

 <b style="font-size: 24pt; margin-left: 10px;">MOTOROLA	 <p style="margin-top: 5px;">Certificate Number: 1449-01</p>
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FCC ID: AZ489FT5836
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

Networks & Enterprise EME Test Laboratory 8000 West Sunrise Blvd Fort Lauderdale, FL. 33322	Date of Report: 06/09/06 Report Revision: Rev O Report ID: FCC rpt_ AAH25UCH6DU6AN_060609_SR3765
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<p>Responsible Engineer: Stephen C. Whalen (Sr. Staff Eng.) Date/s Tested: 05/25/2006 – 06/02/2006 Manufacturer/Location: Motorola – Penang Sector/Group/Div.: NE/GTDG Date submitted for test: 05/02/06 DUT Description: MTX8250 LS 800 MHZ 2.5W 16 CH Test TX mode(s): CW Max. Power output: 2.95W (806-825MHz) & 2.40W (851-870MHz) Nominal Power: 2.5W (806-825MHz) & 2.0W (851-870MHz) Tx Frequency Bands: 806-825MHz & 851-870 MHz Signaling type: FM Model(s) Tested: AAH25UCH6DU6AN Model(s) Certified: AAH25UCH6DU6AN Serial Number(s): 672TA00010 Classification: Occupational/Controlled Rule Part(s): 90</p> <p>Approved Accessories: Antenna(s): PMAF4000A, 806-870MHz, Whip, 1/2 wave, -3dBd, PMAF4001A, 806-941MHz, Stubby, 1/4 wave, -0.15dBd Battery(ies): HNN9008A, NiMH High Capacity Battery, HNN9009A, NiMH Ultra High Capacity Battery, HNN9010A, NiMH Ultra High Capacity Battery Factory Mutual, HNN9011A, NiCd High Capacity Battery Factory Mutual, HNN9012A, NiCd High Capacity Battery, HNN9013D, Li Ion High Capacity Battery, PMNN4045BR, 1400MAH NIMH BATTERY (MAGONE) Body worn accessory(ies): HLN9952A, Belt Clip Carry Holder, HLN9652A, Plain, Belt Loop, Thin Battery, HLN9665A, Plain, Belt Loop, Std. Battery, HLN9670A, Plain, Swivel, Thin Battery, HLN9676A, Plain, Swivel, Std. Battery, HLN9677A, DTMF, Belt Loop, Thin Battery, HLN9689A, DTMF, Belt Loop, Std. Battery, HLN9690A, DTMF, Swivel, Thin Battery, HLN9694A, DTMF, Swivel, Std. Battery, HLN9701B, Plain, Belt Loop, Thin Battery, NTN8039B, Belt Swivel 2.5inch, HLN9714A, Spring Belt Clip, for 2.5inch belt width, HLN9844A, Spring Belt Clip, for 1.5inch belt width, HLN9945A, Limited Keypad, Hard Leather, W/Belt Loop, Thin Battery, HLN9946A, Limited Keypad, Hard Leather, W/Belt Loop, Std. Battery, HLN9955A, Limited Keypad, Hard Leather, W/Swivel, Thin Battery, HLN9998A, Limited Keypad, Hard Leather, W/Swivel, Std. Battery, NTN5243A, Carry Strap, RLN4815A, Fanny Pack Carry Accessory, Universal Radio Pack, PMLN4280A, Carry Case, Full Thin Leather Audio/Data cable accessory(ies): See section 3.0 for list of approved audio acc</p>	
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Max. Calc. 1-g Avg. = 6.40W/kg; 10-g Avg. = 4.64W/kg (Body)
Max. Calc. 1-g Avg. = 3.18W/kg; 10-g Avg. = 2.33W/kg (Face)

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.

This reporting format is consistent with the test report 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 Ken Enger N&E EME Lab Senior Resource Manager, Laboratory Director, Approval Date: 06/09/06	Certification Date: 06/09/06 Certification No.:
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Appendix D

Test System Verification Scans

Note: Dipole validation scans at the head from SPEAG are provided in APPENDIX D. The N&E EME lab validated the dipole to the applicable IEEE system performance targets. Within the same day system validation was performed using FCC body tissue parameters to generate the system performance target values for body at the applicable frequency. The results of the N&E EME system performance validation are provided herein. To assess the isotropic characteristics of the measurement probe, two system performance zoom scans (0 and 90 degrees) were measured. The results were averaged together and adjusted to account for the power drift in order to obtain the final calculated 1 and 10 gram results.

Motorola N&E EME Lab

DUT: Dipole 835 MHz; Date/Time: 5/25/2006 9:43:52 AM
 Run #: HvH-SYSP-835B-060525-02 Sim.Tissue Temp: 20.7 (C)
 Robot #: GEMS-2 Phantom #: 80302002B-S8
 Model #: D835V2 S/N: 435
 TX Freq: 835 (MHz) Start power: 250 (mW)
 Target: 9.73 mW/g for 1g SAR 6.40 mW/g for 10g SAR
 10.03 mW/g calculated 1g-SAR 3.04 % from target (including drift)
 6.53 mW/g calculated 10g-SAR 2.04 % from target (including drift)
 Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.82, 5.82, 5.82)
 Duty Cycle: 1:1, Medium: 835 MHz FCC Body, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 53.7$; $\rho = 1000 \text{ kg/m}^3$
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

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

Reference Value = 54.7 V/m; Power Drift = 0.00614 dB

Peak SAR (extrapolated) = 3.72 W/kg

SAR(1 g) = 2.5 mW/g; SAR(10 g) = 1.63 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 = 54.7 V/m; Power Drift = 0.00614 dB

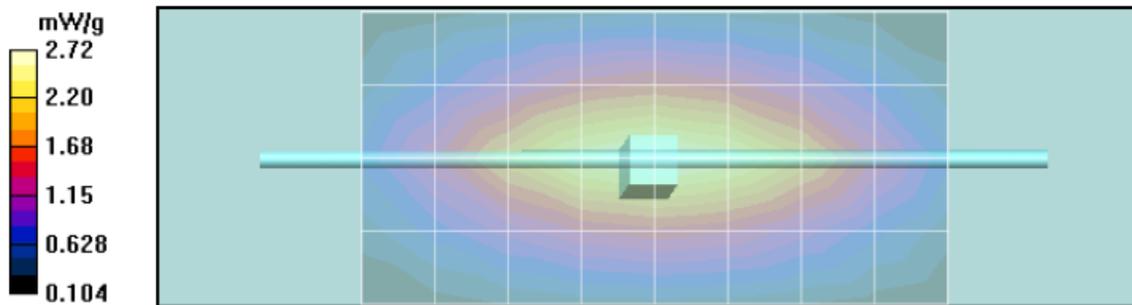
Peak SAR (extrapolated) = 3.72 W/kg

SAR(1 g) = 2.52 mW/g; SAR(10 g) = 1.64 mW/g

Maximum value of SAR (measured) = 2.73 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 N&E EME Lab

DUT: Dipole 835 MHz; Date/Time: 5/26/2006 8:53:41 AM
Run #: JsT-SYSP-835B-060526-01 Sim.Tissue Temp: 20.9 (C)
Robot #: GEMS-2 Phantom #: 80302002B-S8
Model #: D835V2 S/N: 435
TX Freq: 835 (MHz) Start power: 250 (mW)

