MOTOROLA

ACCREDITED

TESTING CERT # 2518.01

FCC ID: AZ489FT4881
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 2 of 2

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

Date of Report: 12/12/07
Report Revision: Rev O
Report ID: XTS4000 ASTRO _071212_SR5727

Responsible Engineer:	Michael Sailsman (SR. Staff EME Engineer)
Date/s Tested:	11/19/07-11/26/07
Manufacturer/Location:	Motorola/Penang
Sector/Group/Div.:	GTDG
Date submitted for test:	11/16/07
DUT Description:	Covert UHF1 380-470 MHz 1-2 Watt radio
Test TX mode(s):	CW
Max. Power output:	2.8 W
Nominal Power:	2.0 W
Tx Frequency Bands:	380-470MHz
Signaling type:	FM, APCO 25
Model(s) Tested:	H18QCN9PW9AN/NUE3623A
Model(s) Certified:	H18QCN9PW9AN/NUE3623A
Serial Number(s):	310071203
Classification:	Occupational/Controlled
Rule Part(s):	90

Antenna(s):
NAE6552A (380-470MHz retractable ¼ wave antenna, -4dBi)

Battery(ies):

NNTN6944A (630mAh Standard Li Ion)

Body worn accessory(ies):

NNTN6946A (Leather belt clip), NNTN6945A (Plastic belt clip)

Audio/Data cable accessory(ies):
NNTN5006BP (Headset Earbud w/ PTT), NNTN5211B (2-wire Surveillance Kit)

Max. Calc. : 1-g Avg. SAR: 1.23 W/kg (Body); 10-g Avg. SAR: 0.90 W/kg (Body)
Max. Calc. : 1-g Avg. SAR: 1.34 W/kg (Face); 10-g Avg. SAR: 1.00 W/kg (Face)
Max. Calc. : 1-g Avg. SAR: 5.69 W/kg (Head); 10-g Avg. SAR: 3.16 W/kg (Head)

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

Approval Date: 12/12/07

Certification Date: 12/13/07

Certification No.: L1071219P

Appendix E
DUT Scans (Shortened Scans and Highest SAR configurations)

Shortened Scan Results

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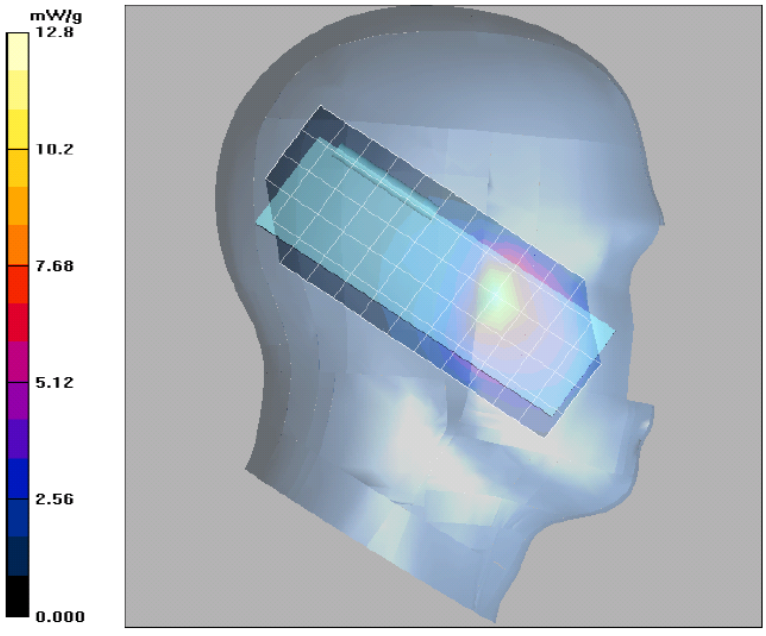
Date/Time: 11/21/2007 12:03:57 PM

Robot# / Run#:DASY4-FL-3/JsT(Vee)-Lear-071121-04
Phantom# / Tissue Temp.: SAMTP1209 / 21.0 (C)
DUT Model# / Serial#: H18QCN9PW9AN/NUE3623A / 310071203
Antenna / TX Freq.: IN / 380.0000 (MHz)
Battery: NNTN6944A Carry Acc. / Cable Acc.: None / None
Start Power: 2.88 (W)

