MOTOROLA

ACCREDITED

CGISS EME Test Laboratory
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S.A.R. EME Compliance Test Report
Part 1 of 2

Date of Report:	February 13, 2004
Report Revision:	Rev. B
Manufacturer:	Motorola
Product Description:	1:6, 1:3, 81:120, 1:12 TDMA; 64 QAM, 16 QAM & QPSK Modulation; 0.6 W Pulse average
FCC ID:	**AZ489FT5828**
Device Model:	H74XAH6RR4AN/NUF3783A

Test Period:	1/21/04 - 2/3/04
EME Tech:	Ed Church
EME Eng.:	Stephen Whalen (Sr. EME Eng.)
Author:	Michael Sailsman Global EME Regulatory Affairs Liaison

Note: 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.

Deanna Zakharia signature on file for Ken — 2/13/04

Ken Enger
Senior Resource Manager, Laboratory Director, CGISS EME Lab

Date Approved

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REVISION HISTORY

Date	Revision	Comments
2/5/04	O	Release of Prototype results
2/11/04	A	Updated antenna gain information in section 3.0
2/13/04	B	Corrected error in antenna gain information in section 3.0; Updated A2LA certification number on cover page

1.0 Introduction

This report details the utilization, test setup, test equipment, and test results of the Specific Absorption Rate (S.A.R.) measurements performed at the CGISS EME Test Lab for model number H74XAH6RR4AN/NUF3783A, FCC ID: AZ489FT5828.

The applicable exposure environment is General Population/Uncontrolled.

2.0 Reference Standards and Guidelines

This product is designed to comply with the following national and international standards and guidelines.

- United States Federal Communications Commission, Code of Federal Regulations; 47CFR part 2 sub-part J
- IEEE 1528, 2003 "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques"
- American National Standards Institute (ANSI) / Institute of Electrical and Electronic Engineers (IEEE) C95. 1-1992
- Institute of Electrical and Electronic Engineers (IEEE) C95.1-1999 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Terminal frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz, 1999
- Australian Communications Authority Radiocommunications (Electromagnetic Radiation - Human Exposure) Standard 2003
- ANATEL, Brazil Regulatory Authority, Resolution 256 (April 11, 2001) "additional requirements for SMR, cellular and PCS product certification."

3.0 Description of Test Sample

FCC ID: AZ489FT5828 is a digital multi-service data capable device that employs time division multiplexing transmission technology with a duty cycle ranging from 16.67% to 33.33% using 16-QAM modulation for voice or circuit data transmission. There is a Split 1:3 mode that operates using a 16.67% transmission duty cycle. Two 7.5ms pulses occur during the six time slots within the 90-msec frame format. This mode is available in both the 806-825MHz and 896-902MHz bands in the telephone interconnect mode only. Packet data transmission is also supported up to a maximum duty cycle of 67.5% using quad QPSK modulation.
This device will be marketed to and used by the general population. This device may be used while held against the head in voice mode, in front of the face in PTT mode, and against the body in voice, PTT and data modes.
FCC ID: AZ489FT5828 is capable of operating in the 806-825 MHz and 896-902MHz bands. Packet data transmission is not available while transmitting in the 896-902 MHz band. The rated power is 0.6 watts pulsed averaged. The maximum output is 0.7 watts pulsed average as defined by the upper limit of the production line final test station.

FCC ID: AZ489FT5828 is offered with the following options and accessories:

Antenna	**Description**
8585327F01	Meander Flex ¼ wave antenna; 806-941 MHz; Extended: -1.10 dBd gain (813MHz), 0.3dBd gain (896MHz) Retracted: -3.40 dBd gain (813 MHz), -3.20dBd gain (896MHz)

Batteries

NNTN4930A	700mAh (5mm) Lithium Ion
NNTN5195A	950mAh (8mm) Lithium Ion
1585164F01	Battery cover (5mm)
1585169F02	Battery cover (8mm)

Body-worn Accessories

NNTN5002A	Black Carry Holster
NNTN4747A	Belt clip

Applicable Audio accessories

SYN8390B	Privacy Earpiece and Mic
NNTN4033A	Privacy earpiece and Mic w/ PTT
NSN6066A	Remote speaker Mic
NNTN4620A	Silver Earbud
SYN8146C	Lightweight over the ear headset w/boom Mic
SYN7875C	Hearing Aid Neck loop
NTN8496A	Lightweight Headset w/mic
NTN8513B	Lightweight Headband
NNTN5004A	Over-the-ear Headset
NNTN5005A	Over-the-ear Headset
NNTN5006A	PTT headset (ear bud)

Other applicable options:

NKN6560A	RS232 Data Cable
NKN6559A	USB Data Cable

3.1 Test Signal

Test Signal mode:

Test Mode	X	Base Station		Simulator	

Transmission Mode:

CW	
Native Transmission	**X**
TDMA: 1:6, 1:3, 81:120	**X**
Other:	

3.2 Test Output Power

A table of the characteristic power slump versus time is provided in Appendix A for the worst case tested battery.

4.0 Description of Test Equipment

4.1 Descriptions of S.A.R. Measurement System

The laboratory utilizes a Dosimetric Assessment System (DASY3™) S.A.R. measurement system manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The test system consists of a Stäubli RX90L robot with an ET3DV6 E-Field probe. Please reference the SPEAG user manual and application notes for detailed probe, robot, and S.A.R. computational procedures.
The S.A.R. measurements were conducted with probe model/serial number ET3DV6/SN1393. The system performance check was conducted daily and within 24 hours prior to testing. DASY output files of the system performance test results and the probe/dipole calibration certificates are included in appendices C and D respectively. The table below summarizes the system performance check results normalized to 1W.

Probe Serial #	Tissue Type	Probe Cal Date	Dipole Kit / Serial #	System Perf. 1-g S.A.R. Result when normalized to 1W (mW/g)	Reference 1-g S.A.R @ 1W (mW/g)	Test Date(s)
1393	FCC Body	4/16/03	D900V2/85	10.875 _/- 0.275	11.170 +/- 10%	1/28/04-2/2/04 5 test days
1393	IEEE Head	4/16/03	D900V2/85	11.965 +/- 0.405	12.000 +/- 10%	1/21/04-1/28/04 7 test days

The DASY3™ system is operated per the instructions in the DASY3™ Users Manual. The complete manual is available directly from SPEAG™. All measurement equipment used to assess S.A.R. EME compliance was calibrated according to 17025 A2LA guidelines.

4.2 Description of Phantom

4.2.1 Flat Phantom

A rectangular shaped box made of low loss acrylic material. The phantom is mounted on a wooden supporting structure that has a loss tangent of < 0.05. The structure has a 60.96 cm x 15.24 cm opening at its center to allow positioning the DUT to the phantom's surface. The flat phantom dimensions used for S.A.R. performance assessment are L = 40cm, W = 23cm, H = 20cm, Surface Thickness = 0.2cm.

4.2.2 SAM Phantom

A SAM TP1208 phantom supplied by SPEAG was used to assess S.A.R. performance at the head.