Target: 9.73 mW/g for 1g SAR 6.40 mW/g for 10g SAR

9.97 mW/g calculated 1g-SAR 2.45% from target (including drift)
6.50 mW/g calculated 10g-SAR 1.64% from target (including drift)

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.82, 5.82, 5.82)

Duty Cycle: 1:1, Medium: 835 MHz FCC Body, Medium parameters used: f = 835 MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 53.6$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn401, Calibrated: 8/18/2005

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

Reference Value = 54.6 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 3.65 W/kg

SAR(1 g) = 2.47 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 = 54.6 V/m; Power Drift = -0.030 dB

Peak SAR (extrapolated) = 3.65 W/kg

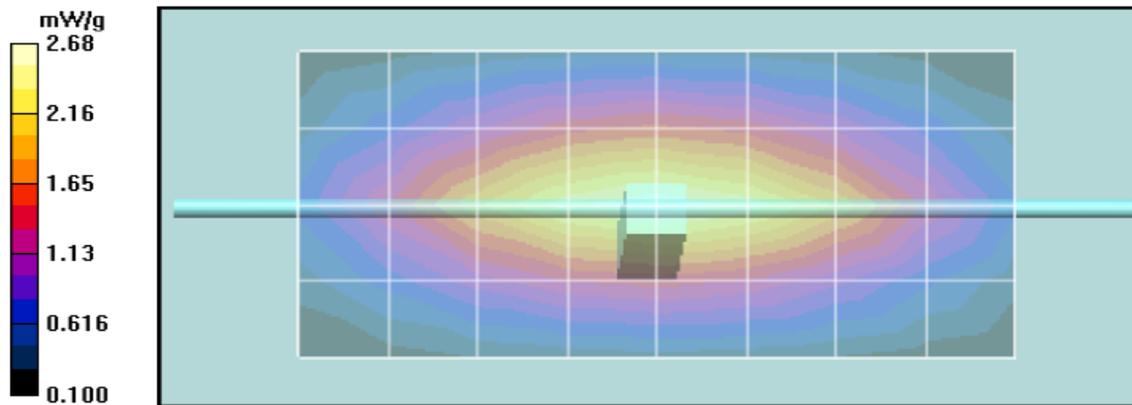
SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.62 mW/g

Maximum value of SAR (measured) = 2.63 mW/g

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

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

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



Motorola N&E EME Lab

DUT: Dipole 835 MHz; Date/Time: 5/27/2006 1:20:45 AM
 Run #: MeC-SYSP-835B-060527-01 Sim.Tissue Temp: 20.9 (C)
 Robot #: GEMS-2 Phantom #: 80302002B-S8
 Model #: D835V2 S/N: 435
 TX Freq: 835 (MHz) Start power: 250 (mW)

Target: 9.73 mW/g for 1g SAR 6.40 mW/g for 10g SAR

9.85 mW/g calculated 1g-SAR 1.26 % from target (including drift)
 6.44 mW/g calculated 10g-SAR 0.66 % from target (including drift)

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.82, 5.82, 5.82)
 Duty Cycle: 1:1, Medium: 835 MHz FCC Body, Medium parameters used: $f = 835$ MHz; $\sigma = 0.97$ mho/m; $\epsilon_r = 53.1$; $\rho = 1000$ kg/m³
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

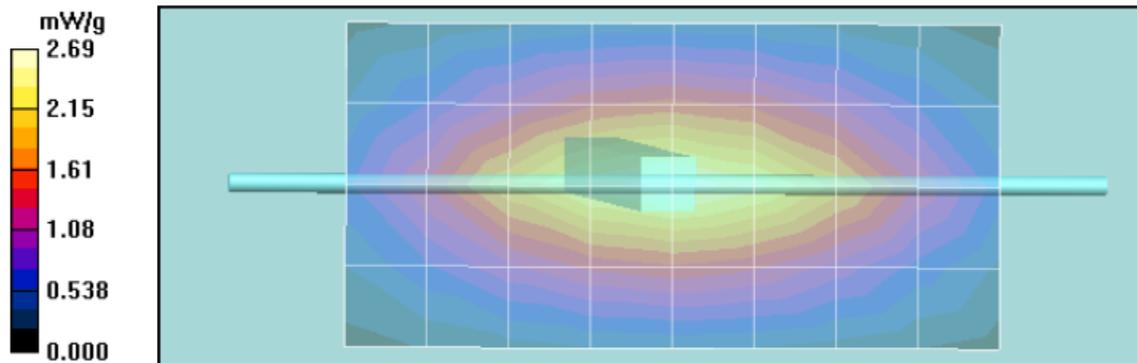
System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 54.4 V/m; Power Drift = 0.0119 dB
 Peak SAR (extrapolated) = 3.66 W/kg
 SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.61 mW/g
 Maximum value of SAR (measured) = 2.68 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) = 3.65 W/kg
 SAR(1 g) = 2.48 mW/g; SAR(10 g) = 1.62 mW/g
 Maximum value of SAR (measured) = 2.66 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.69 mW/g



Motorola N&E EME Lab

DUT: Dipole 835 MHz; Date/Time: 5/28/2006 1:27:37 AM
 Run #: MeC-SYSP-835H-060528-01 Sim.Tissue Temp: 21.0 (C)
 Robot #: GEMS-2 Phantom #: 80302002A-S7
 Model #: D835V2 S/N: 435
 TX Freq: 835 (MHz) Start power: 250 (mW)

Target: 9.92 mW/g for 1g SAR 6.42 mW/g for 10g SAR

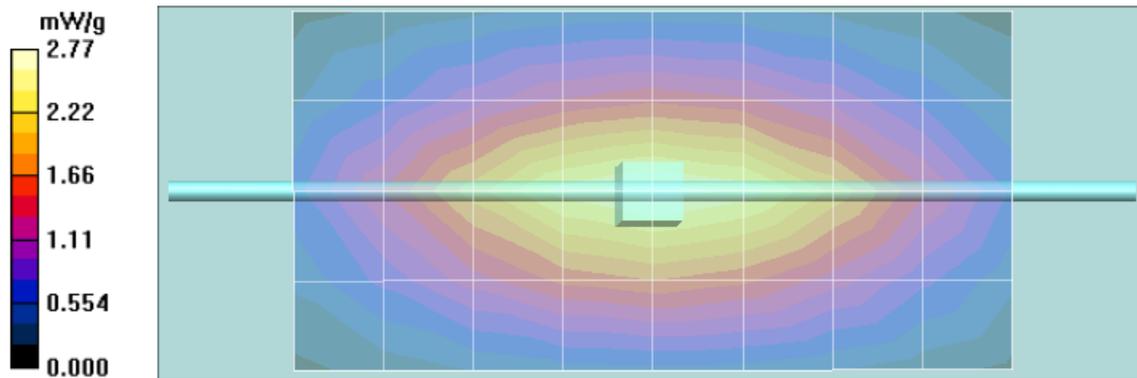
10.11 mW/g calculated 1g-SAR 1.91 % from target (including drift)
 6.47 mW/g calculated 10g-SAR 0.85 % from target (including drift)

