

 MOTOROLA	 <p>Certificate Number: 1449-01</p>		
<p>FCC ID: AZ489FT5845</p> <p>DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 3 of 3</p>			
<p>Government & Enterprise Mobility Solutions EME Test Laboratory 8000 West Sunrise Blvd Fort Lauderdale, FL. 33322</p>	<p>Date of Report: May 25, 2005 Report Revision: Rev. 0 Report ID: FCC rpt_i415_Rev O_050525 SR2383</p>		
<table style="width: 100%; border: none;"> <tr> <td style="width: 60%; vertical-align: top;"> <p>Responsible Engineer: Kim Uong (EME lead Eng.) Date/s Tested: 5/11/05 – 5/19/05 & 5/24/2005 Manufacturer/Location: Motorola - Plantation Sector/Group/Div.: iDEN Subscriber Date submitted for test: 5/6/05 DUT Description: i415; TDMA: 1:6, 2:6, 81:120, 1:12; 64QAM, 16 QAM & QPSK Modulation; 0.6W Pulse Avg.; GPS capable Test TX mode(s): 1:3, 1:6, 81:120, Max. Power output: iDEN - 0.640W Nominal Power: iDEN - 0.60W Tx Frequency Bands: iDEN - 806-825, 896-902MHz Signaling type: TDMA: iDEN Model(s) Tested: H80XAH6RR1AN Model(s) Certified: H80XAH6RR1AN Serial Number(s): 364VFEPSR4 Classification: General Population/Uncontrolled Rule Part(s): 90</p> </td> <td style="width: 40%; text-align: center; vertical-align: middle;">  </td> </tr> </table> <p>Approved Accessories: Antenna(s): 8515985H01 (806-825MHz Stubby ¼ wave antenna, -1.5dBd; 896-902MHz, 0dBd) Battery(ies): SNN5705C (Hi performance Li Ion); NNTN6368A (Battery cover) Body worn accessory(ies): NNTN4747A (Belt clip) Audio/Data cable accessory(ies): NSN6066A (Light duty RSM), NNTN5004A (PTT headset over ear), NNTN5005A (PTT headset over head), SYN8390B (Privacy earpiece), SYN8146C (Lightweight headset w/ boom mic), NTN8496A (Lightweight headset w/ mic), NNTN4033A (Privacy Earpiece/mic w/ PTT), NNTN5006A (Silver Earbud), SYN7875C (Hearing Aide Neckloop), NTN8513B (Lightweight headband), NNTN5330A (Ear bud accessory), NNTN4620A (Silver ear bud), NNTN5211A (Falcon Surveillance kit); NKN6559A (USB Cable), NKN6560A (RS232), NNTN5405A (USB cable w/ charging), NNTN5406A (RS-232 data cable w/ charging);</p> <p style="text-align: center;">Max. Calc. 1-g Avg. SAR: 1.23 mW/g (Body) Max. Calc. 1-g Avg. SAR: 0.11 mW/g (Face) Max. Calc. 1-g Avg. SAR: 1.45 mW/g (Head)</p>		<p>Responsible Engineer: Kim Uong (EME lead Eng.) Date/s Tested: 5/11/05 – 5/19/05 & 5/24/2005 Manufacturer/Location: Motorola - Plantation Sector/Group/Div.: iDEN Subscriber Date submitted for test: 5/6/05 DUT Description: i415; TDMA: 1:6, 2:6, 81:120, 1:12; 64QAM, 16 QAM & QPSK Modulation; 0.6W Pulse Avg.; GPS capable Test TX mode(s): 1:3, 1:6, 81:120, Max. Power output: iDEN - 0.640W Nominal Power: iDEN - 0.60W Tx Frequency Bands: iDEN - 806-825, 896-902MHz Signaling type: TDMA: iDEN Model(s) Tested: H80XAH6RR1AN Model(s) Certified: H80XAH6RR1AN Serial Number(s): 364VFEPSR4 Classification: General Population/Uncontrolled Rule Part(s): 90</p>	
<p>Responsible Engineer: Kim Uong (EME lead Eng.) Date/s Tested: 5/11/05 – 5/19/05 & 5/24/2005 Manufacturer/Location: Motorola - Plantation Sector/Group/Div.: iDEN Subscriber Date submitted for test: 5/6/05 DUT Description: i415; TDMA: 1:6, 2:6, 81:120, 1:12; 64QAM, 16 QAM & QPSK Modulation; 0.6W Pulse Avg.; GPS capable Test TX mode(s): 1:3, 1:6, 81:120, Max. Power output: iDEN - 0.640W Nominal Power: iDEN - 0.60W Tx Frequency Bands: iDEN - 806-825, 896-902MHz Signaling type: TDMA: iDEN Model(s) Tested: H80XAH6RR1AN Model(s) Certified: H80XAH6RR1AN Serial Number(s): 364VFEPSR4 Classification: General Population/Uncontrolled Rule Part(s): 90</p>			
<p>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.</p> <p>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.</p>			
<p>Signature on file Ken Enger GEMS EME Lab Senior Resource Manager, Laboratory Director,</p> <p>Approval Date: 5/26/2005</p>	<p>Certification Date: 5/26/2005</p> <p>Certification No.: L1050510P</p>		

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

Shortened Scan Results

Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date:

Run #: 050524-04

Test operator: C. Miller

Tissue Temp: 21.7(C)

Model #: H80XAH6RR1AN

SN: 364VFEPSR4

Antenna: FIXED

TX Freq: 824.9875MHz

Battery: SNN5705C

Start power: 0.655 W

Carry acc.: NONE

Audio/Data acc.: NONE

Comments: Short Scan at the Left ear with DUT in the Touch position

Shortened scan reflect highest S.A.R. producing configuration; Run time 6 minutes.