4.3 Simulated Tissue Properties

4.3.1 Type of Simulated Tissue

The simulated tissues used are compliant to that specified in FCC Supplement C (Edition 01-01) to OET Bulletin 65 (Edition 97-01) and IEEE 1528, 2003 "Recommended Practice for Determining the Peak Spatial-Average Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques"

Simulated Tissue	Body Position
FCC Body	Torso
IEEE Head	Head/Face

4.3.2 Simulated Tissue Composition

	Tissue Ingredients (%)					
	900MHz		NA		NA	
	Head	Body	Head	Body	Head	Body
Sugar	56.50	44.90	NA	NA	NA	NA
DGBE (Glycol)	NA	NA	NA	NA	NA	NA
De ionized -Water	40.95	53.06	NA	NA	NA	NA
Salt	1.45	0.94	NA	NA	NA	NA
HEC	1	1	NA	NA	NA	NA
Bact.	0.1	0.1	NA	NA	NA	NA

Characterization of Simulated tissue materials and ambient conditions:

Simulated tissue prepared for S.A.R. measurements is measured daily and within 24 hours prior to actual S.A.R. testing to verify that the tissue is within 5% of target parameters at the center of the transmit band. This measurement is done using the Agilent (HP) probe kit model 85070C and a HP8753D Network Analyzer.

Target tissue parameters

FCC Body				
Frequency (MHz)	**Di-electric Constant Target**	**Di-electric Constant Meas. (Range)**	**Conductivity Target S/m**	**Conductivity Meas. (Range) S/m**
813	55.3	53.5-53.8	0.97	0.93-0.94
899	55.0	52.7-52.9	1.05	1.02-1.02

IEEE Head				
Frequency (MHz)	**Di-electric Constant Target**	**Di-electric Constant Meas. (Range)**	**Conductivity Target S/m**	**Conductivity Meas. (Range) S/m**
813	41.6	41.6-42.3	0.90	0.92-0.93
899	41.5	40.5-41.0	0.97	1.01-1.01

4.4 Test conditions

The EME Laboratory ambient environment is well controlled resulting in very stable simulated tissue temperature and therefore stable dielectric properties. Simulated tissue temperature is measured prior to each scan to insure it is within +/- 2°C of the temperature at which the dielectric properties were determined. The liquid depth in the phantom used for measurements was 15cm +/- 0.5cm. Additional precautions are routinely taken to ensure the stability of the simulated tissue such as covering the phantoms when scans are not actively in process in order to minimize evaporation. The lab environment is continuously monitored. The table below presents the range and average environmental conditions during the S.A.R. tests reported herein:

	Target	**Measured**
Ambient Temperature	20 - 25 ˚C	Range: 21.0-25.6˚C Avg. 21.56˚C
Relative Humidity	30 - 70 %	Range: 30.6-53.4% Avg. 45.11%
Tissue Temperature	NA	Range: 20.7-21.6˚C Avg. 21.15˚C

The EME Lab RF environment uses a Spectrum Analyzer to monitor for extraneous large signal RF contaminants that could possibly affect the test results. If such unwanted signals are discovered the S.A.R scans are repeated. However, the lab environment is sufficiently protected such that no S.A.R. impacting interference has been experienced to date.

5.0 Description of Test Procedure

All options and accessories listed in section 3.0 were considered in order to develop the S.A.R. test plan for this product. S.A.R. measurements were performed using a flat phantom to assess performance at the body and a SAM phantom to assess performance at the side of the head and in front of the face using the applicable transmission modes.

Assessments at the head (806-825MHz)

The DUT was assessed at the TX center frequency of the band, in the 1:3 transmission mode, using the offered batteries, with the antenna retracted, in the cheek touch position, at the left ear of the SAM phantom.

The DUT was assessed at the TX center frequency of the band, in the 1:3 transmission mode, using the worst case battery from above, with the antenna extended, in the cheek touch position, at the left ear of the SAM phantom.

The DUT was assessed at the TX center frequency of the band, in the 1:3 transmission mode, using the worst case battery from above, with the antenna retracted and extended, in the 15˚ tilt position, at the left ear of the SAM phantom.

The DUT was assessed at the TX band edges, in 1:3 transmission mode, with the antenna retracted and extended, using the test configuration from above that produced the highest S.A.R results.

The same procedure above was used for assessment at the right ear.

The DUT was assessed at the TX center frequency of the band, in the 1:6 transmission mode, with the antenna retracted and extended, with the flip opened and closed, and with 2.5cm separation distance from the flat area of the SAM phantom, using the offered batteries.

Band edge assessment with 2.5cm separation distance from the flat area of the SAM phantom was done with the antenna retracted and extended, using the test configuration from above that produced the highest S.A.R.

Assessments at the head (896-902MHz)

The DUT was assessed at the TX center frequency of the band, in the 1:3 transmission mode, using the offered batteries, with the antenna retracted, in the cheek touch position, at the left ear of the SAM phantom.

The DUT was assessed at the TX center frequency of the band, in the 1:3 transmission mode, using the worst case battery from above, with the antenna extended, in the cheek touch position, at the left ear of the SAM phantom.

The DUT was assessed at the TX center frequency of the band, in the 1:3 transmission mode, using the worst case battery from above, with the antenna retracted and extended, in the 15˚ tilt position, at the left ear of the SAM phantom.

The DUT was assessed at the TX band edges, in 1:3 transmission mode, with the antenna retracted and extended, using the test configuration from above that produced the highest S.A.R results.

The same procedure above was used for assessment at the right ear.

The DUT was assessed at the TX center frequency of the band, in the 1:6 transmission mode, with the antenna retracted and extended, with the flip opened and closed, and with 2.5cm separation distance from the flat area of the SAM phantom, using the offered batteries.

Band edge assessment with 2.5cm separation distance from the flat area of the SAM phantom was done with the antenna retracted and extended, using the test configuration from above that produced the highest S.A.R.

Shortened scan assessment at the head

A "shortened" scan assessment was done using the test configuration from above that produced the highest S.A.R. results overall at the head.

Assessments at the Body (806-825MHz)

The DUT was assessed at the TX center frequency of the band, in the 81:120 transmission mode, against the flat phantom, with the antenna in the retracted position, with each of the offered batteries, using the offered body worn holster, as well as with data cable model NKN6560A attached.

The DUT was assessed at the TX center frequency of the band, in the 81:120 transmission mode, against the flat phantom, with the antenna in the extended position, using the worst case test configuration from above.

The DUT was assessed at the TX center frequency of the band, in the 81:120 transmission mode, against the flat phantom, with the antenna in both the retracted and extended positions, with the worst case battery from above, using the offered belt clip, as well as with data cable model NKN6560A attached.

The DUT was assessed at the TX center frequency of the band, in the 81:120 transmission mode, against the flat phantom, with the antenna in both the retracted and extended positions, with the worst case battery from above, using the offered body worn holster, as well as with data cable model NKN6559A attached.

The DUT was assessed at the TX center frequency of the band, in the 81:120 transmission mode, against the flat phantom, with the antenna in both the retracted and extended positions, with the worst case battery from above, using the offered body worn holster, without any data cable attached.

The DUT was assessed at the TX center frequency of the band, in the 1:3 and 1:6 transmission modes, using the worst case test configuration from above, with the antenna retracted and extended, using each of the offered audio accessories.

The DUT was assessed at the edges of the TX band, using the over all worst case test configuration from above.