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.92, 5.92, 5.92)
 Duty Cycle: 1:1, Medium: 835 MHz IEEE Head, Medium parameters used: $f = 835$ MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 42.9$; $\rho = 1000$ kg/m³
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

System Performance Check/0-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 55.9 V/m; Power Drift = 0.0302 dB
 Peak SAR (extrapolated) = 3.90 W/kg
SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.62 mW/g
 Maximum value of SAR (measured) = 2.76 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 55.9 V/m; Power Drift = 0.0302 dB
 Peak SAR (extrapolated) = 3.85 W/kg
SAR(1 g) = 2.55 mW/g; SAR(10 g) = 1.64 mW/g
 Maximum value of SAR (measured) = 2.64 mW/g

System Performance Check/Z-Axis Retraction (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.77 mW/g



Motorola N&E EME Lab

DUT: Dipole 835 MHz; Date/Time: 5/30/2006 7:19:33 AM
Run #: ErC-SYSP-835H-060530-01 Sim.Tissue Temp: 21.0 (C)
Robot #: GEMS-2 Phantom #: 80302002A-S7
Model #: D835V2 S/N: 435
TX Freq: 835 (MHz) Start power: 250 (mW)

Target: 9.92 mW/g for 1g SAR 6.42 mW/g for 10g SAR

10.18 mW/g calculated 1g-SAR 2.67 % from target (including drift)
6.53 mW/g calculated 10g-SAR 1.69 % from target (including drift)

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.92, 5.92, 5.92)
Duty Cycle: 1:1, Medium: 835 MHz IEEE Head, Medium parameters used: f = 835 MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 42.6$; $\rho = 1000$ kg/m³
Electronics: DAE3 Sn401, Calibrated: 8/18/2005

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

Reference Value = 55.2 V/m; Power Drift = -0.0191 dB
Peak SAR (extrapolated) = 3.87 W/kg
SAR(1 g) = 2.53 mW/g; SAR(10 g) = 1.62 mW/g
Maximum value of SAR (measured) = 2.74 mW/g

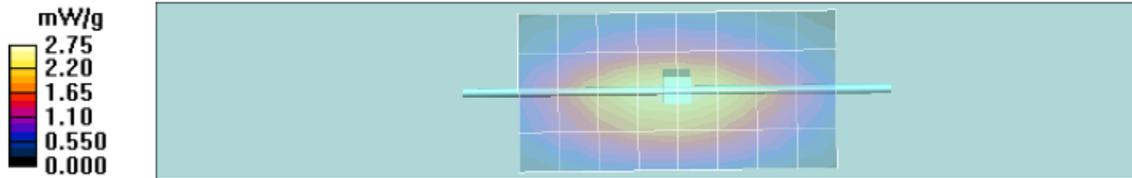
System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 55.2 V/m; Power Drift = -0.0191 dB
Peak SAR (extrapolated) = 3.88 W/kg
SAR(1 g) = 2.54 mW/g; SAR(10 g) = 1.63 mW/g
Maximum value of SAR (measured) = 2.75 mW/g

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

Maximum value of SAR (measured) = 2.67 mW/g

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



Motorola N&E EME Lab

DUT: Dipole 835 MHz; Date/Time: 6/2/2006 9:42:36 AM
Run #: JsT-SYSP-835H-060602-01 Sim.Tissue Temp: 21.1 (C)
Robot #: GEMS-2 Phantom #: 80302002A-S7
Model #: D835V2 S/N: 435
TX Freq: 835 (MHz) Start power: 250 (mW)

Target: 9.92 mW/g for 1g SAR 6.42 mW/g for 10g SAR

10.57 mW/g calculated 1g-SAR 6.55% from target (including drift)
6.79 mW/g calculated 10g-SAR 5.81% from target (including drift)

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.92, 5.92, 5.92)
Duty Cycle: 1:1, Medium: 835 MHz IEEE Head, Medium parameters used: f = 835 MHz; sigma = 0.94 mho/m; epsilon_r = 42.2; rho = 1000 kg/m^3
Electronics: DAE3 Sn401, Calibrated: 8/18/2005

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

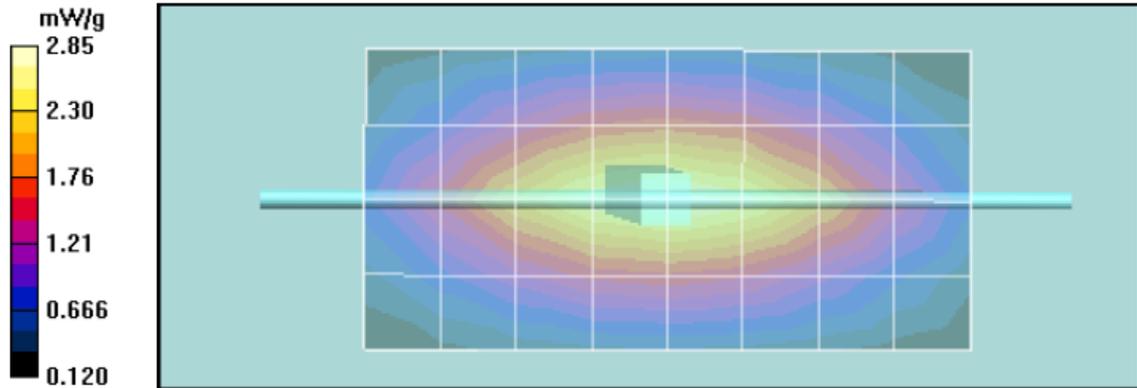
Reference Value = 57.0 V/m; Power Drift = 0.00428 dB
Peak SAR (extrapolated) = 4.04 W/kg
SAR(1 g) = 2.65 mW/g; SAR(10 g) = 1.7 mW/g
Maximum value of SAR (measured) = 2.88 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 57.0 V/m; Power Drift = 0.00428 dB
Peak SAR (extrapolated) = 3.99 W/kg
SAR(1 g) = 2.64 mW/g; SAR(10 g) = 1.7 mW/g
Maximum value of SAR (measured) = 2.86 mW/g

System Performance Check/Dipole Area Scan (5x9x1): Measurement grid: dx=15mm, dy=15mm
Maximum value of SAR (measured) = 2.85 mW/g

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



SYSTEM VALIDATION

Date:	<u>3/16/2006</u>	Frequency (MHz):	<u>835</u>
Lab Location:	<u>GEMS EME</u>	Mixture Type:	<u>IEEE Head</u>
Robot System:	<u>GEMS-1</u>	Ambient Temp.(°C):	<u>22.3</u>
Probe Serial #:	<u>1384</u>	Tissue Temp.(°C):	<u>21.3</u>
DAE Serial #:	<u>406</u>		

Tissue Characteristics

Permittivity:	<u>42.1</u>	Phantom Type/SN:	<u>SAMTP1209</u>
Conductivity:	<u>0.94</u>	Distance (mm):	<u>15</u>

Reference Source:	<u>Dipole</u>	(Dipole)
Reference SN:	<u>435</u>	

Power to Dipole:	<u>250</u>	mW
Power Output (radio):	<u>n/a</u>	mW

Target SAR Value:	<u>9.50</u>	mW/g,	<u>6.20</u>	mW/g (10g avg.)
(normalized to 1.0 W)				

Measured SAR Value:	<u>2.49</u>	mW/g,	<u>1.61</u>	mW/g (10g avg.)
Power Drift:	<u>0.0168</u>	dB		

Measured SAR Value:	<u>9.92</u>	mW/g,	<u>6.42</u>	mW/g (10g avg.)
(normalized to 1.0 W, including drift)				

Percent Difference From Target (MUST be within System Uncertainty):	<u>4.44%</u>	(1g ave)
	<u>3.47%</u>	(10g ave)

Test performed by: Initial: E. C.