Representative "normal" scan run time was 19 minutes

"Shortened" scan max calculated S.A.R. using S.A.R. drift: 1-g Avg. = 1.45mW/g

"Normal" scan max calculated S.A.R. using S.A.R. drift: 1-g Avg. = 1.45mW/g

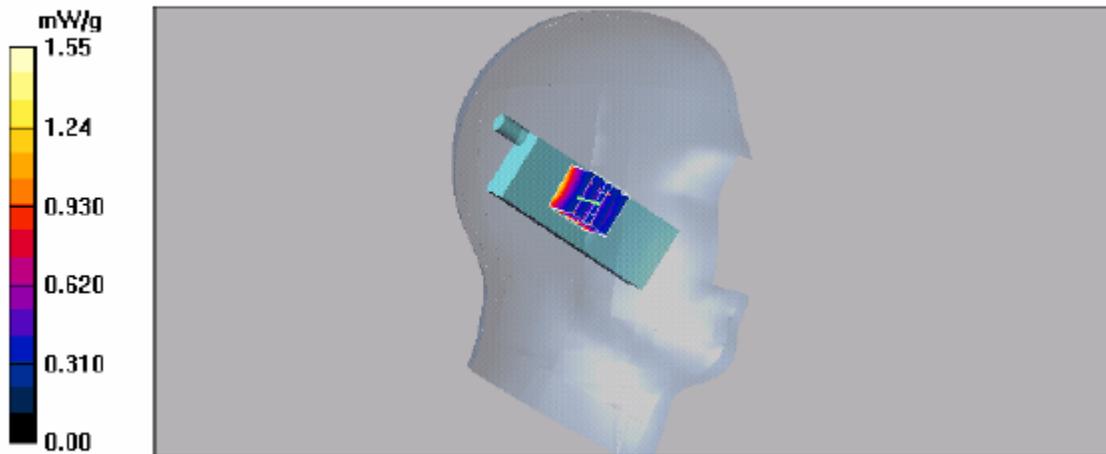
(see part 1 of 2 section 9.0 run # CM-LEAR-R2-050524-05)

Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.6, 6.6, 6.6)

Duty Cycle: 1:3, Medium: 813 IEEE Head, Medium parameters used: $\sigma = 0.93$ mho/m, $\epsilon_r = 43.3$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

Reference Value = 30.7 V/m; Power Drift = -0.01 dB



Highest SAR Configurations Results

Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date: 5/24/05

Run #: 050524-05 Test operator: C. Miller

Sim. Tissue Temp: 21.7 (C)

Model #: H80XAH6RR1AN SN: 364VFEPSR4

Antenna: FIXED TX Freq: 824.9875 MHz

Battery: SNN5705C Start power: 0.651 W

Carry acc.: NONE Audio/Data acc.: NONE

Comments: DUT at the left ear in touch position

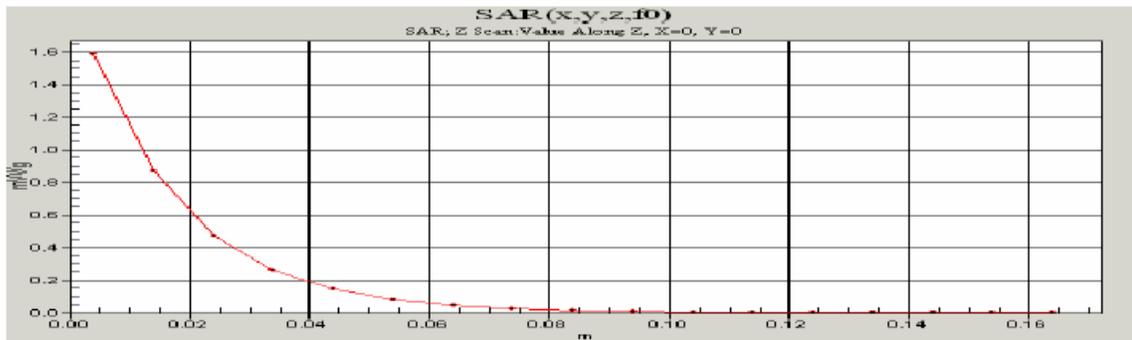
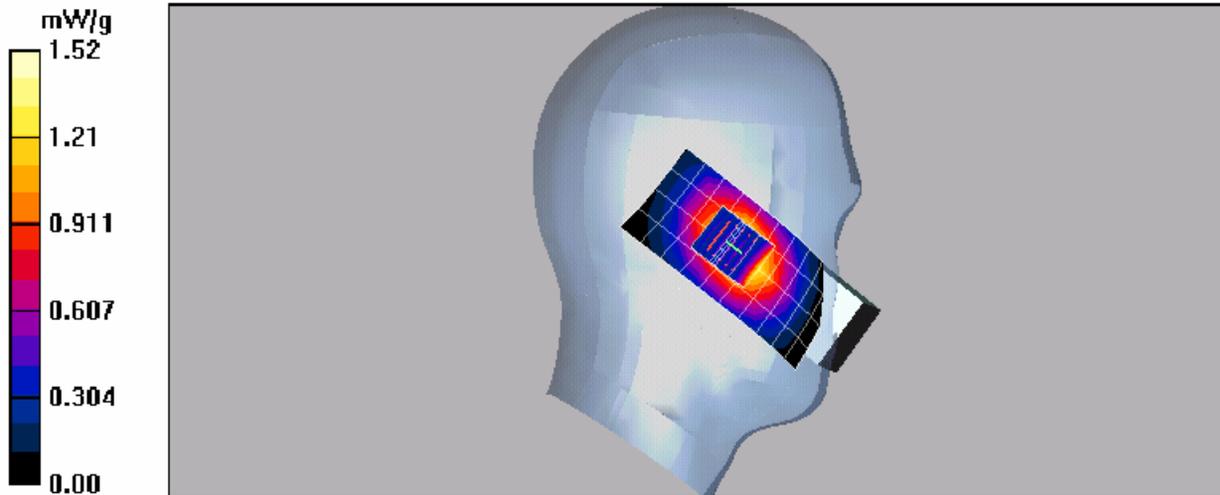
Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.6, 6.6, 6.6)

