1 g) = 2.38 mW/g; SAR(10 g) = 1.57 mW/g
Maximum value of SAR (measured) = 2.58 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 52.9 V/m; Power Drift = 0.0121 dB
Peak SAR (extrapolated) = 3.45 W/kg
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.6 mW/g
Maximum value of SAR (measured) = 2.64 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.55 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.59 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/15/2008 6:47:02 AM

Robot# / Run#: DASY4-FL-1/ ErC-SYSP-835B-080715-01
Phantom# / Tissue Temp.: OVAL1021 / 20.9 (C)
Dipole Model# / Serial#: D835V2 / 435
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 10.05 mW/g (1g)
Calculated: 9.70 mW/g (1g)
Percent from Target (+/-): 3.5 % (1g)

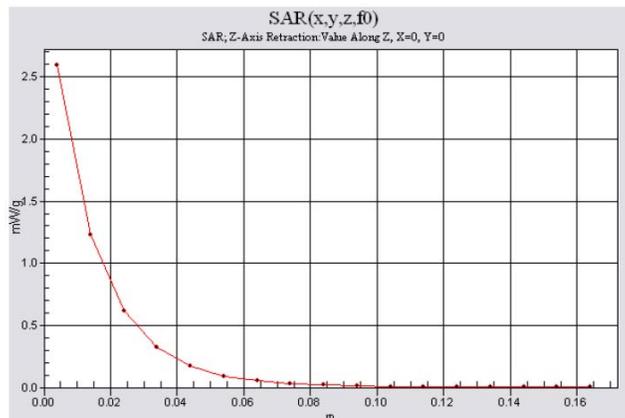
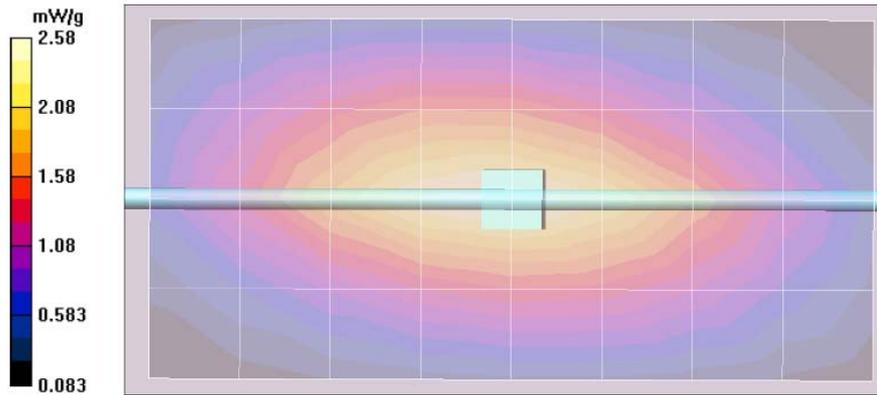
Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.2 V/m; Power Drift = -0.0039 dB
Peak SAR (extrapolated) = 3.41 W/kg
SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.58 mW/g
Maximum value of SAR (measured) = 2.60 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 53.2 V/m; Power Drift = -0.0039 dB
Peak SAR (extrapolated) = 3.48 W/kg
SAR(1 g) = 2.45 mW/g; SAR(10 g) = 1.61 mW/g
Maximum value of SAR (measured) = 2.64 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.58 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.59 mW/g



Motorola Government & Public Safety EME Laboratory
Date/Time: 7/17/2008 9:59:36 AM

Robot# / Run#: DASY4-FL-1/ErC SYSP-835B-080717-06
Phantom# / Tissue Temp.: OVAL1021 / 20.4 (C)
Dipole Model# / Serial#: D835V2 / 427
TX Freq. / Start power: 835 (MHz) / 250 (mW)

Target: 9.07 mW/g (1g)
Calculated: 9.06 mW/g (1g)
Percent from Target (+/-): 0.1 % (1g)