DUT: Dipole 835 MHz; Date/Time: 3/16/2006 5:46:22 AM

Run #: ErC-VAL-835H-060316-01 Sim.Tissue Temp: 21.3 (C)
 Robot: GEMS-1 Phantom #: SAMTP1209
 Model #: D835V2 S/N: 435
 TX Freq: 450 (MHz) Start power: 250 (mW)

New Targets:
 9.92 mW/g for 1g SAR 6.42 mW/g for 10g SAR
 9.92 mW/g calculated 1g-SAR; 0 % from target (including drift)
 6.42 mW/g calculated 10g-SAR; 0 % from target (including drift)

Probe: ET3DV6 - SN1384, Calibrated: 5/26/2005, ConvF(6.53, 6.53, 6.53),
 Duty Cycle: 1:1, Medium: 835 IEEE Head, Medium parameters used: f = 835 MHz; $\sigma = 0.94$ mho/m; $\epsilon_r = 42.1$; $\rho = 1000$ kg/m³ ;
 Electronics: DAE3 Sn406, Calibrated: 11/21/2005

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

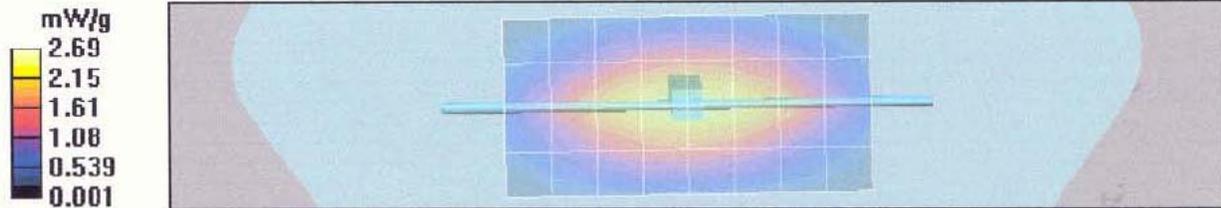
dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 55.5 V/m; Power Drift = 0.0168 dB
 Peak SAR (extrapolated) = 3.70 W/kg
 SAR(1 g) = 2.46 mW/g; SAR(10 g) = 1.59 mW/g
 Maximum value of SAR (measured) = 2.67 mW/g

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

dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 55.5 V/m; Power Drift = 0.0168 dB
 Peak SAR (extrapolated) = 3.80 W/kg
 SAR(1 g) = 2.52 mW/g; SAR(10 g) = 1.63 mW/g
 Maximum value of SAR (measured) = 2.70 mW/g

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

System Performance Check/Z-Axis Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 2.69 mW/g



SYSTEM PERFORMANCE CHECK TARGET SAR

Date:	<u>03/16/06</u>	Frequency (MHz):	<u>835</u>
Lab Location:	<u>GEMS EME</u>	Mixture Type:	<u>FCC Body</u>
Robot System:	<u>GEMS-1</u>	Ambient Temp.(°C):	<u>22.5</u>
Probe Serial #:	<u>1384</u>	Tissue Temp.(°C):	<u>20.2</u>
DAE Serial #:	<u>406</u>		

Tissue Characteristics

Permittivity:	<u>53.4</u>	Phantom Type/SN:	<u>80302002A-S7</u>
Conductivity:	<u>0.98</u>	Distance (mm):	<u>15</u>

Reference Source: Dipole (Dipole)
 Reference SN: 435

Power to Dipole: 250 mW

Measured SAR Value: 2.415 mW/g, 1.59 mW/g (10g avg.)
 Power Drift: -0.03 dB

New Target/Measured

SAR Value: 9.73 mW/g, 6.40 mW/g (10g avg.)
 (normalized to 1.0 W, including drift)

Test performed by: *E. J. J. J. J.* Initial: *E, J*

DUT: Dipole 835 MHz; Date/Time: 3/16/2006 6:33:59 AM

Run #: ErC-VAL-835B-060316-01 Sim.Tissue Temp: 20.2 (C)
 Robot GEMS-1 Phantom #: 80302002A-S7
 Model #: D835V2 S/N: 435
 TX Freq: 450 (MHz) Start power: 250 (mW)

New Targets:
 9.73 mW/g for 1g SAR 6.40 mW/g for 10g SAR
 9.73 mW/g calculated 1g-SAR; 0 % from target (including drift)
 6.40 mW/g calculated 10g-SAR; 0 % from target (including drift)

Probe: ET3DV6 - SN1384, Calibrated: 5/26/2005, ConvF(6.19, 6.19, 6.19),
 Duty Cycle: 1:1, Medium: FCC Body 835 MHz, Medium parameters used: $f = 835 \text{ MHz}$; $\sigma = 0.98 \text{ mho/m}$; $\epsilon_r = 53.4$; $\rho = 1000 \text{ kg/m}^3$;
 Electronics: DAE3 Sn406, Calibrated: 11/21/2005

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

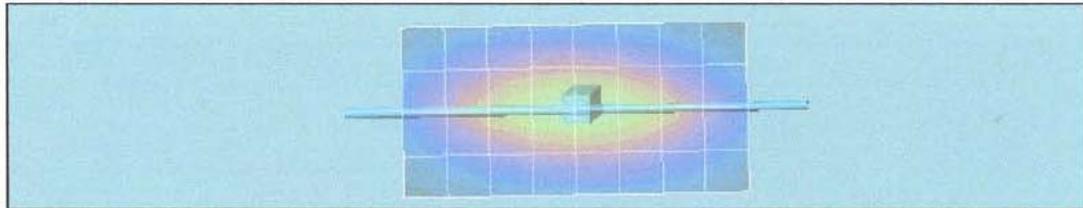
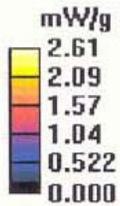
Reference Value = 54.1 V/m; Power Drift = -0.030 dB
 Peak SAR (extrapolated) = 3.47 W/kg
SAR(1 g) = 2.4 mW/g; SAR(10 g) = 1.58 mW/g
 Maximum value of SAR (measured) = 2.61 mW/g

System Performance Check/90-Degree 5x5x7 Cube (5x5x7)/Cube 0: Measurement grid:
 $dx=7.5\text{mm}$, $dy=7.5\text{mm}$, $dz=5\text{mm}$

Reference Value = 54.1 V/m; Power Drift = -0.030 dB
 Peak SAR (extrapolated) = 3.50 W/kg
SAR(1 g) = 2.43 mW/g; SAR(10 g) = 1.6 mW/g
 Maximum value of SAR (measured) = 2.63 mW/g