Duty Cycle: 1:3, Medium: 813 IEEE Head, Medium parameters used: $\sigma = 0.93$ mho/m, $\epsilon_r = 43.3$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

Left Ear - Touch position/7x7x7 Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm, Reference Value = 30.7 V/m; Power Drift = -0.0022 dB

SAR(1 g) = 1.45 mW/g



Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date: 5/13/05

Run #: 050513-04 Test operator: C. Miller

Sim. Tissue Temp: 21.3 (C)

Model #: H80XAH6RR1AN SN: 364VFEPSR4

Antenna: FIXED TX Freq: 896.01875 MHz

Battery: SNN5705C Start power: 0.666 W

Carry acc.: NONE Audio/Data acc.: NONE

Comments: DUT at left ear in touch position

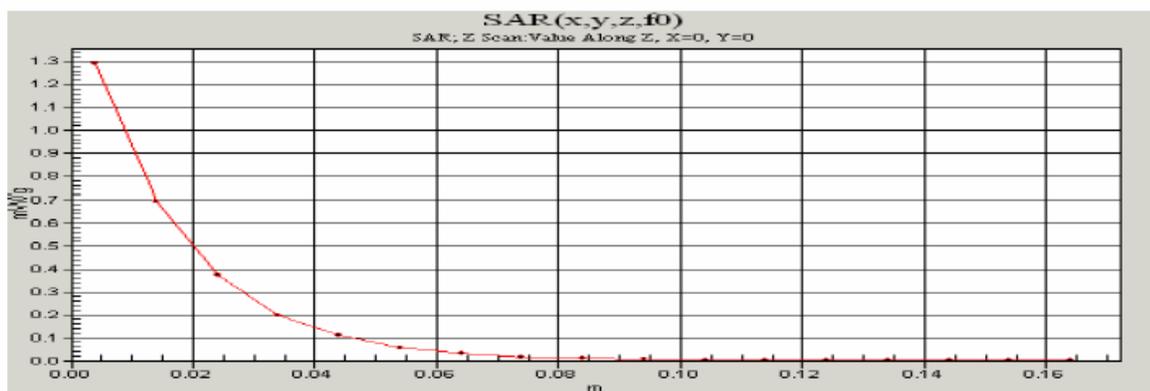
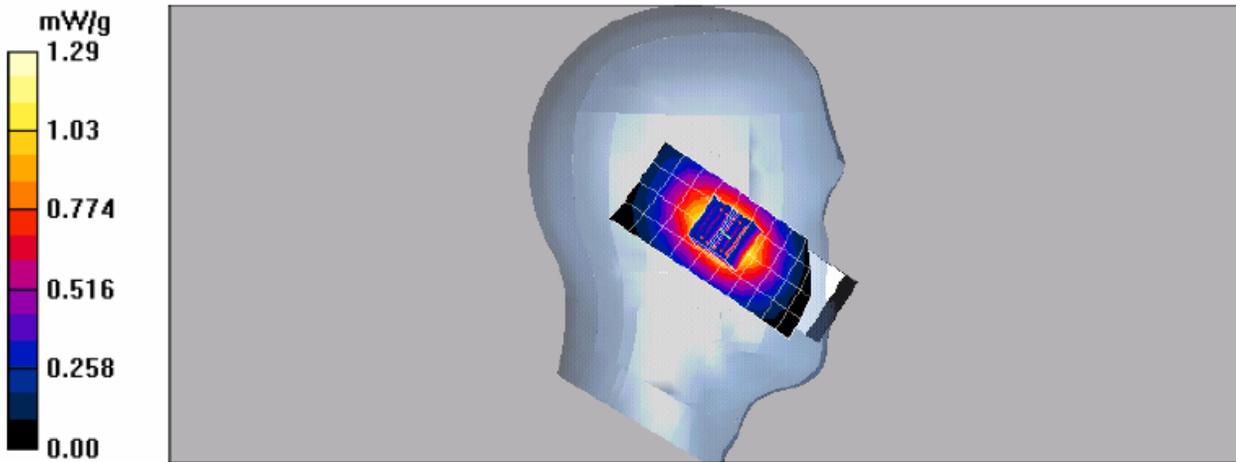
Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.35, 6.35, 6.35)