Comments: Short Scan at the face against SAM phantom
Shortened scan reflect highest SAR producing configuration; Run time 8 minutes.
Representative "normal" scan run time was 19 minutes
"Shortened" scan max calculated SAR using SAR drift: 1-g Avg. = 5.56mW/g; 10-g Avg. = 3.15mW/g
"Normal" scan max calculated SAR using SAR drift: 1-g Avg. = 5.69mW/g; 10-g Avg. = 3.16mW/g
(see part 1 of 2 section 9.0 run # CM-Lear-071120-14)

Probe: ET3DV6 - SN1393, Calibrated: 3/19/2007, ConvF(7.36, 7.36, 7.36) Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 425 MHz; σ = 0.85 mho/m; εr = 44; ρ = 1000 kg/m3
Left Ear-Touch position/5x5x7 Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm Reference Value = 76.0 V/m; Power Drift = -0.372 dB Peak SAR (extrapolated) = 23.2 W/kg
SAR(1 g) = 10.2 mW/g; SAR(10 g) = 5.79 mW/g Maximum value of SAR (measured) = 11.1 mW/g



Highest SAR Configurations Results

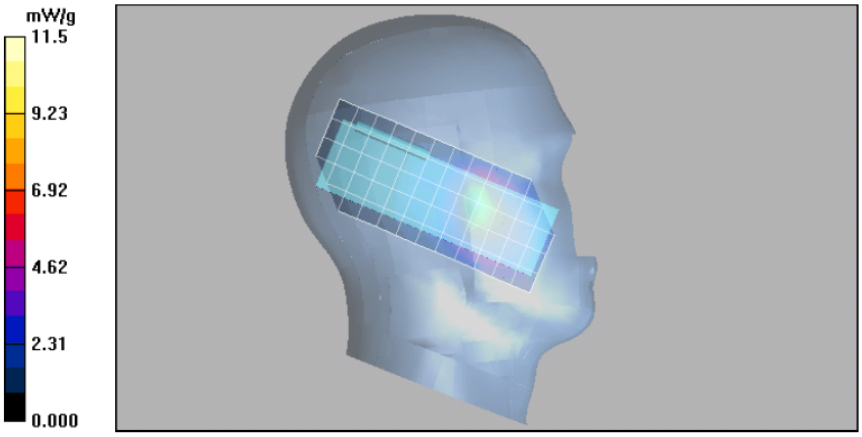
Motorola Government & Public Safety EME Laboratory
Date/Time: 11/20/2007 5:56:58 PM

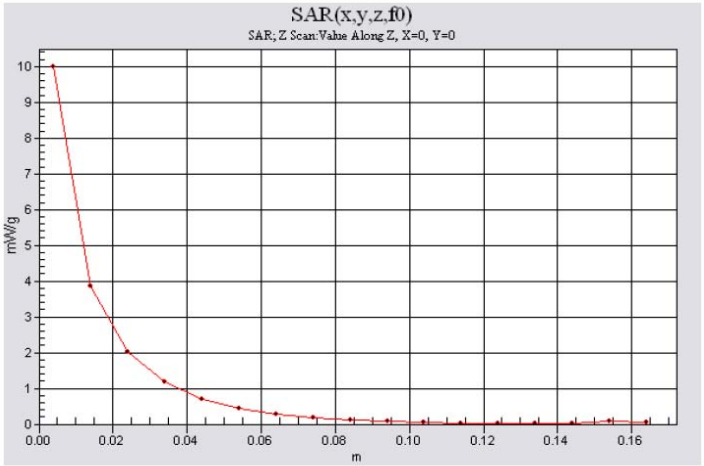
Robot# / Run#:DASY4-FL-3/CM-Lear-071120-14
Phantom# / Tissue Temp.: SAMTP1209 / 21.2 (C)
DUT Model# / Serial#: H18QCN9PW9AN/NUE3623A / 310071203
Antenna / TX Freq.: IN / 380.0000 (MHz)
Battery: NNTN6944A
Carry Acc. / Cable Acc.: None / None
Start Power: 2.88 (W)