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

System Performance Check/Z-Axis Scan (1x1x17): Measurement grid: $dx=20\text{mm}$, $dy=20\text{mm}$, $dz=10\text{mm}$



Appendix E
DUT Scans (Shortened scans & Highest SAR configurations)

Shortened Scan Results

Motorola N&E EME Laboratory

DUT: Waris: Date/Time: 5/27/2006 8:07:40 PM
 Run #: MeC-Ab-060527-32 Sim. Tissue Temp: 21.0 (C)
 Robot #: GEMS-2 Phantom #: 80302002B-S8
 Model #: AAH25UCH6DU6AN SN: 672TA00010
 Antenna: PMAF4001A TX Freq: 860.500 MHz
 Battery: HNN9013D Start power: 2.45 W
 Carry acc.: HLN9844A Audio/Data acc.: ENMN4011A w/RKN4097A

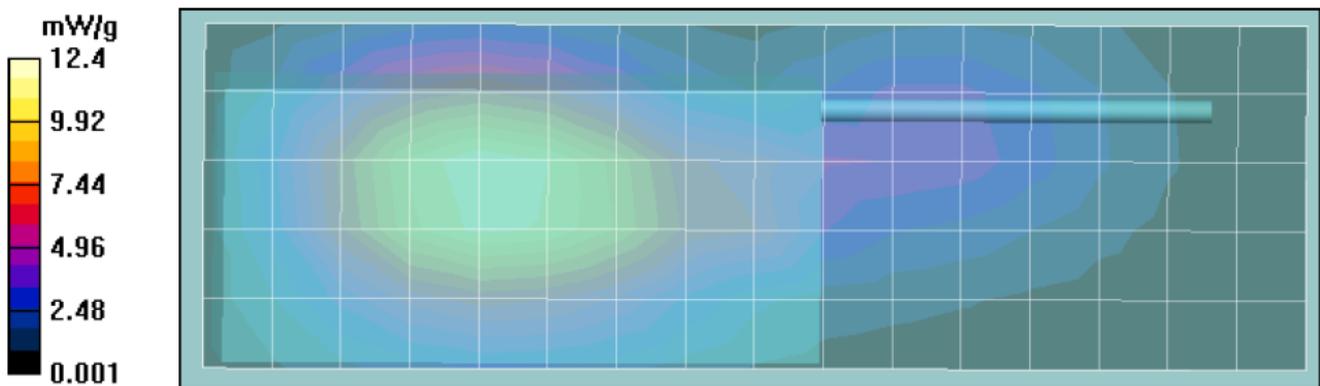
Comments: SHORT SCAN

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.82, 5.82, 5.82)
 Duty Cycle: 1:1, Medium: 860.5 MHz FCC Body, Medium parameters used: f = 860.5 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

Ab Scan/5x5x7 Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
 Reference Value = 60.3 V/m; Power Drift = -0.102 dB
 Peak SAR (extrapolated) = 15.3 W/kg
SAR(1 g) = 11.8 mW/g; SAR(10 g) = 8.52 mW/g
 Maximum value of SAR (measured) = 12.4 mW/g

Ab Scan/Area Scan (51x161x1): Measurement grid: dx=15mm, dy=15mm
 Reference Value = 75.8 V/m; Power Drift = -0.102 dB
Motorola Fast SAR: SAR(1 g) = 11.5 mW/g; SAR(10 g) = 8.01 mW/g
 Maximum value of SAR (interpolated) = 12.2 mW/g

Comments: Short Scan at the body w/ body worn accessory against phantom
Shortened scan reflect highest SAR producing configuration at the body; Run time 6 minutes.
Representative “normal” scan run time was 26 minutes
“Shortened” scan max calculated SAR using SAR drift: 1-g Avg. = 6.01mW/g; 10-g Avg. = 4.36mW/g
“Normal” scan max calculated SAR using SAR drift: 1-g Avg. = 6.40mW/g; 10-g Avg. = 4.64mW/g
 (see section 9.0 run # MeC-AB-060527-31)



Motorola N&E EME Laboratory

DUT: Waris; Date/Time: 6/2/2006 11:46:30 AM
 Run #: JsT-Face-060602-03 Sim. Tissue Temp: 21.0 (C)
 Robot #: GEMS-2 Phantom #: 80302002A-S7
 Model #: AAH25UCH6DU6AN SN: 672TA00010
 Antenna: PMAF4001A TX Freq: 870.0000 MHz
 Battery: HNN9013D Start power: 2.52 W
 Carry acc.: None Audio/Data acc.: None

Comments: Shortened Scan; Front of radio @ 2.5cm.

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.92, 5.92, 5.92)
 Duty Cycle: 1:1, Medium: 860.5 MHz IEEE Head, Medium parameters used: $f = 860.5 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

Face Template/5x5x7 Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm

Reference Value = 60.1 V/m; Power Drift = 0.173 dB

Peak SAR (extrapolated) = 7.45 W/kg

SAR(1 g) = 5.81 mW/g; SAR(10 g) = 4.26 mW/g

Maximum value of SAR (measured) = 6.16 mW/g

Face Template/Area Scan (51x161x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 60.1 V/m; Power Drift = 0.173 dB

Motorola Fast SAR: SAR(1 g) = 5.58 mW/g; SAR(10 g) = 3.97 mW/g

Maximum value of SAR (interpolated) = 5.89 mW/g

Comments: Short Scan at the face with 2.5cm separation

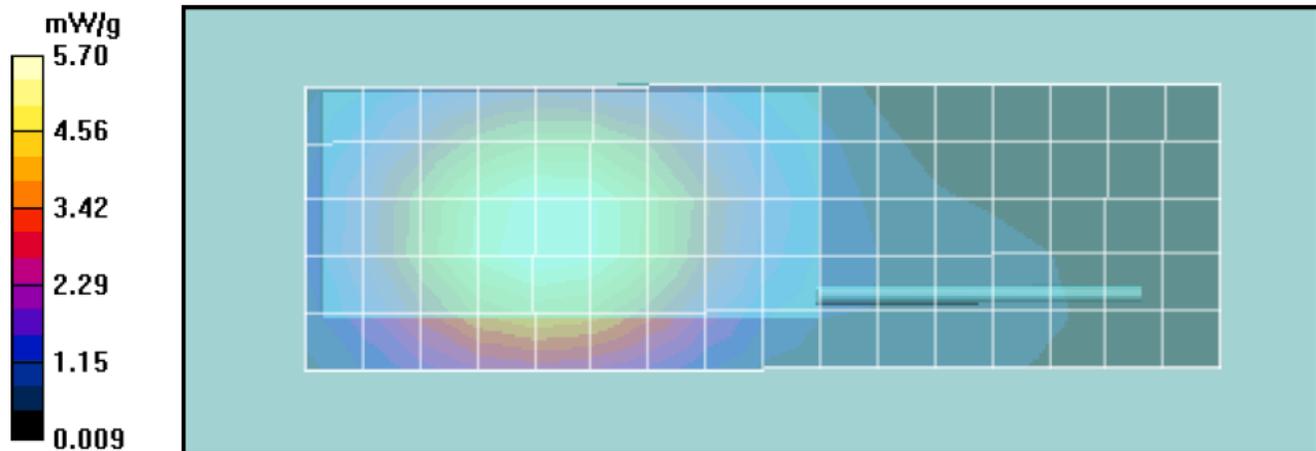
Shortened scan reflect highest SAR producing configuration at the face; Run time 6 minutes.