Duty Cycle: 1:3, Medium: 899 IEEE Head, Medium parameters used: $\sigma = 0.99$ mho/m, $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

Left Ear - Touch position/7x7x7 Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm, Reference Value = 29.2 V/m; Power Drift = -0.270 dB

SAR(1 g) = 1.25 mW/g



Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date: 5/13/05

Run #: 050513-05 Test operator: C. Miller

Sim. Tissue Temp: 21.2 (C)

Model #: H80XAH6RR1AN SN: 364VFEPSR4

Antenna: FIXED

TX Freq: 813.5125 MHz

Battery: SNN5705C

Start power: 0.668 W

Carry acc.: NONE

Audio/Data acc.: NONE

Comments: DUT with front separated 2.5cm from phantom

Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.6, 6.6, 6.6)

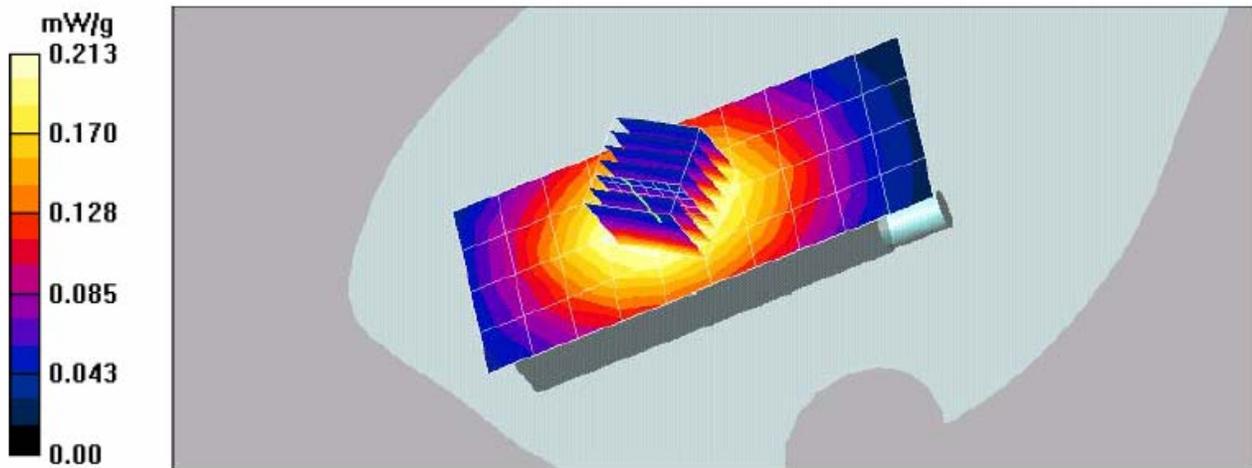
Duty Cycle: 1:6, Medium: 813 IEEE Head, Medium parameters used: $\sigma = 0.91$ mho/m, $\epsilon_r = 41.6$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

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

Reference Value = 13.8 V/m; Power Drift = 0.111 dB

SAR(1 g) = 0.210 mW/g



Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date: 5/13/05

Run #: 050513-06 Test operator: C. Miller

Sim. Tissue Temp: 21.2 (C)

Model #: H80XAH6RR1AN SN: 364VFEPSR4

Antenna: FIXED TX Freq: 899.66875 MHz

Battery: SNN5705C Start power: 0.660 W

Carry acc.: NONE Audio/Data acc.: NONE

Comments: DUT front separated 2.5cm from phantom

Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.35, 6.35, 6.35)