Comments: Touch, Full scan

Probe: ET3DV6 - SN1393, Calibrated: 3/19/2007, ConvF(7.36, 7.36, 7.36)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 425 MHz; σ = 0.86 mho/m; ε_r = 44.4; ρ = 1000 kg/m^3

Left Ear-Touch position/5x5x7 Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 74.4 V/m; Power Drift = -0.453 dB
Peak SAR (extrapolated) = 26.5 W/kg
SAR(1 g) = 10.3 mW/g; SAR(10 g) = 5.71 mW/g
Maximum value of SAR (measured) = 10.3 mW/g





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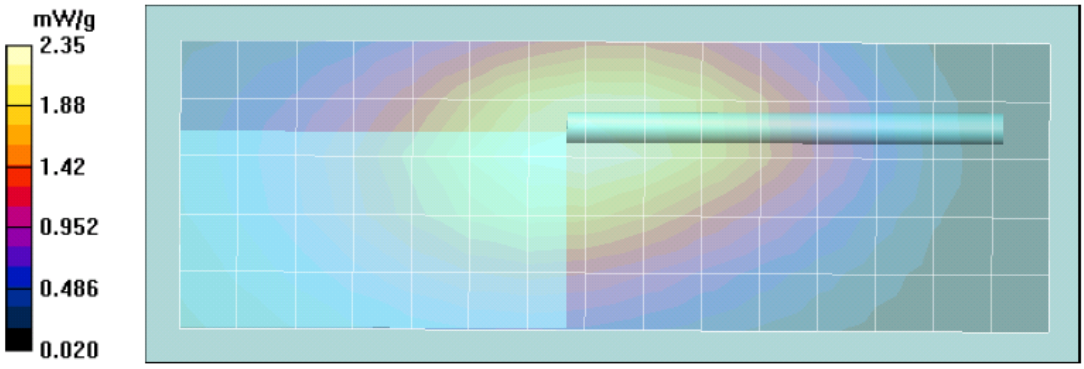
Date/Time: 11/26/2007 11:40:53 AM

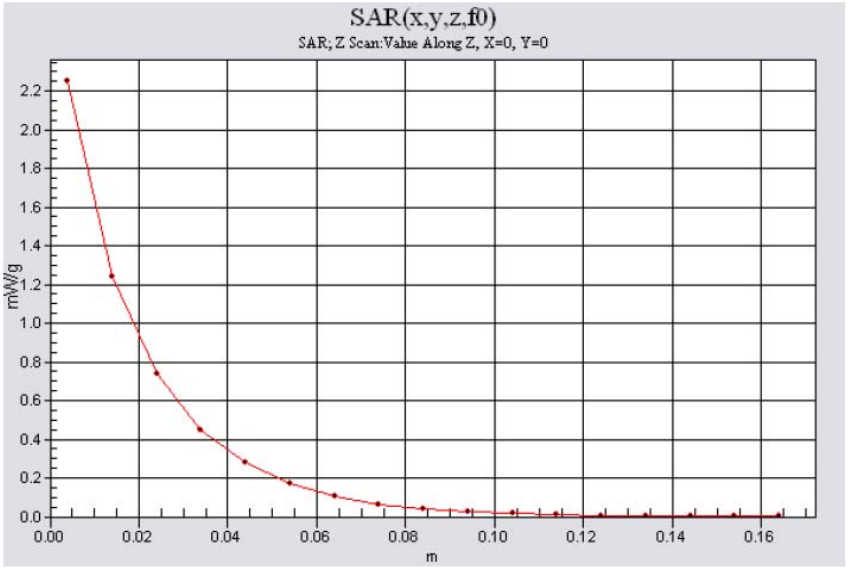
Robot# / Run#:DASY4-FL-3/JsT(Vee)-Ab-071126-03
Phantom# / Tissue Temp.: 80302002B-S8 / 21.9 (C)
DUT Model# / Serial#: H18QCN9PW9AN/NUE3623A / 310071203
Antenna / TX Freq.: OUT / 380.0000 (MHz)
Battery: NNTN6944A
Carry Acc. / Cable Acc.: None / NNTN5006BP
Start Power: 2.90 (W)

Comments: Full Scan; Back- Antenna @ 2.5 cm.