Representative "normal" scan run time was 23 minutes

"Shortened" scan max calculated SAR using SAR drift: 1-g Avg. = 2.91mW/g; 10-g Avg. = 2.13mW/g

"Normal" scan max calculated SAR using SAR drift: 1-g Avg. = 3.18mW/g; 10-g Avg. = 2.33mW/g

(see section 9.0 run # JsT-Face-060602-02)



Highest SAR Configurations Results

Motorola N&E EME Laboratory

DUT: Waris; Date/Time: 5/27/2006 7:18:56 PM
 Run #: MeC-Ab-060527-31 Sim. Tissue Temp: 20.9 (C)
 Robot #: GEMS-2 Phantom #: 80302002B-S8
 Model #: AAH25UCH6DU6AN SN: 672TA00010
 Antenna: PMAF4001A TX Freq: 860.500 MHz
 Battery: HNN9013D Start power: 2.46 W
 Carry acc.: HLN9844A Audio/Data acc.: ENMN4011A w/RKN4097A

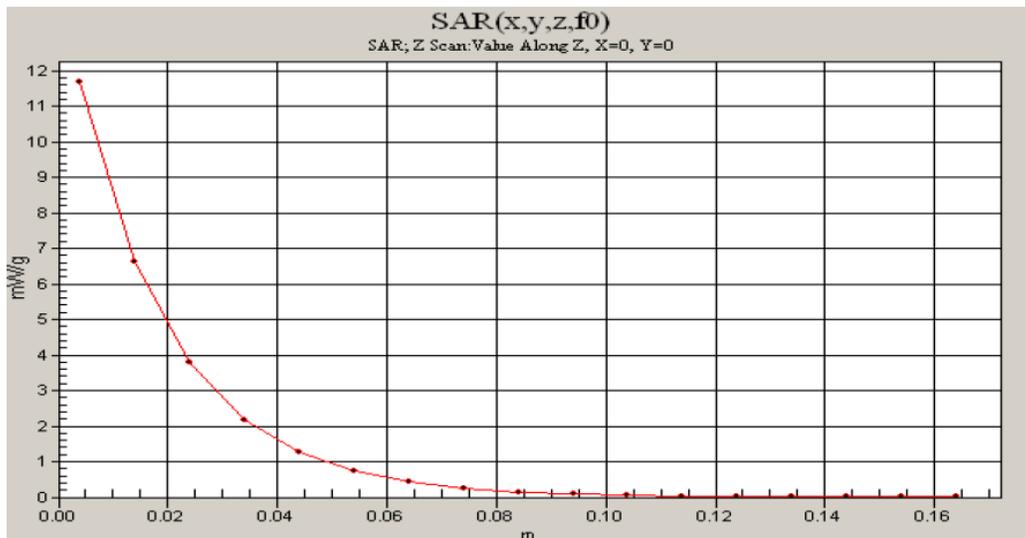
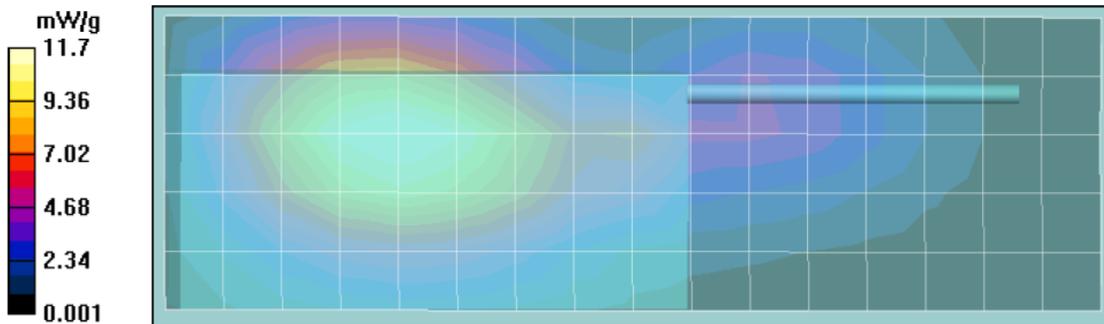
Comments: FULL SCAN

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.82, 5.82, 5.82)
 Duty Cycle: 1:1, Medium: 860.5 MHz FCC Body, Medium parameters used: f = 860.5 MHz; $\sigma = 1$ mho/m; $\epsilon_r = 52.9$; $\rho = 1000$ kg/m³
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

Ab Scan/7x7x7 Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
 Reference Value = 80.0 V/m; Power Drift = -0.619 dB
 Peak SAR (extrapolated) = 14.4 W/kg
SAR(1 g) = 11.1 mW/g; SAR(10 g) = 8.04 mW/g
 Maximum value of SAR (measured) = 11.8 mW/g

Ab Scan/Area Scan (51x161x1): Measurement grid: dx=15mm, dy=15mm
 Reference Value = 80.0 V/m; Power Drift = -0.619 dB
Motorola Fast SAR: SAR(1 g) = 11.6 mW/g; SAR(10 g) = 8.09 mW/g
 Maximum value of SAR (interpolated) = 12.3 mW/g

Ab Scan/Z Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm
 Maximum value of SAR (measured) = 11.7 mW/g



Motorola N&E EME Laboratory

DUT: Waris: Date/Time: 6/2/2006 10:45:39 AM
 Run #: JsT-Face-060602-02 Sim. Tissue Temp: 21.1 (C)
 Robot #: GEMS-2 Phantom #: 80302002A-S7
 Model #: AAH25UCH6DU6AN SN: 672TA00010
 Antenna: PMAF4001A TX Freq: 870.0000 MHz
 Battery: HNN9013D Start power: 2.52 W
 Carry acc.: None Audio/Data acc.: None

Comments: Full Scan; Front of radio @ 2.5cm.

Probe: ET3DV6 - SN1547, Calibrated: 10/25/2005, ConvF(5.92, 5.92, 5.92)
 Duty Cycle: 1:1, Medium: 860.5 MHz IEEE Head, Medium parameters used: $f = 860.5 \text{ MHz}$; $\sigma = 0.96 \text{ mho/m}$; $\epsilon_r = 41.9$; $\rho = 1000 \text{ kg/m}^3$
 Electronics: DAE3 Sn401, Calibrated: 8/18/2005