Assessments at the Body (896-902MHz)

The DUT was assessed at the low frequency of the TX band, in the 1:3 transmission mode, against the flat phantom, with the antenna in the retracted position, using the offered batteries and worst case body worn and audio accessories that produced the highest S.A.R. results from the audio accessories assessment performed in the 806-825MHz band.

The DUT was assessed at the low frequency of the TX band, in the 1:3 transmission mode, against the flat phantom, with the antenna in the extended position, using the worst case test configuration from above.

The DUT was assessed at the mid and high frequencies of the TX band, in the 1:3 transmission mode, against the flat phantom, with the antenna in the retracted and extended positions, using the worst case body worn and audio accessories that produced the highest S.A.R. results from the audio accessories assessment performed in the 806-825MHz band.

Note that data mode is not a user option in the 896-902MHz band therefore this test condition was not assessed.

Assessments at the body 2.5cm separation

The DUT was also assessed at the center frequency of the TX band, in the 81:120 transmission mode, with the front and back of the device separated 2.5cm from the flat phantom, with the antenna retracted and extended, using the worst case battery and frequency from the 806-825MHz body assessment above.

Shortened scan assessment at the body

A “shortened” scan was performed using the test configuration that produced the highest S.A.R. results overall at the body.

5.1 Device Test Positions

Reference Figure 1 for the device orientation and position which exhibited the highest S.A.R. performance.

5.1.1 Body

The DUT was positioned such that it was centered against the flat phantom with the offered body worn accessories and applicable attachments. The DUT was positioned with its' back and front housing separated 2.5cm from the flat phantom, with the antenna in the retracted and extended positions.

5.1.2 Head

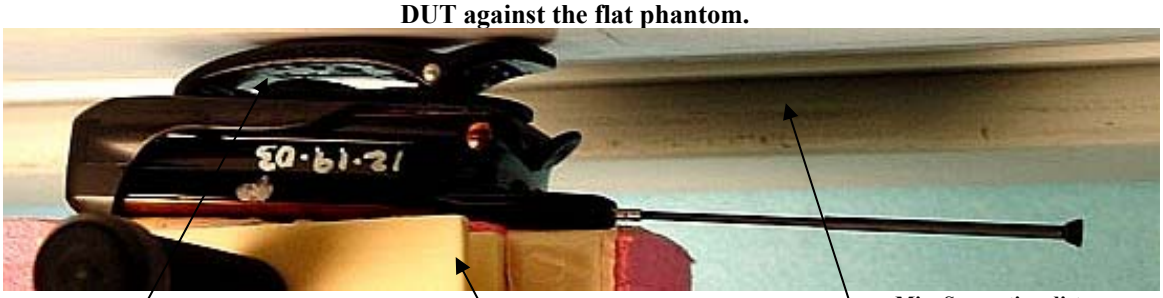
The DUT was placed in the cheek touch and 15° tilt positions at the left and right ears of the SAM phantom, with the antenna in the retracted and extended positions.

5.1.3 Face

The DUT was placed with 2.5cm separation from the flat area of the SAM phantom, with the flip opened and closed and with the antenna in the retracted and extended positions.

5.2 Test Position Photographs

Figure 1: Highest S.A.R. Test Position (@ Body)
DUT against the flat phantom.



Min. Separation distances:
Ant. Base = 3.1cm
Ant. Tip = 3.5cm

DUT against the flat phantom

< 0.05 Loss Tangent DUT support structure

Flat phantom Support structure and opening

Figure 2. Assessment @ the Left ear; antenna retracted.
DUT in 15° tilt position. (Same position used for antenna extended.)

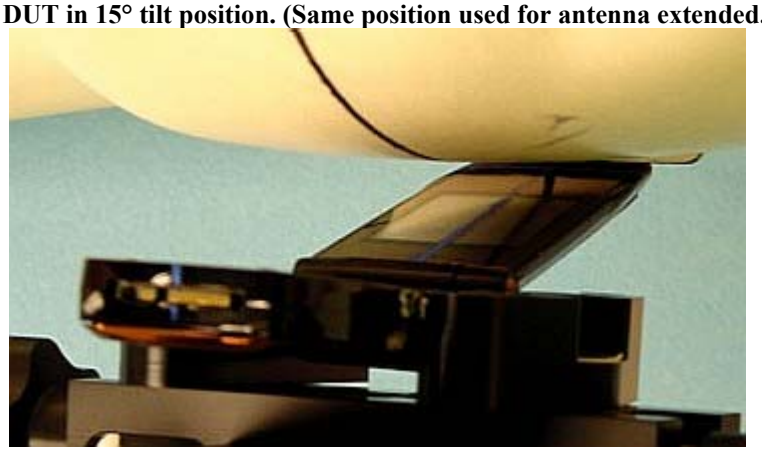


Figure 3. Assessment @ the Left ear; antenna retracted.
DUT in cheek touch position. (Same position used for antenna extended.)

Figure 4. Assessment @ the Right ear; antenna retracted.
DUT in 15° tilt position. (Same position used for antenna extended.)

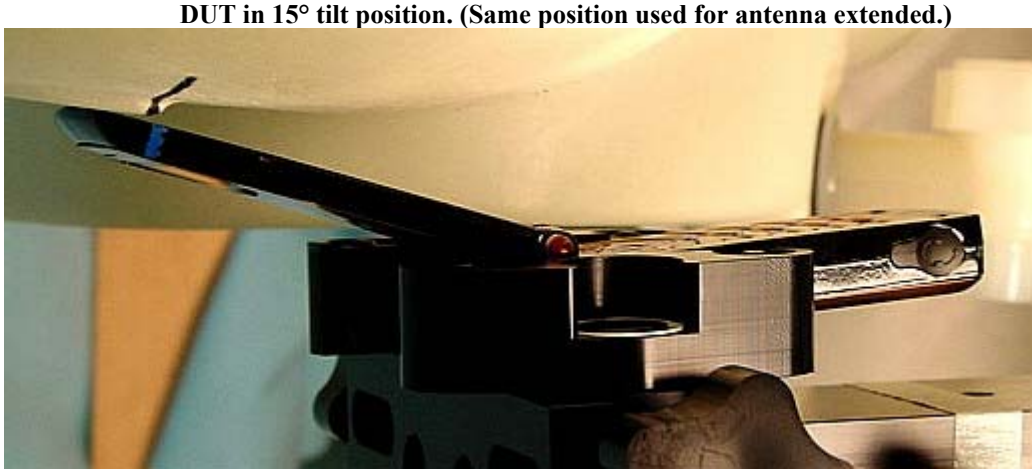


Figure 5. Assessment @ the Right ear; antenna retracted.
DUT in cheek touch position. (Same position used for antenna extended.)