Probe: ET3DV6 - SN1384, Calibrated: 5/19/2008, ConvF(5.86, 5.86, 5.86)
Electronics: DAE3 Sn363, Calibrated: 4/22/2008

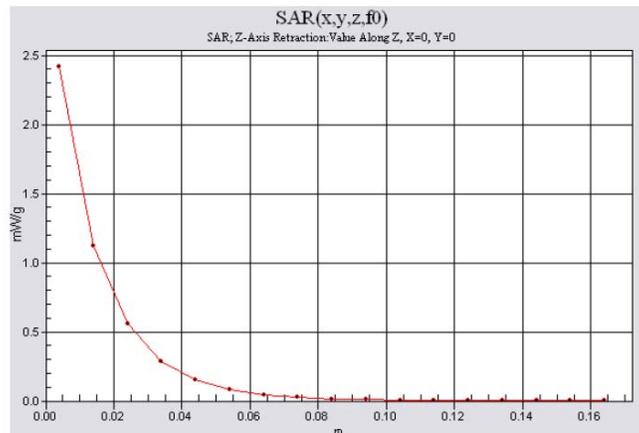
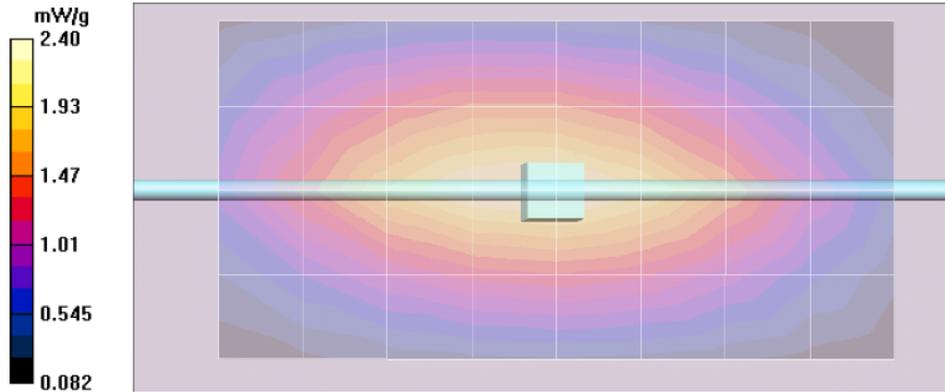
Duty Cycle: 1:1, Medium parameters used: f = 835 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 51.3 V/m; Power Drift = -0.000947 dB
Peak SAR (extrapolated) = 3.23 W/kg
SAR(1 g) = 2.24 mW/g; SAR(10 g) = 1.46 mW/g
Maximum value of SAR (measured) = 2.41 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 51.3 V/m; Power Drift = -0.000947 dB
Peak SAR (extrapolated) = 3.30 W/kg
SAR(1 g) = 2.29 mW/g; SAR(10 g) = 1.5 mW/g
Maximum value of SAR (measured) = 2.46 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.40 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
Maximum value of SAR (measured) = 2.42 mW/g



DIPOLE SAR TARGET - BODY

Date: 07/17/08 Frequency (MHz): 835
 Lab Location: (FL08/PG)-G&PS Mixture Type: Body
 DAE Serial #: 363 Ambient Temp.(°C): 22

Tissue Characteristics

Permittivity: 53.1 Phantom Type/SN: OVAL1021
 Conductivity: 1.00 Distance (mm): 15
 Tissue Temp.(°C): 20.4

Reference Source: Dipole Power to Dipole: 250 mW
 Reference SN: 427

New Target:

Average Measured SAR Value: 9.07 mW/g(1g avg.),

Probe SN #s	1-G Cube	Diff from Ave	Robot
1383	9.04	-0.3%	R1
1393	9.10	0.4%	R1
1384	9.06	-0.1%	R1
		-100.0%	
		-100.0%	
Average	9.0667	New Measured SAR Value	

(normalized to 1.0 W)