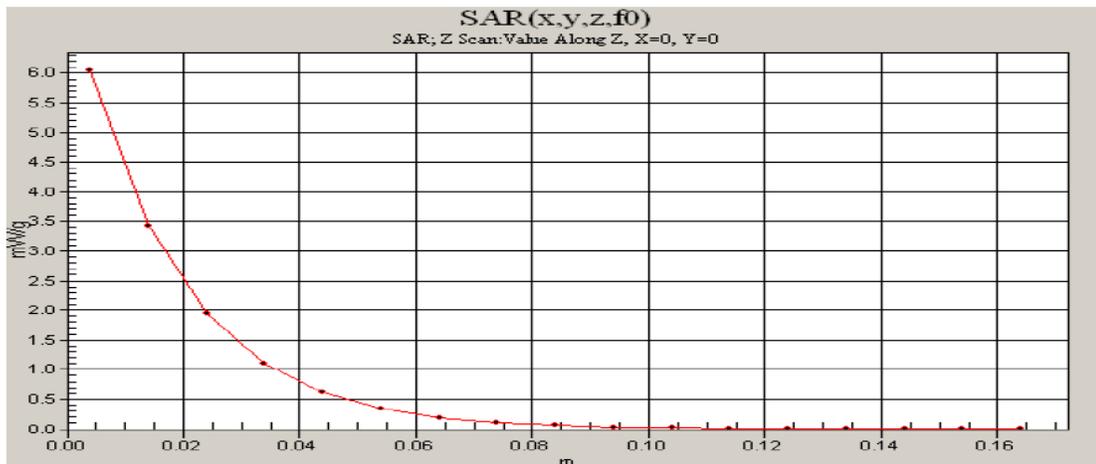
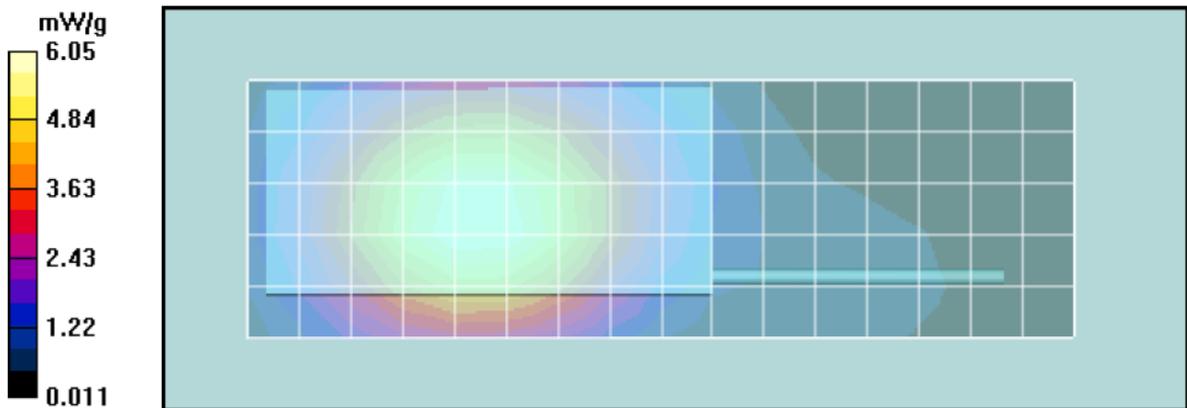
Face Template/7x7x7 Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 64.6 V/m; Power Drift = -0.455 dB
 Peak SAR (extrapolated) = 7.32 W/kg
SAR(1 g) = 5.72 mW/g; SAR(10 g) = 4.2 mW/g
 Maximum value of SAR (measured) = 6.02 mW/g

Face Template/Area Scan (51x161x1): Measurement grid: dx=15mm, dy=15mm

Reference Value = 64.6 V/m; Power Drift = -0.455 dB
Motorola Fast SAR: SAR(1 g) = 5.94 mW/g; SAR(10 g) = 4.22 mW/g
 Maximum value of SAR (interpolated) = 6.27 mW/g

Face Template/Z Scan (1x1x17): Measurement grid: dx=20mm, dy=20mm, dz=10mm



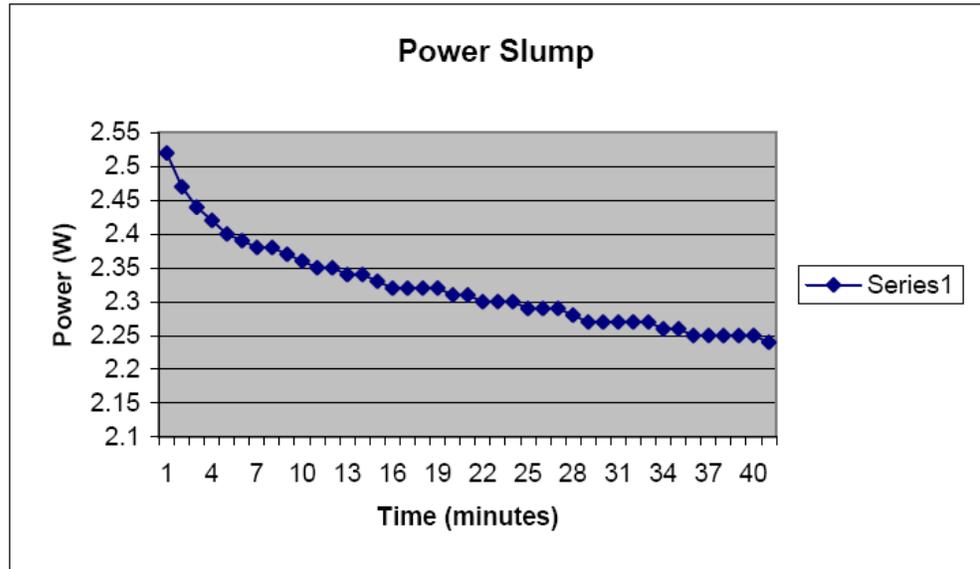
APPENDIX F
DUT Supplementary Data (Power slump)

Power Slump for Model AAH25UCH6DU6AN

Serial # 672TA00010

Battery HNN9013D, Frequency 860.5000 MHz.,ENMN4011A Helmet Com w/RKN4097A

Time (Minutes)	Power (W)
Start (0)	2.52
1	2.47
2	2.44
3	2.42
4	2.4
5	2.39
6	2.38
7	2.38
8	2.37
9	2.36
10	2.35
11	2.35
12	2.34
13	2.34
14	2.33
15	2.32
16	2.32
17	2.32
18	2.32
19	2.31
20	2.31
21	2.30
22	2.30
23	2.30
24	2.29
25	2.29
26	2.29
27	2.28
28	2.27
29	2.27
30	2.27
31	2.27
32	2.27
33	2.26
34	2.26
35	2.25
36	2.25
37	2.25
38	2.25
39	2.25
40	2.24



Appendix G
DUT Test Position Photos

**Figure 1: Highest SAR Test Position (Body)
DUT w/ belt clip HLN9844A against the phantom
and attached audio accessory ENMN4011A helmet Com with RKN4097A
(Similar position used for all other body worn, battery and audio accessories)**



**Figure 2: Highest SAR Test Position (face)
DUT w/ front side separated 2.5cm from the phantom
(same position used with applicable audio and battery accessories).**



Figure 3: SAR Test Position (Body)
DUT w/ back separated 2.5cm from the phantom; w/ attached audio accessory
ENMN4011A helmet Com with RKN4097A
(Same position used for antenna separated 2.5cm).



Figure 4: SAR Test Position (Body)
DUT w/ front separated 2.5cm from the phantom; w/ attached audio accessory
ENMN4011A helmet Com with RKN4097A



Appendix H

DUT and Body worn Accessory Photos

The purpose of this appendix is to illustrate the offered body-worn carry accessory(ies). The sample that was used in the following photos represents the product used to obtain the results presented herein.