Probe: ET3DV6 - SN1393, Calibrated: 3/19/2007, ConvF(7.9, 7.9, 7.9)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 425 MHz; σ = 0.92 mho/m; ε_r = 55.9; ρ = 1000 kg/m^3

Ab Scan/5x5x7 Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 50.7 V/m; Power Drift = -0.559 dB
Peak SAR (extrapolated) = 3.08 W/kg
SAR(1 g) = 2.17 mW/g; SAR(10 g) = 1.58 mW/g
Maximum value of SAR (measured) = 2.29 mW/g





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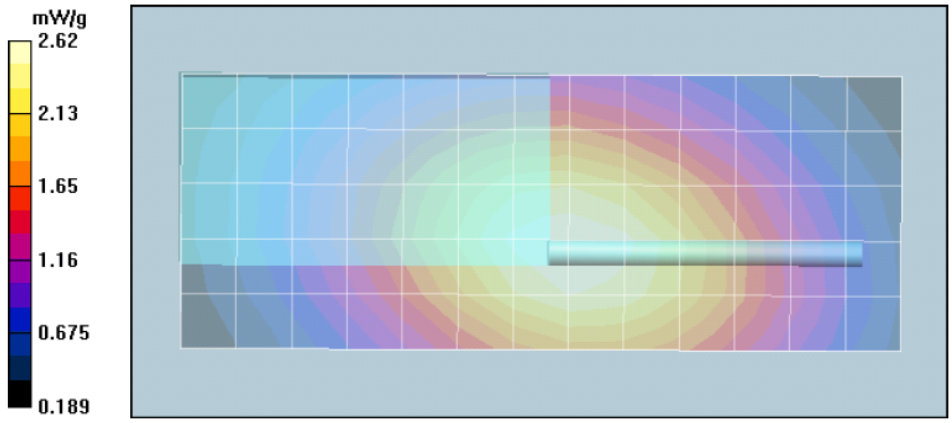
Date/Time: 11/21/2007 10:23:28 AM

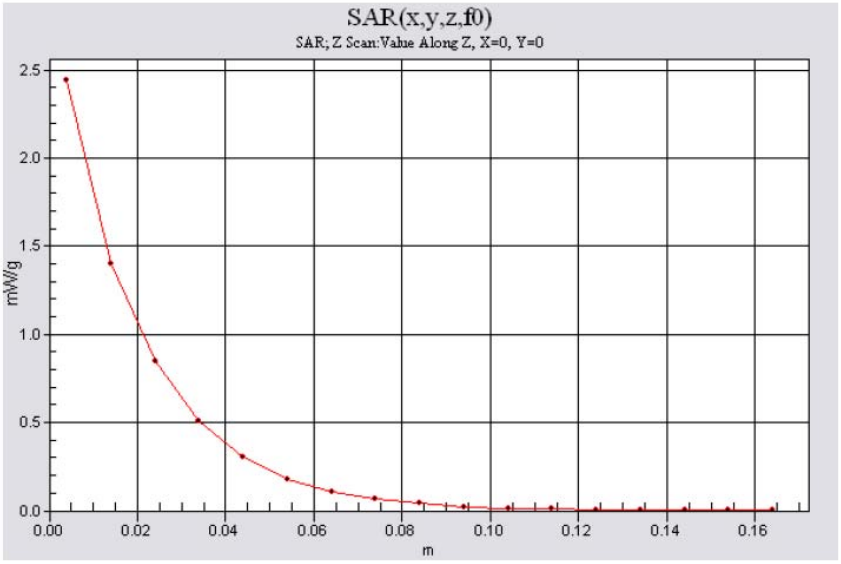
Robot# / Run#:DASY4-FL-3/JsT(Vee)-Face-071121-03
Phantom# / Tissue Temp.: SAMTP1209 / 21.1 (C)
DUT Model# / Serial#: H18QCN9PW9AN/NUE3623A / 310071203
Antenna / TX Freq.: OUT / 380.0000 (MHz)
Battery: NNTN6944A
Carry Acc. / Cable Acc.: None / None
Start Power: 2.88 (W)