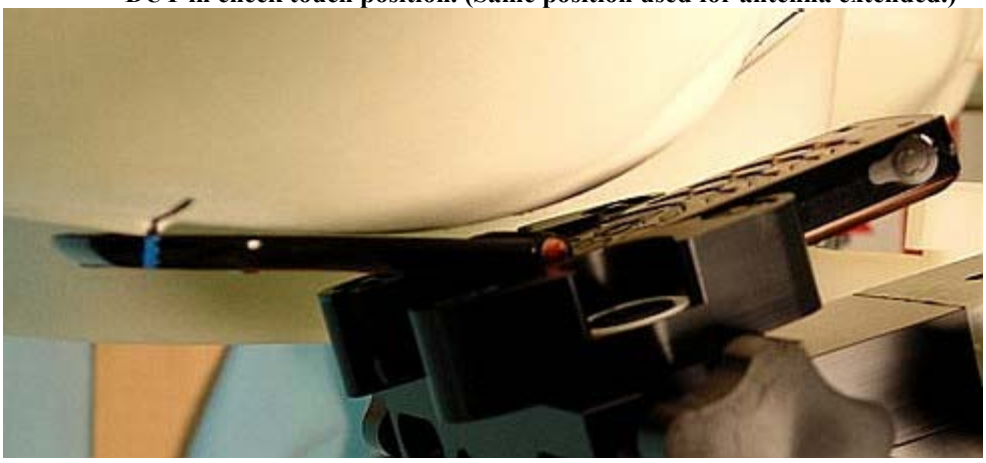


Figure 6. Assessment @ the Face; antenna retracted.
DUT front 2.5cm separation distance from flat area of the SAM phantom with the flip closed.
(Same position used for antenna extended as well as flip opened.)

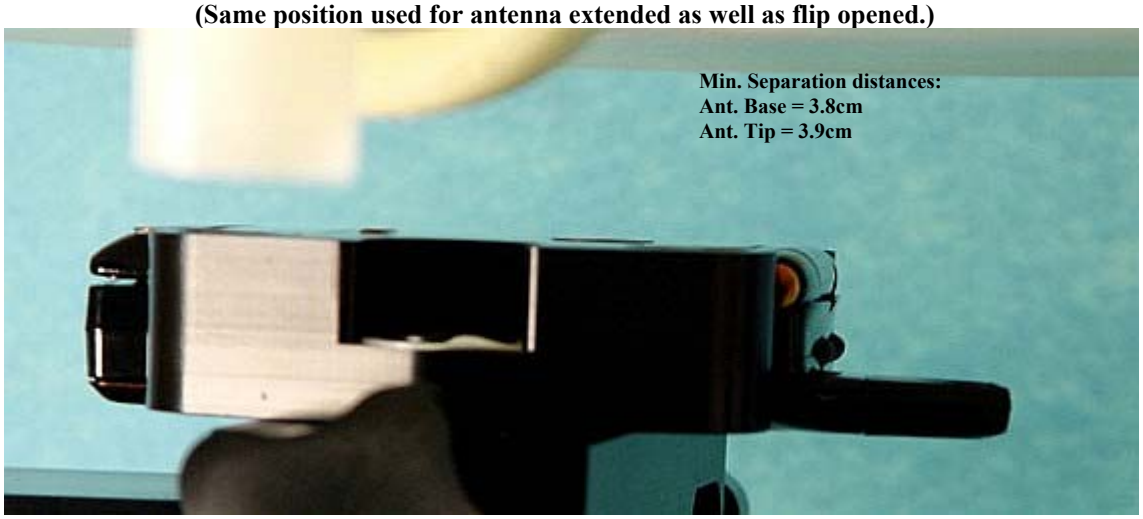


Figure 7. Assessment @ Body; antenna retracted.
DUT with belt clip model NNTN5002A against the flat phantom and attached data cable model NKN6560A.
(Same position used with antenna extended, with and without a data cable attached,
as well as with each of the offered audio accessories.)

Figure 8. Assessment @ Body; antenna retracted.
DUT with belt clip model NNTN4747A against the flat phantom and attached data cable model NKN6560A.
(Same position used with antenna extended.)

Figure 9. Assessment @ the Body; antenna retracted.
DUT front separated 2.5cm. (Same position used for antenna extended.)

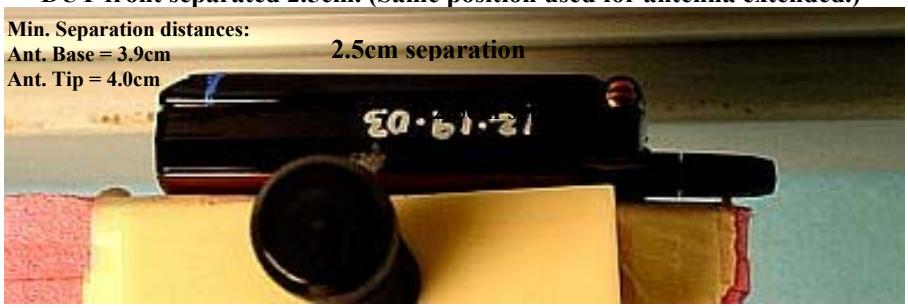


Figure 10. Assessment @ the Body; antenna retracted.
DUT back separated 2.5cm. (Same position used for antenna extended.)

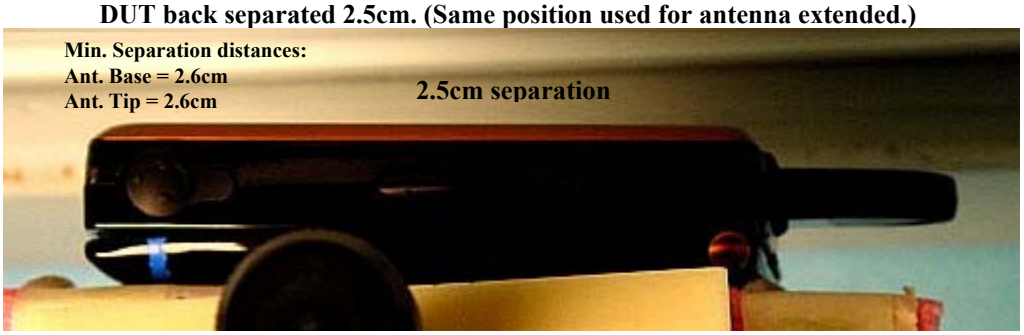


Figure 11: Robot Test System (Flat Phantom)