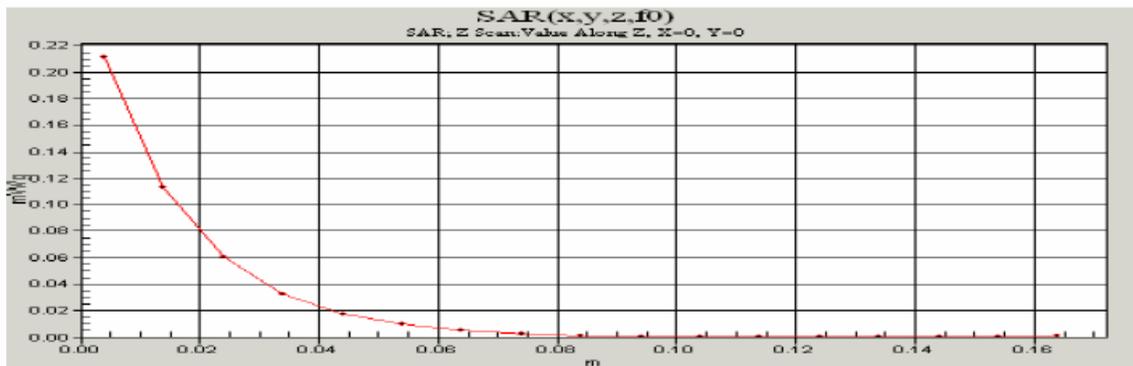
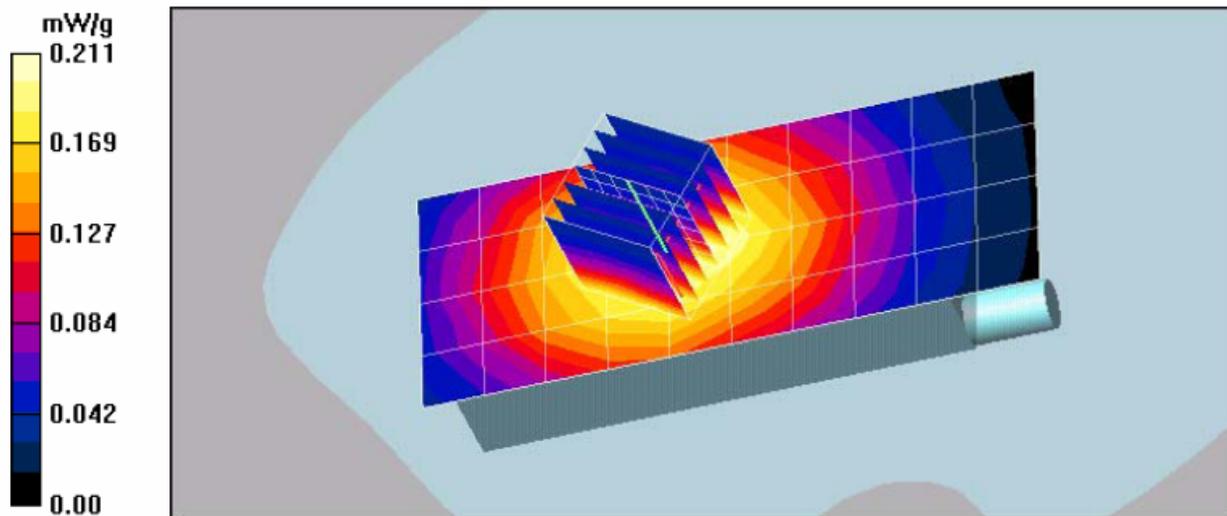
Duty Cycle: 1:6, Medium: 899 IEEE Head, Medium parameters used: $\sigma = 0.99$ mho/m, $\epsilon_r = 40.5$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

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

Reference Value = 13.2 V/m; Power Drift = 0.0918 dB

SAR(1 g) = 0.203 mW/g



Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date: 5/18/05

Run #: 050518-05 Test operator: C. Miller

Sim. Tissue Temp: 22.0 (C)

Model #: H80XAH6RR1AN SN: 364VFEPSR4

Antenna: FIXED TX Freq: 806.0125 MHz

Battery: SNN5705C Start power: 0.636 W

Carry acc.: NNTN4747A Audio/Data acc.: NONE

Comments: DUT with carry accessory against the phantom

Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.3, 6.3, 6.3)

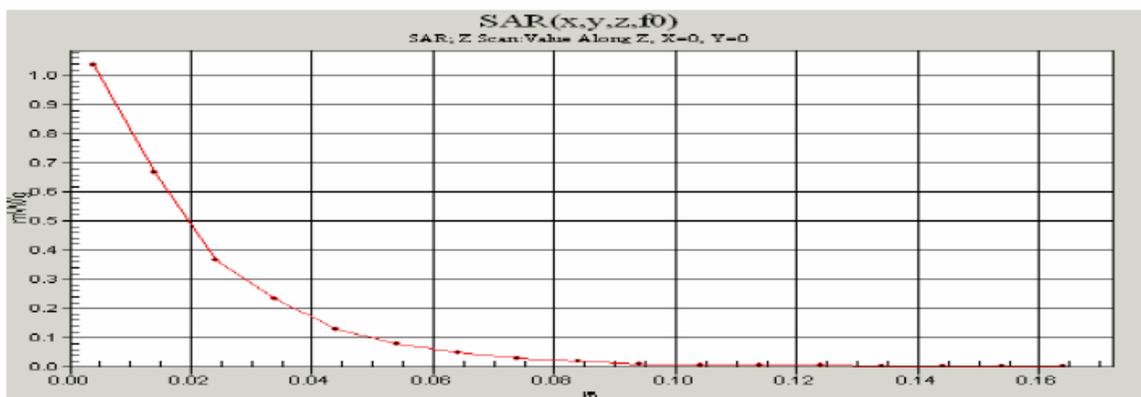
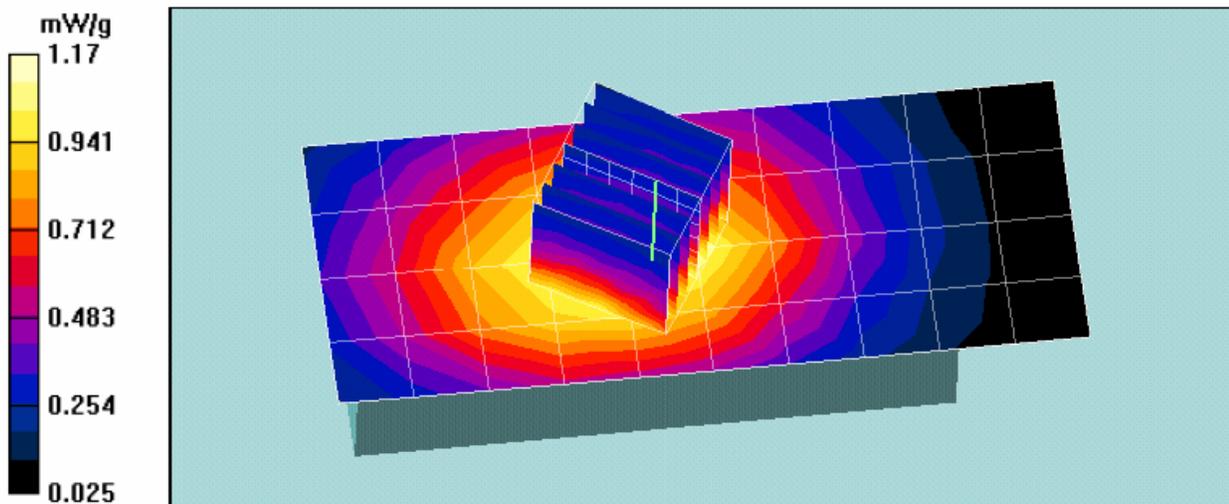
Duty Cycle: 1:1.5, Medium: 813 MHz FCC Body, Medium parameters used: $\sigma = 0.94$ mho/m, $\epsilon_r = 53.8$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