Comments: Full Scan; Flip closed

Probe: ET3DV6 - SN1393, Calibrated: 3/19/2007, ConvF(7.36, 7.36, 7.36)
Electronics: DAE3 Sn401, Calibrated: 8/28/2007
Duty Cycle: 1:1, Medium parameters used: f = 425 MHz; σ = 0.85 mho/m; ε_r = 44; ρ = 1000 kg/m^3

Face Scan/5x5x7 Zoom Scan (5x5x7)/Cube 0: Measurement grid: dx=7.5mm, dy=7.5mm, dz=5mm
Reference Value = 55.6 V/m; Power Drift = -0.505 dB
Peak SAR (extrapolated) = 3.28 W/kg
SAR(1 g) = 2.39 mW/g; SAR(10 g) = 1.78 mW/g
Maximum value of SAR (measured) = 2.49 mW/g



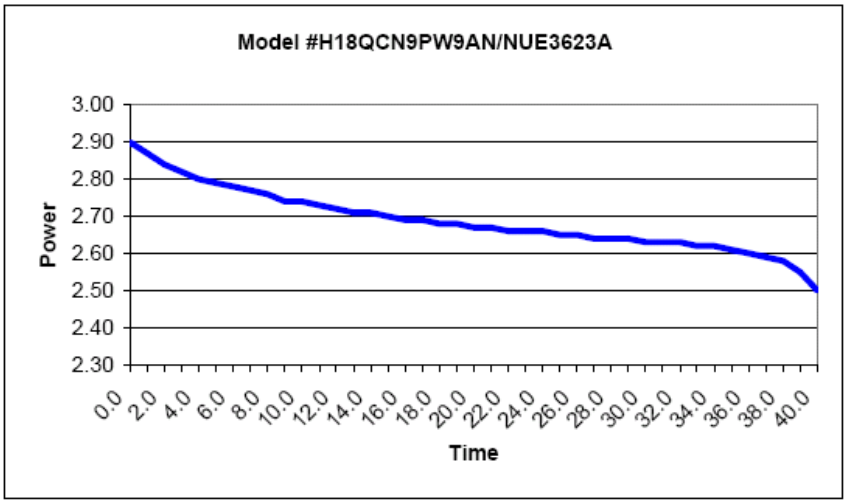


APPENDIX F
DUT Supplementary Data (Power slump)

Model #H18QCN9PW9AN/NUE3623A
Serial #310071203

Battery	NNTN6944A	**Transmit Mode**	CW
Frequency	380.0000 MHz	**Audio Accessory**	None
Date	11/26/2007		

TX TIME (Minutes)	**Meaured Power (Watts)**
0.0	2.90
1.0	2.87
2.0	2.84
3.0	2.82
4.0	2.80
5.0	2.79
6.0	2.78
7.0	2.77
8.0	2.76
9.0	2.74
10.0	2.74
11.0	2.73
12.0	2.72
13.0	2.71
14.0	2.71
15.0	2.70
16.0	2.69
17.0	2.69
18.0	2.68
19.0	2.68
20.0	2.67
21.0	2.67
22.0	2.66
23.0	2.66
24.0	2.66
25.0	2.65
26.0	2.65
27.0	2.64
28.0	2.64
29.0	2.64
30.0	2.63
31.0	2.63
32.0	2.63
33.0	2.62
34.0	2.62
35.0	2.61
36.0	2.60
37.0	2.59
38.0	2.58
39.0	2.55
40.0	2.50



Appendix G
DUT Test Position Photos

Figure 1: Highest SAR Test Position (Body)
DUT back towards phantom with antenna separated 2.5cm;
worst case audio accessory attached, and antenna extended
(same position used for all other audio accessories and for antenna retracted)