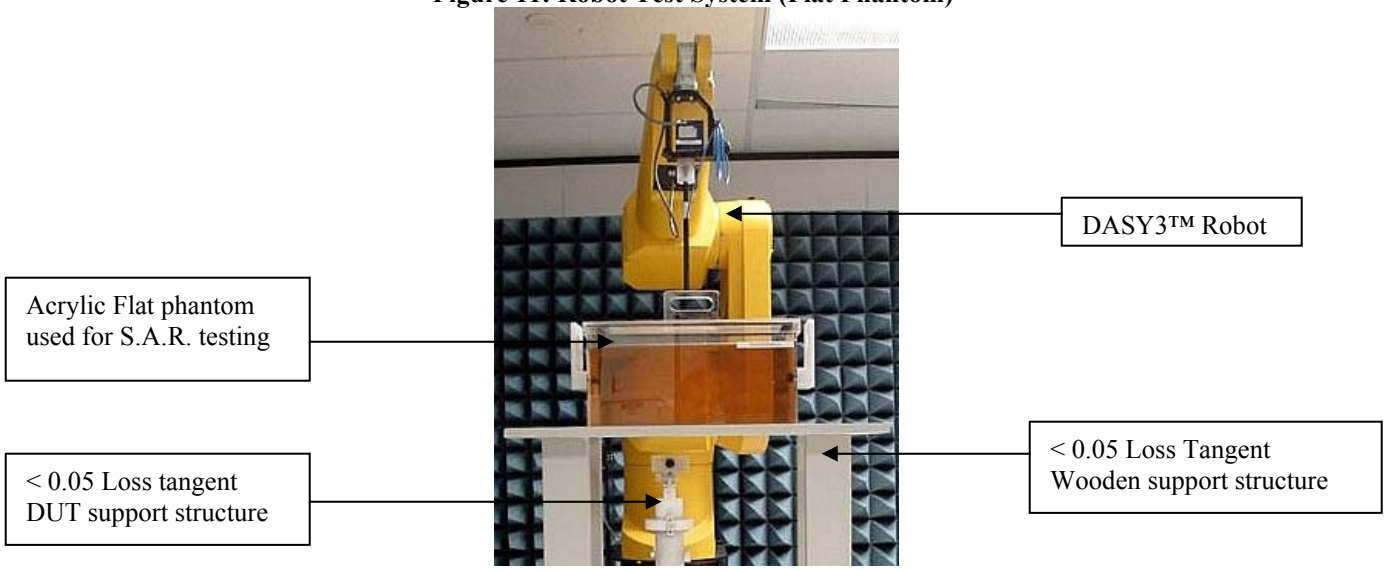
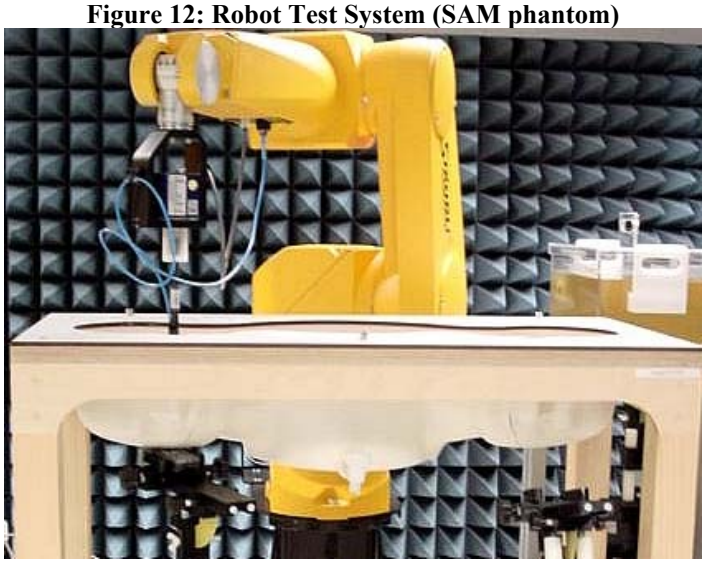


Figure 12: Robot Test System (SAM phantom)



5.3 Probe Scan Procedures

The E-field probe scans in a coarse grid over a large area inside the phantom in order to locate the interpolated maximum S.A.R. distribution. After the coarse scan measurement, the probe is automatically moved to a position at the interpolated maximum. The subsequent scan can directly use this position as reference for the cube evaluations.

6.0 Measurement Uncertainty

Table 1: Uncertainty Budget for Device Under Test: 75 – 3000 MHz

a	*b*	*c*	*d*	*e = f(d,k)*	*f*	*g*	*h = c x f / e*	*i = c x g / e*	*k*
Uncertainty Component	IEEE 1528 section	Tol. (± %)	Prob Dist	Div.	c_i (1 g)	c_i (10 g)	1 g u_i (±%)	10 g u_i (±%)	v_i
Measurement System									
Probe Calibration	E.2.1	4.8	N	1.00	1	1	4.8	4.8	∞
Axial Isotropy	E.2.2	4.7	R	1.73	0.707	0.707	1.9	1.9	∞
Hemispherical Isotropy	E.2.2	9.6	R	1.73	0.707	0.707	3.9	3.9	∞
Boundary Effect	E.2.3	1.0	R	1.73	1	1	0.6	0.6	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6	1.0	N	1.00	1	1	1.0	1.0	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	1.3	R	1.73	1	1	0.8	0.8	∞
RF Ambient Conditions - Noise	E.6.1	3.0	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	0.0	R	1.73	1	1	0.0	0.0	∞
Probe Positioner Mech. Tolerance	E.6.2	1.0	R	1.73	1	1	0.6	0.6	∞
Probe Positioning w.r.t Phantom	E.6.3	4.0	R	1.73	1	1	2.3	2.3	∞
Max. SAR Evaluation (ext., int., avg.)	E.5	3.4	R	1.73	1	1	2.0	2.0	∞
Test sample Related									
Test Sample Positioning	E.4.2	3.4	N	1.00	1	1	3.4	3.4	29
Device Holder Uncertainty	E.4.1	3.8	N	1.00	1	1	3.8	3.8	8
SAR drift	6.6.2	5.0	R	1.73	1	1	2.9	2.9	∞
Phantom and Tissue Parameters									
Phantom Uncertainty	E.3.1	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity (target)	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity (measurement)	E.3.3	6.5	N	1.00	0.64	0.43	4.2	2.8	∞
Liquid Permittivity (target)	E.3.2	5.0	R	1.73	0.6	0.49	1.7	1.4	∞
Liquid Permittivity (measurement)	E.3.3	4.0	N	1.00	0.6	0.49	2.4	2.0	∞
Combined Standard Uncertainty			RSS				12	11	601
Expanded Uncertainty (95% CONFIDENCE LEVEL)			*k*=2				23	22	

Table 2: Uncertainty Budget for System Check: 75 – 3000 MHz

a	*b*	*c*	*d*	*e = f(d,k)*	*f*	*g*	*h = c x f / e*	*i = c x g / e*	*k*
Uncertainty Component	IEEE 1528 section	**Tol. (± %)**	**Prob. Dist.**	**Div.**	c_i (1 g)	c_i (10 g)	**1 g** u_i (±%)	**10 g** u_i (±%)	v_i
Measurement System									
Probe Calibration	E.2.1	4.8	N	1.00	1	1	4.8	4.8	∞
Axial Isotropy	E.2.2	4.7	R	1.73	1	1	2.7	2.7	∞
Spherical Isotropy	E.2.2	9.6	R	1.73	0	0	0.0	0.0	∞
Boundary Effect	E.2.3	1.0	R	1.73	1	1	0.6	0.6	∞
Linearity	E.2.4	4.7	R	1.73	1	1	2.7	2.7	∞
System Detection Limits	E.2.5	1.0	R	1.73	1	1	0.6	0.6	∞
Readout Electronics	E.2.6	1.0	N	1.00	1	1	1.0	1.0	∞
Response Time	E.2.7	0.8	R	1.73	1	1	0.5	0.5	∞
Integration Time	E.2.8	1.3	R	1.73	1	1	0.8	0.8	∞
RF Ambient Conditions - Noise	E.6.1	3.0	R	1.73	1	1	1.7	1.7	∞
RF Ambient Conditions - Reflections	E.6.1	0.0	R	1.73	1	1	0.0	0.0	∞
Probe Positioner Mechanical Tolerance	E.6.2	0.4	R	1.73	1	1	0.2	0.2	∞
Probe Positioning w.r.t. Phantom	E.6.3	1.4	R	1.73	1	1	0.8	0.8	∞
Max. SAR Evaluation (ext., int., avg.)	E.5	3.4	R	1.73	1	1	2.0	2.0	∞
Dipole									
Dipole Axis to Liquid Distance	8, E.4.2	2.0	R	1.73	1	1	1.2	1.2	∞
Input Power and SAR Drift Measurement	8, 6.6.2	5.0	R	1.73	1	1	2.9	2.9	∞
Phantom and Tissue Parameters									
Phantom Uncertainty	E.3.1	4.0	R	1.73	1	1	2.3	2.3	∞
Liquid Conductivity (target)	E.3.2	5.0	R	1.73	0.64	0.43	1.8	1.2	∞
Liquid Conductivity (measurement)	E.3.3	6.0	R	1.73	0.64	0.43	2.2	1.5	∞
Liquid Permittivity (target)	E.3.2	5.0	R	1.73	0.6	0.49	1.7	1.4	∞
Liquid Permittivity (measurement)	E.3.3	6.0	R	1.73	0.6	0.49	2.1	1.7	∞
Combined Standard Uncertainty			RSS				9	8	99999
Expanded Uncertainty (95% CONFIDENCE LEVEL)			*k*=2				17	17	