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

Reference Value = 30.8 V/m; Power Drift = -0.391 dB

SAR(1 g) = 1.12 mW/g



Motorola GEMS EME Laboratory

FCC ID: AZ489FT5845; Test Date: 5/18/05

Run #: 050518-09 Test operator: C. Miller

Sim. Tissue Temp: 21.9 (C)

Model #: H80XAH6RR1AN SN: 364VFEPSR4

Antenna: FIXED

TX Freq: 896.01875 MHz

Battery: SNN5705C

Start power: 0.664 W

Carry acc.: NNTN4747A

Audio/Data acc.: NTN8496A

Comments: DUT with carry accessory against the phantom

Probe: ET3DV6 - SN1383, Calibrated: 2/24/2005, ConvF(6.03, 6.03, 6.03)

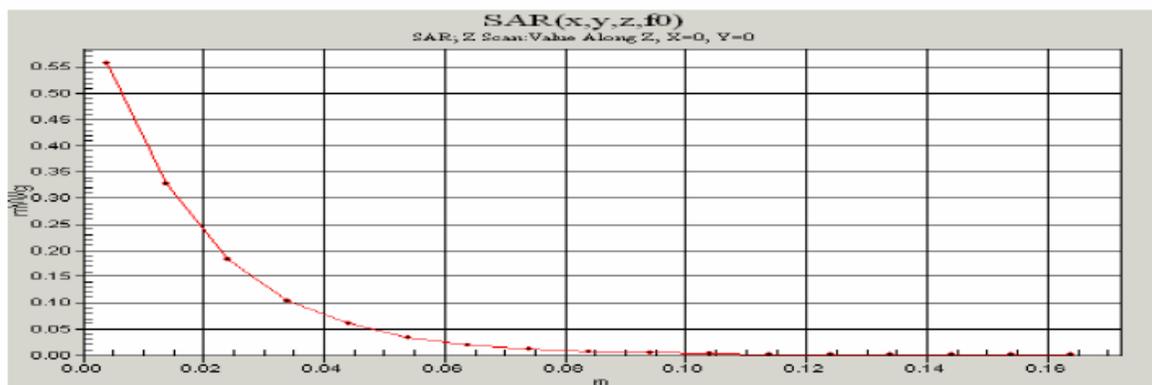
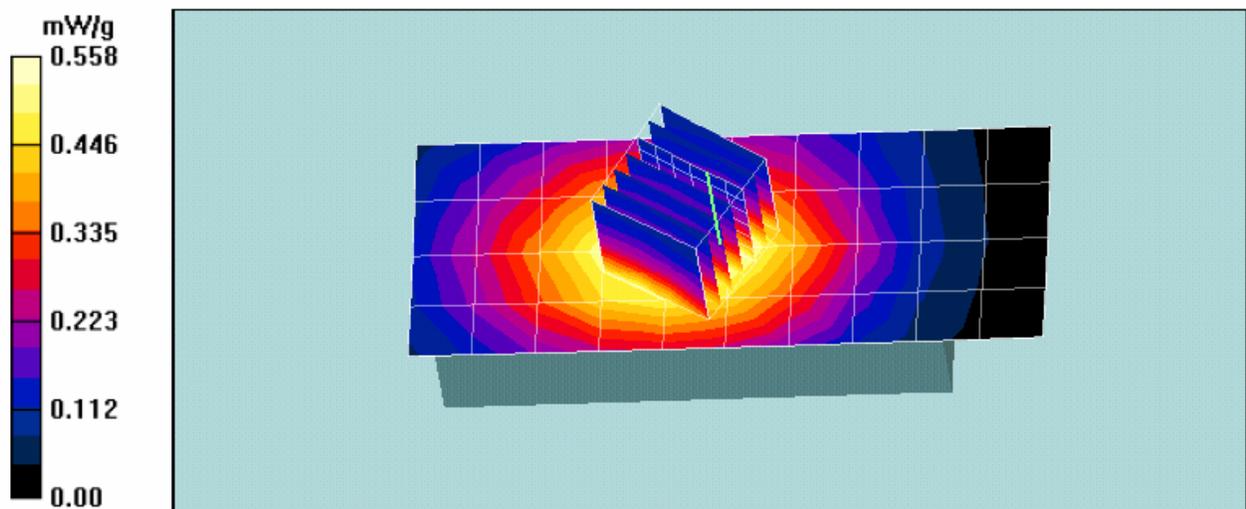
Duty Cycle: 1:3, Medium: 899 MHz FCC Body, Medium parameters used: $\sigma = 1.03$ mho/m, $\epsilon_r = 53$; $\rho = 1000$ kg/m³