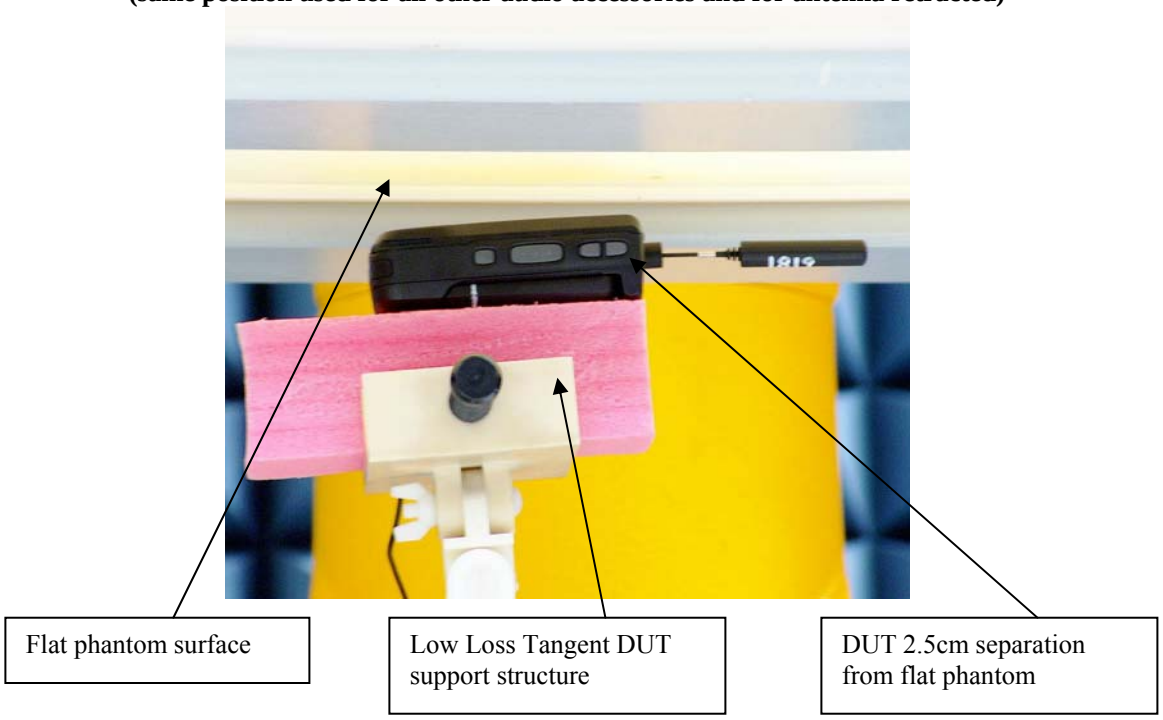


Figure 2: Highest SAR Test Position (face)
DUT flip closed w/ front side separated 2.5cm from the phantom
(same position used for antenna extended)

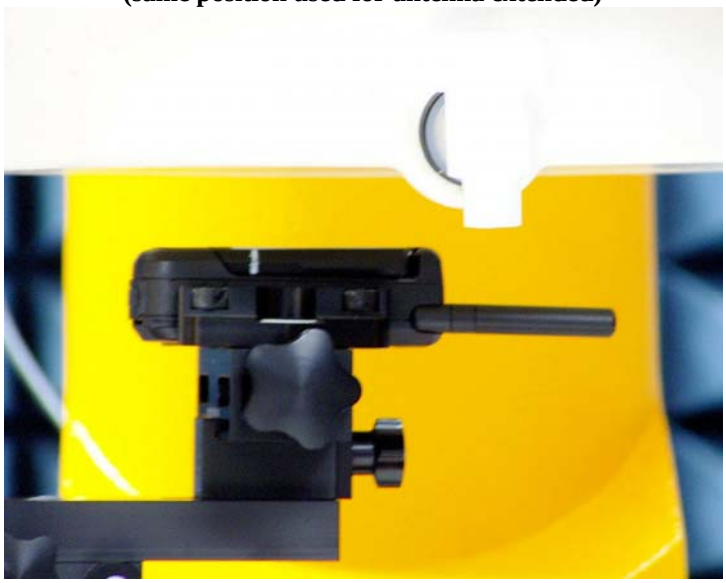


Figure 3: Highest SAR Test Position (Head)
DUT at the left ear in cheek touch position.
(same position used for antenna extended)