Notes for Tables 1 and 2
a) Column headings *a-k* are given for reference.
b) Tol. - tolerance in influence quantity.
c) Prob. Dist. – Probability distribution
d) N, R - normal, rectangular probability distributions
e) Div. - divisor used to translate tolerance into normally distributed standard uncertainty
f) *ci* - sensitivity coefficient that should be applied to convert the variability of the uncertainty component into a variability of SAR.
g) *ui* – SAR uncertainty
h) *vi* - degrees of freedom for standard uncertainty and effective degrees of freedom for the expanded uncertainty.

7.0 S.A.R. Test Results

All S.A.R. results obtained by the tests described in Section 5.0 are listed in section 7.1 below. The bolded result indicates the highest observed S.A.R. performance. DASY3™ S.A.R. measurement scans are provided in APPENDIX B for the highest observed S.A.R.
Appendix A presents shortened S.A.R. cube scans to assess the validity of the calculated results presented herein.
Note: The results of the shortened cube scans presented in Appendix A demonstrate that the scaling methodology used to determine the calculated S.A.R. results presented herein are valid.

7.1 S.A.R. results

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 1:3 mode; 806-825MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
Left Ear												
sw-lear-r3-040121-05/364ADY0J12	Retracted	813.5125	NNTN4930A	Cheek Touch	None	None	0.680	0.080	1.240	0.806	1.28	0.83
sw-lear-r3-040126-05/364ADY0J12	Retracted	813.5125	NNTN5195A	Cheek touch	None	None	0.698	0.230	1.330	0.871	1.33	0.87
sw-lear-r3-040126-06/364ADY0J12	Extended	813.5125	NNTN5195A	Cheek touch	None	None	0.686	0.460	1.190	0.789	1.21	0.81
ec-lear-r3-040128-12/364ADY0J12	Retracted	813.5125	NNTN5195A	15D tilt	None	None	0.698	-0.030	0.250	0.178	0.25	0.18
ec-lear-r3-040128-13/364ADY0J12	Extended	813.5125	NNTN5195A	15D tilt	None	None	0.699	-0.090	0.303	0.219	0.31	0.22
ec-lear-r3-040126-10/364ADY0J12	Retracted	806.0125	NNTN5195A	Cheek touch	None	None	0.695	0.400	1.130	0.736	1.14	0.74
ec-lear-r3-040126-11/364ADY0J12	Extended	806.0125	NNTN5195A	Cheek touch	None	None	0.700	0.370	1.290	0.842	1.29	0.84
ec-lear-r3-040126-12/364ADY0J12	Retracted	824.9875	NNTN5195A	Cheek touch	None	None	0.688	0.080	1.170	0.773	1.19	0.79
ec-lear-r3-040126-13/364ADY0J12	Extended	824.9875	NNTN5195A	Cheek touch	None	None	0.693	0.390	1.260	0.828	1.27	0.84
Right Ear												
ec-rear-r3-040126-14/364ADY0J12	Retracted	813.5125	NNTN5195A	Cheek touch	None	None	0.699	-0.300	1.000	0.646	1.07	0.69
ec-rear-r3-040126-15/364ADY0J12	Retracted	813.5125	NNTN4930A	Cheek touch	None	None	0.685	-0.080	1.280	0.806	1.33	0.84
ec-rear-r3-040126-16/364ADY0J12	Extended	813.5125	NNTN4930A	Cheek touch	None	None	0.709	-0.030	1.340	0.870	1.35	0.88
sw-rear-r3-040127-02/364ADY0J12	Retracted	813.5125	NNTN4930A	15D tilt	None	None	0.682	-0.170	0.267	0.193	0.28	0.21

sw-rear-r3-040127-03/364ADY0J12	Extended	813.5125	NNTN4930A	15D tilt	None	None	0.695	0.130	0.185	0.140	0.19	0.14
sw-rear-r3-040127-04/364ADY0J12	Retracted	806.0125	NNTN4930A	Cheek touch	None	None	0.715	-0.550	1.240	0.803	**1.41**	0.91
ec-rear-r3-040127-05/364ADY0J12	Extended	806.0125	NNTN4930A	Cheek touch	None	None	0.691	-0.100	1.330	0.859	1.38	0.89
ec-rear-r3-040127-06/364ADY0J12	Retracted	824.9875	NNTN4930A	Cheek touch	None	None	0.691	-0.300	1.290	0.836	1.40	0.91
ec-rear-r3-040127-07/364ADY0J12	Extended	824.9875	NNTN4930A	Cheek touch	None	None	0.703	0.010	1.270	0.815	1.27	0.82

DUT assessment at the Face; 2.5cm separation; 1:6 mode; 806-825MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
ec-face-r3-040127-11/364ADY0J12	Retracted	813.5125	NNTN5195A	DUT 2.5cm flip closed	None	None	0.675	0.060	0.127	0.091	0.07	0.05
ec-face-r3-040127-12/364ADY0J12	Retracted	813.5125	NNTN4930A	DUT 2.5cm flip closed	None	None	0.673	0.060	0.136	0.097	0.07	0.05
ec-face-r3-040127-13/364ADY0J12	Extended	813.5125	NNTN4930A	DUT 2.5cm flip closed	None	None	0.679	-0.010	0.204	0.147	0.11	0.08
ec-face-r3-040127-14/364ADY0J12	Retracted	813.5125	NNTN4930A	DUT 2.5cm flip open	None	None	0.672	0.050	0.095	0.068	0.05	0.04
ec-face-r3-040127-15/364ADY0J12	Extended	813.5125	NNTN4930A	DUT 2.5cm flip open	None	None	0.675	-0.040	0.093	0.067	0.05	0.03
ec-face-r3-040127-16/364ADY0J12	Retracted	806.0125	NNTN4930A	DUT 2.5cm flip closed	None	None	0.676	0.040	0.126	0.090	0.07	0.05
ec-face-r3-040127-17/364ADY0J12	Extended	806.0125	NNTN4930A	DUT 2.5cm flip closed	None	None	0.678	0.050	0.215	0.156	**0.11**	0.08
ec-face-r3-040127-18/364ADY0J12	Retracted	824.9875	NNTN4930A	DUT 2.5cm flip closed	None	None	0.677	0.070	0.145	0.103	0.07	0.05
ec-face-r3-040127-19/364ADY0J12	Extended	824.9875	NNTN4930A	DUT 2.5cm flip closed	None	None	0.674	0.040	0.184	0.131	0.10	0.07