Photo 1
Model HLN9677A
Front View



Photo 2
Model HLN9677A
Side View



Photo 3
Model HLN9690A
Front View



Photo 4
Model HLN9690A
Side View



Photo 5
Model HLN9701B
Front View



Photo 6
Model HLN9701B
Side View



Photo 7
Model HLN9714A
Back View



Photo 8
Model HLN9714A
Side View



Photo 9
Model HLN9844A
Back View



Photo 10
Model HLN9844A
Side View



Photo 11
Model HLN9952A / HLN9844A
Back View



Photo 12
Model HLN9952A / HLN9844A
Side View



Photo 13
Model NTN5243A / HLN9677A
Front View



Photo 14
Model PMLN4280A
Front View



Photo 15
Model PMLN4280A
Side View



Photo 16
Model RLN4815A
Front View

Appendix I

DUT Body-worn Separation Distances and Offered Accessory Test Status

The following table(s) summarizes the separation distances and test status provided by each of the applicable body-worn accessory(ies):

Carry Case Models	Tested ?	Min. Separation distances between DUT antenna and phantom surface. (mm)	Comments
HLN9652A	no	NA	Similar to HLN9677A except for leather cutout
HLN9665A	no	NA	Similar to HLN9689A except for leather cutout
HLN9670A	no	NA	Similar to HLN9690A except for leather cutout
HLN9676A	no	NA	Similar to HLN9694A except for leather cutout
HLN9677A	yes	58-80	Tested with thin battery, worst case
HLN9689A	no	NA	Used with standard battery, not worst case
HLN9690A	yes	58-80	Tested with thin battery, worst case
HLN9694A	no	NA	Used with standard battery, not worst case
HLN9945A	no	NA	Similar to HLN9677A except for leather cutout
HLN9946A	no	NA	Similar to HLN9689A except for leather cutout
HLN9955A	no	NA	Similar to HLN9690A except for leather cutout
HLN9998A	no	NA	Similar to HLN9694A except for leather cutout
HLN9701B	yes	34-46	
NTN8039B	yes	NA	Tested w/HLN9690A or HLN9694A
HLN9714A	yes	22-31	
HLN9844A	yes	22-51	
NTN5243A	yes	58-80	Tested with HLN9677A
RLN4815A	yes	34-39	
PMLN4280A	yes	28-39	
HLN9952A	yes	29-42	Tested with worst case belt clip (HLN9844A)
Audio Acc. Models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
HMN9030A	yes	NA	Tested w/HLN9716C
HMN9052E	yes	NA	
HMN9053E	yes	NA	Tested w/WADN4190B
RLN4885A	no	NA	Similar to WADN4190B
RLN4941A	no	NA	Similar to WADN4190B
ENMN4015A	yes	NA	
ENMN4012A	yes	NA	
ENMN4011A	yes	NA	Tested w/ENLN4135A
ENMN4010A	yes	NA	
ENMN4013A	yes	NA	
ENMN4014A	yes	NA	
ENMN4016A	no	NA	Similar RMN4019A
ENMN4017A	no	NA	Similar to ENMN4014A

Continued

Audio Acc. Models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
RMN4019A	yes	NA	
RMN4020B	yes	NA	
PMMN4002B	no	NA	Similar to HMN9053E
PMLN4558A	no	NA	Similar to PMLN4556A
PMMN4009A	yes	NA	
ENLN4135A	yes	NA	Tested w/ENLN4135A
PMLN4418A	yes	NA	
RMN4017A	yes	NA	
RMN4044A	yes	NA	Tested w/BDN6641A
RMN4048A	yes	NA	
WADN4190B	yes	NA	Tested w/HMN9053E
PMLN4557A	no	NA	Similar to PMLN4556A
PMLN4556A	yes	NA	
HMN9013A	yes	NA	Tested w/HLN9716C
HMN9727B	yes	NA	Tested w/HLN9716C
HMN9752B	yes	NA	Tested w/HLN9716C
HMN9754D	yes	NA	Tested w/HLN9716C
NTN1722A	yes	NA	
NTN1723A	yes	NA	
NTN1724A	no	NA	Similar to NTN1723A
NMN6245A	yes	NA	Tested w/HLN9717A
NMN6246B	yes	NA	Tested w/HLN9717A
NTN8370A	no	NA	mechanical part
NTN8371A	no	NA	mechanical part
RLN4760A	no	NA	mechanical part
RLN4761A	no	NA	mechanical part
RLN4762A	no	NA	mechanical part
RLN4763A	no	NA	mechanical part
RLN4764A	no	NA	mechanical part
RLN4765A	no	NA	mechanical part
RLN4922A	yes	NA	Tested w/ENMN4014A
AARMN4018B	yes	NA	
AARMN4021A	no	NA	Similar to AARMN4028A
AARMN4022A	yes	NA	
AARMN4028A	no	NA	Similar to ENMN4013A
AARMN4029A	no	NA	Similar to AARMN4022A
AARMN4031B	no	NA	Similar to ENMN4015A
AZRMN4032A	yes	NA	
AARMN4045A	no	NA	Similar to RMN4044A
RMN4051B	yes	NA	Tested w/RKN4097A

Continued

Audio Acc. Models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
RMN4052B	no	NA	Similar to RMN4051B
RMN4053A	no	NA	Similar to RMN4051B
RMN4054B	yes	NA	Tested w/HLN9717A
RMN4055B	yes	NA	Tested w/HLN9717A
BDN6641A	yes	NA	Tested w/RMN4044A
BDN6646C	yes	NA	Tested w/HLN9716C
BDN6647G	yes	NA	Tested w/HLN9716C
BDN6648C	yes	NA	Tested w/HLN9716C
BDN6664A	no	NA	Similar to BDN6665A
BDN6665A	yes	NA	Tested w/HLN9717A
BDN6666A	yes	NA	Tested w/HLN9717A
BDN6667A	no	NA	Similar to BDN6729A
BDN6668A	no	NA	Similar to BDN6730A
BDN6669A	no	NA	Similar to BDN6729A
BDN6670A	no	NA	Similar to BDN6730A
BDN6677A	no	NA	Similar to BDN6641A
BDN6678A	no	NA	Similar to BDN6677A
BDN6719A	no	NA	Similar to BDN6665A
BDN6720A	yes	NA	Tested w/HLN9716C
BDN6726A	no	NA	Similar to BDN6665A
BDN6727A	no	NA	Similar to BDN6665A
BDN6728A	no	NA	Similar to BDN6666A
BDN6729A	yes	NA	Tested w/HLN9717A
BDN6730A	yes	NA	Tested w/HLN9717A
BDN6731A	no	NA	Similar to BDN6729A
BDN6732A	no	NA	Similar to BDN6730A
BDN6780A	no	NA	Similar to BDN6729A
BDN6781A	yes	NA	Tested w/HLN9717A
NNTN4187A	yes	NA	Tested w/HLN9717A
HLN9717A	yes	NA	Tested with various audios each one identified.
HTN3000D		NA	
HLN9716C	yes	NA	Tested with various audios each one identified.
RLN4939A		NA	
0180358B38	yes	NA	Tested w/RMN4044A
0180300E83	no	NA	Similar to 0180358B38
RKN4097A	yes	NA	Tested w/RMN4051B