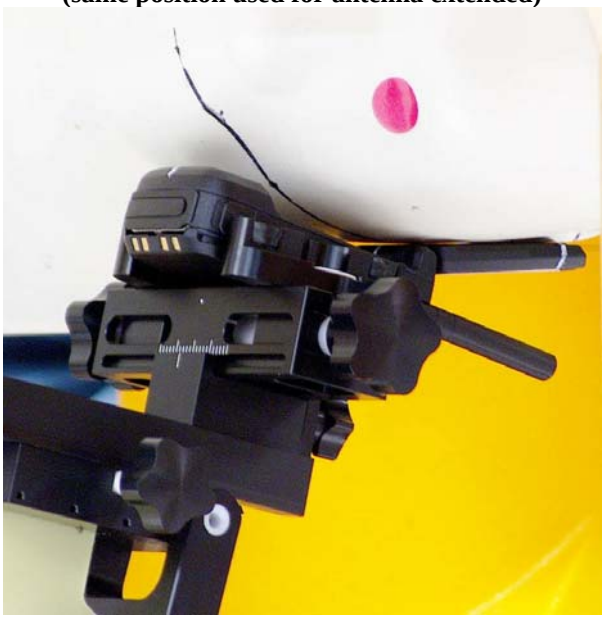


Figure 4: Body Assessment
DUT w/ plastic belt clip model NNTN6945A against the phantom.
(same position used for antenna retracted)

Figure 5: Body Assessment
DUT w/ leather belt clip model NNTN6946A against the phantom.
(same position used for antenna retracted)

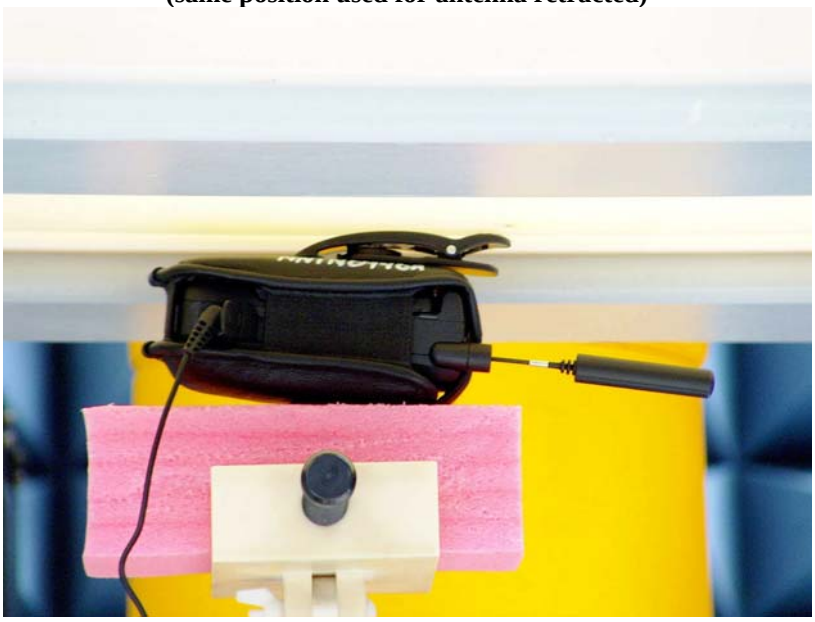


Figure 6: Body Assessment
DUT w/ front side separated 2.5cm from the phantom.
(same position used for antenna retracted)

Figure 7: Face Assessment
DUT Flip opened w/ front side separated 2.5cm from the phantom.
(same position used for antenna extended)

Figure 8: Assessment at the Head
DUT at the left ear in tilt position.
(same position used for antenna extended)