DUT assessment at the head; Cheek Touch, Tilt, and Band edges; 1:3 mode; 896-902 MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
Left Ear												
sw-rear-r3-040126-04/364ADY0J12	Retracted	899.66875	NNTN5195A	Cheek touch	None	None	0.684	0.550	0.751	0.485	0.77	0.50
sw-lear-r3-040122-08/364ADY0J12	Retracted	899.66875	NNTN4930A	Cheek touch	None	None	0.684	-0.580	0.696	0.460	0.81	0.54
sw-lear-r3-040122-09/364ADY0J12	Extended	899.66875	NNTN4930A	Cheek touch	None	None	0.693	0.080	0.805	0.537	0.81	0.54

sw-lear-r3-040122-10/364ADY0J12	Retracted	899.66875	NNTN4930A	15D tilt	None	None	0.689	-0.270	0.156	0.110	0.17	0.12
sw-lear-r3-040123-02/364ADY0J12	Extended	899.66875	NNTN4930A	15D tilt	None	None	0.675	-0.390	0.195	0.140	0.22	0.16
sw-lear-r3-040123-03/364ADY0J12	Retracted	896.01875	NNTN4930A	Cheek touch	None	None	0.681	0.110	0.699	0.466	0.72	0.48
sw-lear-r3-040123-04/364ADY0J12	Extended	896.01875	NNTN4930A	Cheek touch	None	None	0.685	0.250	0.832	0.558	0.85	0.57
sw-lear-r3-040123-05/364ADY0J12	Retracted	901.98125	NNTN4930A	Cheek touch	None	None	0.683	-0.090	0.625	0.417	0.65	0.44
sw-lear-r3-040123-06/364ADY0J12	Extended	901.98125	NNTN4930A	Cheek touch	None	None	0.692	0.030	0.797	0.534	0.81	0.54
Right Ear												
sw-rear-r3-040126-03/364ADY0J12	Retracted	899.66875	NNTN5195A	Cheek touch	None	None	0.676	-0.170	0.620	0.399	0.67	0.43
sw-rear-r3-040123-07/364ADY0J12	Retracted	899.66875	NNTN4930A	Cheek touch	None	None	0.678	0.460	0.693	0.455	0.72	0.47
sw-rear-r3-040123-08/364ADY0J12	Extended	899.66875	NNTN4930A	Cheek touch	None	None	0.684	0.110	0.791	0.520	0.81	0.53
sw-rear-r3-040123-09/364ADY0J12	Retracted	899.66875	NNTN4930A	15D tilt	None	None	0.699	0.020	0.176	0.125	0.18	0.13
sw-rear-r3-040123-10/364ADY0J12	Extended	899.66875	NNTN4930A	15D tilt	None	None	0.687	-0.400	0.142	0.103	0.16	0.12
sw-rear-r3-040126-02/364ADY0J12	Retracted	896.01875	NNTN4930A	Cheek touch	None	None	0.680	0.780	0.782	0.513	0.81	0.53
ec-rear-r3-040127-08/364ADY0J12	Extended	896.01875	NNTN4930A	Cheek touch	None	None	0.685	0.010	0.929	0.595	0.95	0.61
ec-rear-r3-040127-09/364ADY0J12	Retracted	901.98125	NNTN4930A	Cheek touch	None	None	0.681	-0.810	0.560	0.356	0.69	0.44
ec-rear-r3-040127-10/364ADY0J12	Extended	901.98125	NNTN4930A	Cheek touch	None	None	0.708	-0.110	0.989	0.637	**1.01**	0.65

DUT Assessment at the Face; 2.5cm separation; 1:6mode; 896-902MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
sw-face-r3-040128-02/364ADY0J12	Retracted	899.66875	NNTN5195A	DUT 2.5cm flip closed	None	None	0.688	0.040	0.173	0.121	0.09	0.06
sw-face-r3-040128-03/364ADY0J12	Retracted	899.66875	NNTN4930A	DUT 2.5cm flip closed	None	None	0.690	0.030	0.153	0.108	0.08	0.05
sw-face-r3-040128-04/364ADY0J12	Extended	899.66875	NNTN5195A	DUT 2.5cm flip closed	None	None	0.689	-0.040	0.155	0.109	0.08	0.06
sw-face-r3-040128-05/364ADY0J12	Retracted	899.66875	NNTN5195A	DUT 2.5cm flip open	None	None	0.690	-0.010	0.081	0.057	0.04	0.03

sw-face-r3-040128-07/364ADY0J12	Extended	899.66875	NNTN5195A	DUT 2.5cm flip open	None	None	0.691	0.060	0.064	0.045	0.03	0.02
sw-face-r3-040128-08/364ADY0J12	Retracted	896.01875	NNTN5195A	DUT 2.5cm flip closed	None	None	0.689	-0.090	0.178	0.125	**0.09**	0.06
sw-face-r3-040128-09/364ADY0J12	Extended	896.01875	NNTN5195A	DUT 2.5cm flip closed	None	None	0.689	0.030	0.166	0.114	0.08	0.06
ec-face-r3-040128-10/364ADY0J12	Retracted	901.98125	NNTN5195A	DUT 2.5cm flip closed	None	None	0.692	0.070	0.163	0.114	0.08	0.06
ec-face-r3-040128-11/364ADY0J12	Extended	901.98125	NNTN5195A	DUT 2.5cm flip closed	None	None	0.695	-0.180	0.154	0.107	0.08	0.06

DUT Assessment at the body; Battery, body worn, data cables; 81:120 mode; 806-825MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
ec-ab-r3-040128-15/364ADY0J12	Retracted	813.5125	NNTN5195A	Against phantom	NNTN5002A	NKN6560A	0.678	-1.160	0.428	0.309	0.58	0.42
ec-ab-r3-040128-19/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NKN6560A	0.674	-1.130	0.462	0.338	0.62	0.46
ec-ab-r3-040128-20/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NKN6560A	0.670	-0.950	0.762	0.557	0.99	0.72
sw-ab-r3-040129-03/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN4747A	NKN6560A	0.670	-0.780	0.447	0.323	0.56	0.40
ec-ab-r3-040129-05/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN4747A	NKN6560A	0.670	-0.860	0.551	0.396	0.70	0.50
ec-ab-r3-040129-06/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NKN6559A	0.668	-0.760	0.389	0.279	0.49	0.35
ec-ab-r3-040129-07/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NKN6559A	0.665	-0.960	0.684	0.500	0.90	0.66
ec-ab-r3-040129-08/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	None	0.669	-1.110	0.589	0.427	0.80	0.58
ec-ab-r3-040129-09/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	None	0.662	-0.990	1.090	0.790	**1.45**	1.05

DUT Assessment at the body; offered audio accessories, Band edges; 1:3, 1:6, and 81:120 modes; 806-825MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
ec-ab-r3-040129-10/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN4620A	0.683	0.170	0.232	0.164	0.24	0.17
ec-ab-r3-040129-11/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN4620A	0.687	-0.070	0.464	0.336	0.48	0.35
ec-ab-r3-040129-12/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	SYN8390B	0.692	0.160	0.165	0.114	0.17	0.12
ec-ab-r3-040129-13/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	SYN8390B	0.688	0.110	0.442	0.317	0.45	0.32