Electronics: DAE3 Sn406, Calibrated: 11/17/2004

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

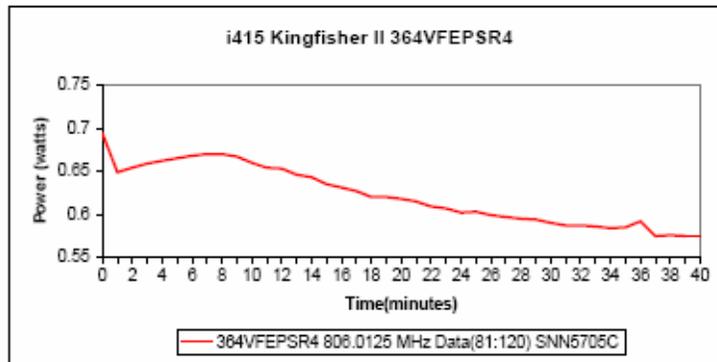
Reference Value = 21.1 V/m; Power Drift = -0.426 dB

SAR(1 g) = 0.537 mW/g



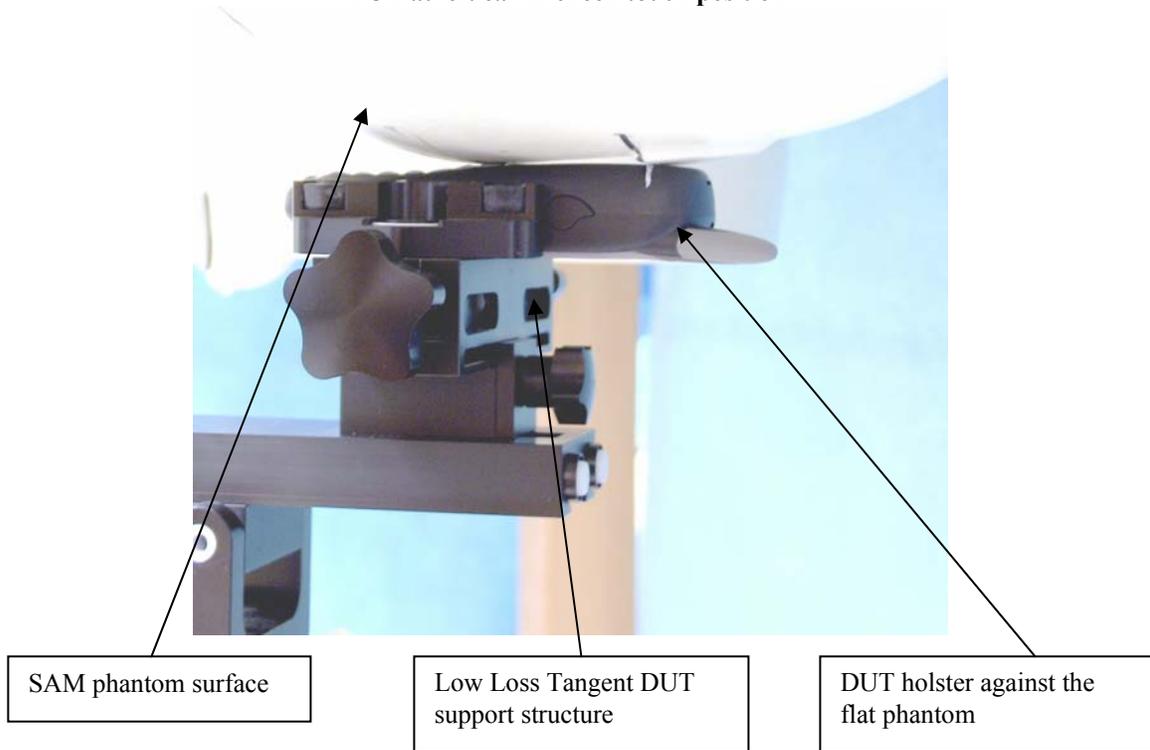
APPENDIX F
DUT Supplementary Data (Power slump)

Radio Sn	364VFEPSR4
Frequency	806.0125 MHz
Mode	Data(81:120)
Battery	SNN5705C
Time(minutes)	Power (Watts)
0	0.694
1	0.649
2	0.654
3	0.659
4	0.662
5	0.665
6	0.668
7	0.67
8	0.67
9	0.667
10	0.66
11	0.654
12	0.653
13	0.646
14	0.643
15	0.635
16	0.631
17	0.627
18	0.62
19	0.62
20	0.618
21	0.615
22	0.609
23	0.607
24	0.602
25	0.603
26	0.599
27	0.597
28	0.595
29	0.594
30	0.59
31	0.587
32	0.587
33	0.586
34	0.584
35	0.585
36	0.592
37	0.575
38	0.576
39	0.575
40	0.575