Test performed by:  Initial: 

DIPOLE SAR TARGET - HEAD

Date: 07/17/08 Frequency (MHz): 835
 Lab Location: (FL08/PG)-G&PS Mixture Type: IEEE Head
 DAE Serial #: 363 Ambient Temp.(°C): 21.9

Tissue Characteristics
 Permittivity: 39.7 Phantom Type/SN: SAMTP1234
 Conductivity: 0.88 Distance (mm): 15
 Tissue Temp.(°C): 20.9

Reference Source: Dipole Power to Dipole: 250 mW
 Reference SN: 427

Target 1g-SAR Value (mW/g, normalized to 1.0 W):

9.56

Difference from Target

-10.60% (1g-SAR)

New Target:

Average 1g-SAR Value (mW/g):	8.55
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Passes K=2

Percent Difference From Target (MUST be within k=2 Uncertainty):

Probe SN #s	1g-SAR (Cube)	Diff from Ave	Robot
1384	8.76	2.4%	R1
1393	8.48	-0.8%	R1
1383	8.40	-1.7%	R1
		#DIV/0!	
		#DIV/0!	
Average	8.5467	New Measured SAR Value	

(normalized to 1.0 W)

Test performed by:  Initial: 

DIPOLE SAR TARGET - BODY

Date: 08/02/07 Frequency (MHz): 835
 Lab Location: NE Mixture Type: FCC Body
 DAE Serial #: 374 Ambient Temp.(°C): 19.9

Tissue Characteristics

Permittivity: 53.6 Phantom Type/SN: 80302002D-S15
 Conductivity: 1.00 Distance (mm): 15
 Tissue Temp.(°C): 20.1

Reference Source: Dipole Power to Dipole: 250 mW
 Reference SN: 435

New Target:

Average Measured SAR Value: 10.05 mW/g(1g avg.), 6.62 mW/g (10g avg.)

Test performed by: Mike Cieslar Initial: *mc*

Probe SN #s	1-G Cube	Diff from Ave	10-G Cube	Diff from Ave	Robot
1383	9.31	-7.3%	6.30	-4.8%	Rx
1384	10.55	5.0%	6.90	4.3%	Rx
1393	10.16	1.1%	6.65	0.5%	Rx
1547	10.16	1.1%	6.61	-0.1%	Rx
		-100.0%		-100.0%	Rx
Average	10.0450		6.6150		New Measured SAR Value
(normalized to 1.0 W, including drift)					

DIPOLE SAR TARGET - HEAD

Date: 08/02/07 Frequency (MHz): 835
 Lab Location: NE Mixture Type: IEEE Head
 DAE Serial #: 374 Ambient Temp.(°C): 19.9

Tissue Characteristics
 Permittivity: 40.7 Phantom Type/SN: 80302002D-S15
 Conductivity: 0.91 Distance (mm): 15
 Tissue Temp.(°C): 20.4

Reference Source: Dipole Power to Dipole: 250 mW
 Reference SN: 435

Target SAR Value: 9.5 mW/g (1g avg.), 6.2 mW/g (10g avg.)
 (normalized to 1.0 W)

New Target:

Average Measured SAR Value: 9.56 mW/g (1g avg.), 6.23 mW/g (10g avg.)

Percent Difference From Target (MUST be within k=2 Uncertainty): 0.66% (1g ave)
0.44% (10g ave)

Test performed by: J. Turco Initial: 

Probe SN #s	1-G Cube	Diff from Ave	10-G Cube	Diff from Ave	Robot
1384	9.69	1.33%	6.30	1.16%	R1
1393	9.82	2.69%	6.39	2.61%	R1
1547	9.44	-1.28%	6.13	-1.57%	R1
1383	9.30	-2.75%	6.09	-2.21%	R1
5	NA	#VALUE!	NA	#VALUE!	NA
Average	9.5625		6.2275		New Measured SAR Value
(normalized to 1.0 W, including drift)					