DUT Assessment at the body; offered audio accessories, Band edges; 1:3 and 81:120 modes; 806-825MHz band (Continued)												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
ec-ab-r3-040129-14/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	SYN8146C	0.675	0.140	0.229	0.164	0.24	0.17
ec-ab-r3-040129-15/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	SYN8146C	0.681	0.170	0.407	0.288	0.42	0.30
ec-ab-r3-040129-16/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	SYN7875C	0.691	0.090	0.204	0.146	0.21	0.15
ec-ab-r3-040129-17/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	SYN7875C	0.684	0.100	0.404	0.286	0.41	0.29
ec-ab-r3-040129-18/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NTN8496A	0.686	0.160	0.245	0.174	0.25	0.18
sw-ab-r3-040130-02/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NTN8496A	0.679	0.090	0.459	0.331	0.47	0.34
sw-ab-r3-040130-03/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NTN8513B	0.684	0.170	0.188	0.133	0.19	0.14
sw-ab-r3-040130-04/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NTN8513B	0.690	0.110	0.364	0.261	0.37	0.26
sw-ab-r3-040130-05/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN4033A	0.684	0.090	0.186	0.133	0.19	0.14
sw-ab-r3-040130-06/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN4033A	0.692	0.180	0.360	0.263	0.36	0.27
sw-ab-r3-040130-08/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NSN6066A	0.696	-0.180	0.097	0.069	0.05	0.04
sw-ab-r3-040130-07/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NSN6066A	0.698	-0.090	0.204	0.145	0.10	0.07
sw-ab-r3-040130-09/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN5004A	0.692	0.160	0.243	0.175	0.25	0.18
ec-ab-r3-040130-10/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN5004A	0.690	0.070	0.477	0.343	0.48	0.35
ec-ab-r3-040130-11/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN5005A	0.691	0.120	0.226	0.162	0.23	0.16
ec-ab-r3-040130-12/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN5005A	0.683	0.030	0.452	0.324	0.46	0.33
ec-ab-r3-040130-13/364ADY0J12	Retracted	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.681	0.130	0.225	0.163	0.23	0.17
ec-ab-r3-040130-14/364ADY0J12	Extended	813.5125	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.686	0.000	0.520	0.375	0.53	0.38
ec-ab-r3-040130-15/364ADY0J12	Retracted	806.0125	NNTN4930A	Against phantom	NNTN5002A	None	0.689	-1.260	0.445	0.324	0.60	0.44
ec-ab-r3-040130-16/364ADY0J12	Extended	806.0125	NNTN4930A	Against phantom	NNTN5002A	None	0.691	-1.020	1.090	0.796	**1.40**	1.02

ec-ab-r3-040130-17/364ADY0J12	Retracted	824.9875	NNTN4930A	Against phantom	NNTN5002A	None	0.673	-0.920	0.695	0.502	0.89	0.65
ec-ab-r3-040130-18/364ADY0J12	Extended	824.9875	NNTN4930A	Against phantom	NNTN5002A	None	0.667	-0.900	1.070	0.774	1.38	1.00

DUT assessment at the body; Across the band, w/ worst case accessories from 806-825MHz assessment 1:3 mode; 896-902MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
ec-ab-r3-040130-19/364ADY0J12	Retracted	896.01875	NNTN5195A	Against phantom	NNTN5002A	NNTN5006A	0.688	-0.040	0.323	0.225	0.33	0.23
ec-ab-r3-040130-21/364ADY0J12	Retracted	896.01875	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.685	0.080	0.330	0.232	0.34	0.24
ec-ab-r3-040131-02/364ADY0J12	Extended	896.01875	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.687	-0.260	0.374	0.266	0.40	0.29
ec-ab-r3-040131-03/364ADY0J12	Retracted	899.66875	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.675	0.040	0.319	0.222	0.33	0.23
ec-ab-r3-040131-04/364ADY0J12	Extended	899.66875	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.671	-0.440	0.346	0.245	0.40	0.28
ec-ab-r3-040131-05/364ADY0J12	Retracted	901.98125	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.667	-0.030	0.352	0.249	0.37	0.26
ec-ab-r3-040131-06/364ADY0J12	Extended	901.98125	NNTN4930A	Against phantom	NNTN5002A	NNTN5006A	0.665	-0.350	0.375	0.266	**0.43**	0.30

DUT assessment at the body; 2.5cm separation; w/ overall worst case test configuration at the body; 81:120mode; 806-825 MHz band												
Run Number/ SN	**Antenna Position**	**Freq. (MHz)**	**Battery**	**Test position**	**Carry Case**	**Additional attachments**	**Initial Power (W)**	**S.A.R. Drift (dB)**	**Meas. 1g-S.A.R. (mW/g)**	**Meas. 10g-S.A.R. (mW/g)**	**Max Calc. 1g-S.A.R. (mW/g)**	**Max Calc. 10g-S.A.R. (mW/g)**
ec-ab-r3-040131-09/364ADY0J12	Retracted	813.5125	NNTN4930A	DUT back 2.5cm	None	None	0.683	-0.930	0.591	0.421	0.75	0.53
ec-ab-r3-040131-10/364ADY0J12	Extended	813.5125	NNTN4930A	DUT back 2.5cm	None	None	0.685	-0.870	1.110	0.803	**1.39**	1.00
ec-ab-r3-040131-11/364ADY0J12	Retracted	813.5125	NNTN4930A	DUT front 2.5cm	None	None	0.679	-1.010	0.347	0.253	0.45	0.33
ec-ab-r3-040131-12/364ADY0J12	Extended	813.5125	NNTN4930A	DUT front 2.5cm	None	None	0.667	-0.770	0.733	0.536	0.92	0.67

7.2 Peak S.A.R. location

Refer to APPENDIX B for detailed S.A.R. scan distributions.

7.3 Highest S.A.R. results calculation methodology

The calculated maximum 1-gram and 10-gram averaged S.A.R. values are determined by scaling the measured S.A.R. to account for power leveling variations and power slump. For this device the Maximum Calculated 1-gram and 10-gram averaged peak S.A.R. is calculated using the following formula:

Max. Calc. 1-g Avg. SAR = ((S.A.R. meas. / (10^(Pdrift/10))*(Pmax/Pint))* DC%
P_{max} = Maximum Power (W)
P_{int} = Initial Power (W)
Pdrift = DASY drift results (dB)
$SAR_{meas.}$ = Measured 1 gram averaged peak S.A.R. (mW/g)
DC % = Transmission mode duty cycle in % where applicable
Note that the use of the above formula should consider the relationship between the initial power, max power, and drift. Also, a 50% duty cycle is applied for PTT operation.

8.0 Conclusion

The highest Operational Maximum Calculated 1-gram and 10-gram average S.A.R. values found for FCC ID: AZ489FT5828 model H74XAH6RR4AN/NUF3783A.

At the Body: **1-g Avg. = 1.45 mW/g; 10-g Avg. = 1.05 mW/g**
At the Face: **1-g Avg. = 0.11 mW/g; 10-g Avg. = 0.08 mW/g**
At the Head: **1-g Avg. = 1.41 mW/g; 10-g Avg. = 0.91 mW/g**

These test results clearly demonstrate compliance with FCC General Population/Uncontrolled RF Exposure limits of **1.6 mW/g** per the requirements of 47 CFR 2.1093(d)