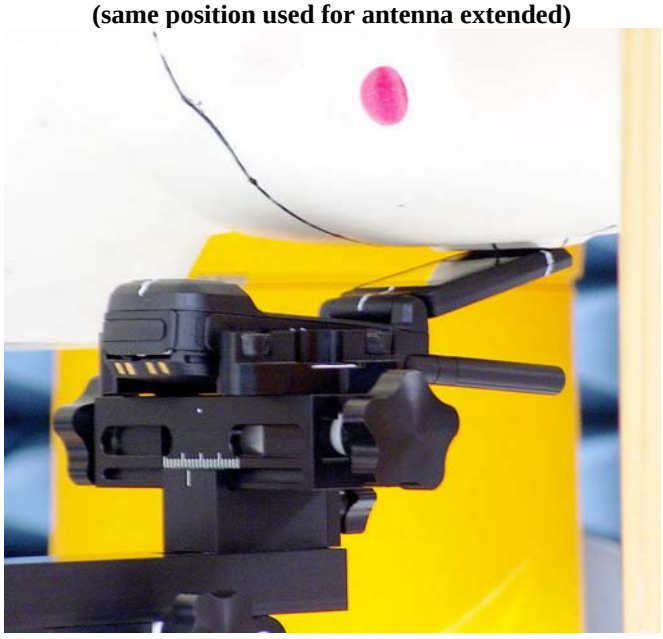


Figure 9: Assessment at the Head
DUT at the right ear in cheek touch position.
(same position used for antenna extended)

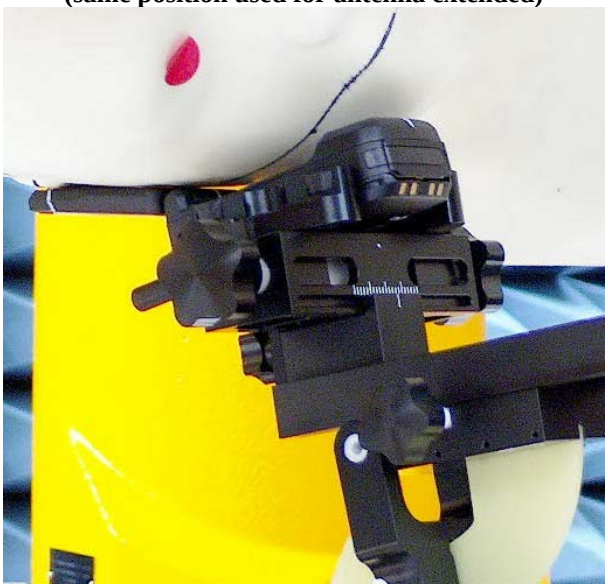
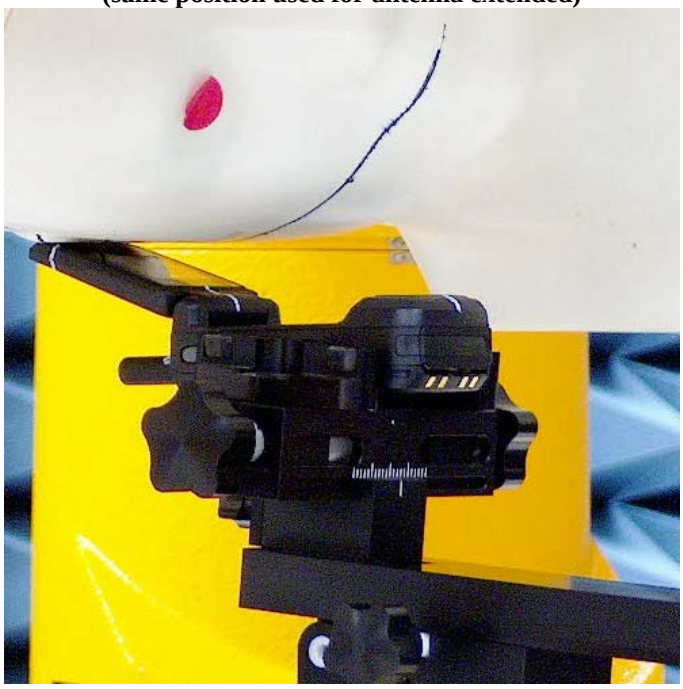


Figure 10: Assessment at the Head
DUT at the right ear in tilt position.
(same position used for antenna extended)



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 NNTN6945A
Back View

Photo 2.
Model NNTN6945A
Front View

Photo 3.
Model NNTN6945A
Side View

Photo 4.
Model NNTN6946A
Back View

Photo 5.
Model NNTN6946A
Front View

Photo 6.
Model NNTN6946A
Side View

Appendix I

DUT Antenna 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
NNTN6945A	Yes	35-41	NA
NNTN6946A	Yes	40-51	NA

Audio Acc. Models	Tested ?	Separation distances between DUT antenna and phantom surface. (mm)	Comments
NNTN5006A	Yes	NA	NA
NNTN5211B	Yes	NA	NA