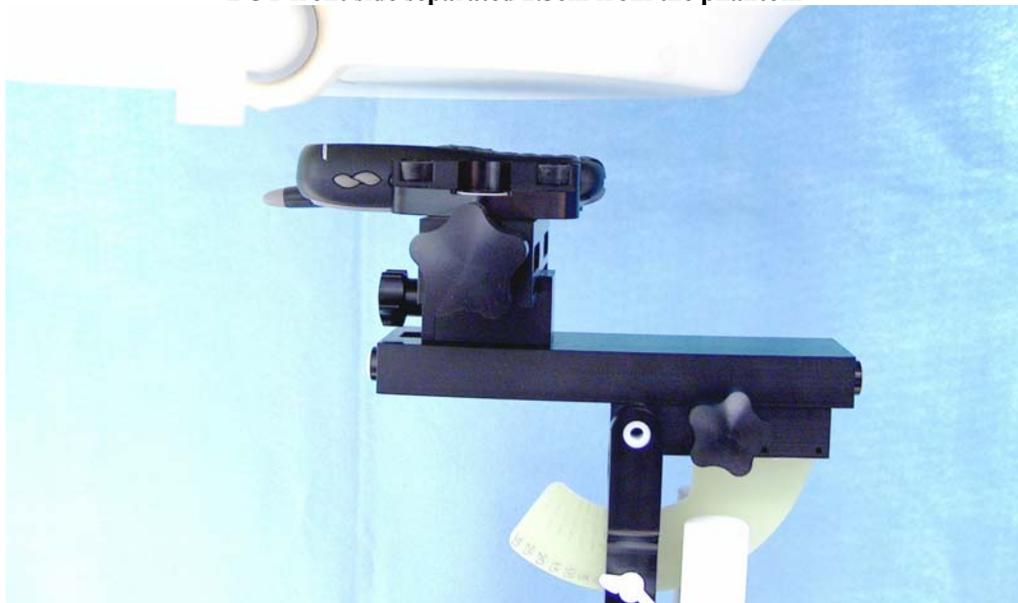


Appendix G DUT Test Position Photos

**Figure 1: Highest S.A.R. Test Position (Head)
DUT at left ear in cheek touch position**



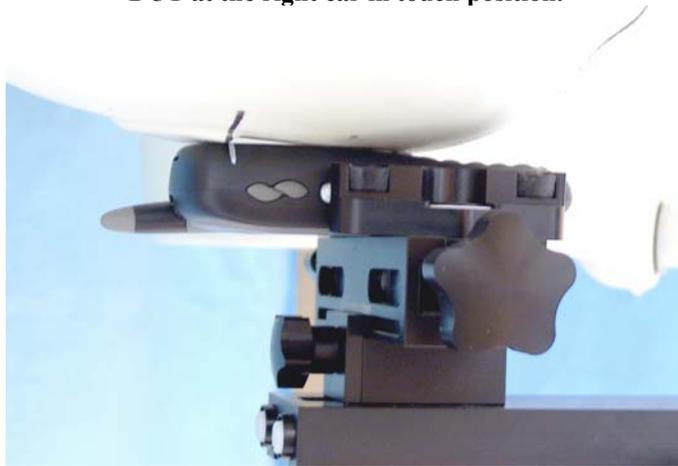
**Figure 2: Highest S.A.R. Test Position (face)
DUT front side separated 2.5cm from the phantom**



**Figure 3: Highest S.A.R. Test Position (Body)
DUT with carry accessory against the phantom.
(same position used for each attached accessories)**



**Figure 4: Head Assessment
DUT at the right ear in touch position.**



**Figure 5: Head Assessment
DUT at the right ear in tilt position.**



**Figure 6: Head Assessment
DUT at the left ear in tilt position.**



**Figure 7: Body Assessment
DUT back separated 2.5cm from the phantom**



**Figure 8: Body Assessment
DUT front separated 2.5cm from the phantom**



Appendix H DUT and Accessory Photos

The purpose of this appendix is to illustrate the body-worn carry accessory(ies) for FCC ID: AZ489FT5845. The sample that was used in the following photos represents the product used to obtain the results presented herein and was used in this section to demonstrate the offered body-worn accessory(ies).



Photo 1.
Model NNTN4747A
Back View



Photo 2.
Model NNTN4747A
Side View

Appendix I DUT Body-worn Separation Distances

The following table summarizes the test status and separation distance 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
NNTN4747A	Yes	25-27	NA

Audio Acc. Models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
NNTN4620A	Yes	NA	NA
SYN8146C	Yes	NA	NA
SYN7875C	Yes	NA	NA
NTN8496A	Yes	NA	NA
NTN8513B	Yes	NA	NA
SYN8390B	Yes	NA	NA
NNTN4033A	Yes	NA	NA
NSN6066A	Yes	NA	NA
NNTN5004A	Yes	NA	NA
NNTN5005A	Yes	NA	NA
NNTN5006A	Yes	NA	NA
NNTN5330A	Yes	NA	NA
NNTN5211A	Yes	NA	NA

Data cable Models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
NKN6560A	Yes	NA	NA
NKN6559A	Yes	NA	NA
NNTN5405A	Yes	NA	NA
NNTN5406A	Yes	NA	NA

Other attachment models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
NNTN6368A	Yes	NA	Tested with offered battery