MOTOROLA

ACCREDITED
Certificate Number: 1449-01

FCC ID: AZ489FT5832
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 1 of 3

GEMS EME Test Laboratory
8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322

Date of Report: March 14, 2005
Report Revision: Rev. A
Report ID: FCC rpt_i275_Rev A_050315 SR1995

Responsible Engineer:	Kim Uong (EME lead Eng.)
Date/s Tested:	3/02/05-3/4/05
Manufacturer/Location:	Motorola - Plantation
Sector/Group/Div.:	iDEN Subscriber
Date submitted for test:	2/07/05
DUT Description:	Dual Mode iDEN (1:6, 2:6, 81:120, 1:12 TDMA; 64QAM, 16 QAM & QPSK Modulation; 0.6W Pulse Avg. MOTOtalk (114:120 8FSK; 0.85 W nominal); GPS capable
Test TX mode(s):	114:120
Max. Power output:	0.891W
Nominal Power:	0.85W
Tx Frequency Bands:	902-928MHz
Signaling type:	iDEN; MOTOtalk – (FHSS 8FSK)
Model(s) Tested:	H79XAN6RR4AN
Model(s) Certified:	H79XAN6RR4AN
Serial Number(s):	364YFABY2J
Classification:	General Population/Uncontrolled
Rule Part(s):	15

Approved Accessories:

Antenna(s):
8585424E01 (806-941MHz retractable Top helical ½ wave antenna -0.8dBd @ 915MHz)
Battery(ies):
SNN5705C (8-mm 950mAh); SNN5705B (Hi performance 750mAh Li Ion)
Body worn accessory(ies):
NNTN5821A (Holster)
Audio 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), NNTN5751A (Stereo phone audio mix headset PTT)

Max. Calc. 1-g/10-g Avg. SAR: 1.08/0.79 mW/g (Body)
Max. Calc. 1-g/10-g Avg. SAR: 0.83/0.59 mW/g (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 GEMS EME Lab Senior Resource Manager, Laboratory Director,

3/15/05
Approval Date:

Certification Date: 3/15/05

Certification No.: L1050337

Part 1 of 3

APPENDICES

Part 2 of 3

Part 3 of 3

REVISION HISTORY

Date	Revision	Comments
3/15/05	O	Release of MOTOtalk Pilot results
3/15/05	A	Corrected incorrect DUT model number

1.0 Introduction and Overview

This report details the utilization, test setup, test equipment, and test results of the Specific Absorption Rate (S.A.R.) measurements performed at the GEMS EME Test Lab for the derivative model number H79XAN6RR4AN of FCC ID: AZ489FT5832. The results presented herein replace the previously reported Part 15 results.

The test results presented herein 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).

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; Rule Part 47CFR § 2.1093 sub-part J:1999
- Federal Communications Commission, “Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields”, OET Bulletin 65, Supplement C (Edition 01-01), FCC, Washington, D.C.: June 2001.
- 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 No. 303 of July 2, 2002 "Regulation of the limitation of exposure to electrical, magnetic, and electromagnetic fields in the radio frequency range between 9KHz and 300 GHz." and “Attachment to resolution # 303 from July 2, 2002”
- Health Canada, “Limits of Human Exposure to Radiofrequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz”, Safety Code 6.
- Industry Canada, “Evaluation Procedure for Mobile and Portable Radio Transmitters with respect to Health Canada’s Safety Code 6 for Exposure of Humans to Radio Frequency Fields”, Radio Standards Specification RSS-102 Issue 1 (Provisional): September 1999.

2.1 SAR Limits

EXPOSURE LIMITS	SAR (W/kg)	
	(General Population / Uncontrolled Exposure Environment)	(Occupational / Controlled Exposure Environment)
Spatial Average (averaged over the whole body)	0.08	0.4
Spatial Peak (averaged over any 1-g of tissue)	1.60	8.0
Spatial Peak (hands/wrists/feet/ankles averaged over 10-g)	4.0	20.0
Localized SAR (Head and Trunk 10-g)	2.0	10.0

3.0 Description of Device Under Test (DUT)

FCC ID: AZ489FT5832 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 M16-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 supported up to a maximum duty cycle of 67.5% using quad QPSK modulation. MOTOtalk transmission is also supported and employs a frequency hopping digital spread spectrum format operating in the 900 MHZ ISM band. MOTOtalk has a transmission duty cycle of 114:120 using 8 FSK modulation. MOTOtalk operates only in PTT mode in front of the face or at the abdomen with the applicable offered audio accessories. This device is also GPS capable.
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: AZ489FT5832 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. MOTOtalk operates in the 902-928MHz band. The rated power is 0.60 watts pulsed averaged in 806-825MHz and 896-902MHz bands and 0.85 watts in the MOTOtalk band. The maximum output is 0.70 watts pulsed average and 0.891 watts respectively as defined by the upper limit of the production line final test station.

FCC ID: AZ489FT5832 is offered with the options and accessories listed on the coversheet of this report.

Test Output Power

A table of the characteristic power slump versus time is provided in Appendix F.

4.0 Description of Test System

4.1 Descriptions of Robotics/probes/Readout Electronics

The laboratory utilizes a Dosimetric Assessment System (DASY4™) S.A.R. measurement system Version 4.3 manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The test system consists of a Stäubli RX90L robot, DASY 3 DAE, and ET3DV6 E-Field probes. Please reference the SPEAG user manual and application notes for detailed probe, robot, and S.A.R. computational procedures. Section 5.0 presents relevant test equipment information. Appendices B and C present the applicable calibration certificates. The E-field probe first scans 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.

4.2 Description of Phantom(s)

4.2.1 Flat Phantom

Phantom Type	Phantom Material	Phantom Dimensions (cm)	Support structure opening dimensions (cm)	Support structure material	Loss Tangent (wood)
Flat	High Density Polyethylene (HDPE)	80x30x20x0.2	68.58x20.32	Wood	< 0.05

4.2.2 SAM Phantom

Phantom Type	Material Parameters	Material Thickness (mm)	Support structure material	Loss Tangent (wood)
SAMTP1209	200MHz -3GHz; Er = <5, Loss Tangent = <0.05	2mm +/- 0.2mm	Wood	< 0.05

4.3 Description of Equivalent tissues

Type of Simulated Tissue

The simulated tissue used is 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". The sugar based simulate tissue is produced by placing the correct measured amount of De-ionized water into a large container. Each of the dried ingredients are weighed and added to the water carefully to avoid clumping. If the solution has a high sugar concentration the water is pre-heated to aid in dissolving the ingredients. For Diacetin and Glycol based simulates, sugar and HEC ingredients are not needed. The solution is mixed thoroughly, covered, and allowed to sit overnight prior to use.

Simulated Tissue Composition

% of listed ingredients	900MHz	
	Head	Body
Sugar	56.5	44.9
DGBE (Glycol)	NA	NA
Diacetin	NA	NA
De ionized -Water	40.95	53.06
Salt	1.45	0.94
HEC	1.0	1
Bact.	0.1	0.1

Reference section 6.1 for target parameters

5.0 Additional Test Equipment

Equipment Type	Model Number	Serial Number	Calibration Due Date
Coupler (NARDA)	3020A	40295	7/18/2005
Sensor (HP/Agilent)	8482B	3318A07392	11/22/05
Sensor (HP/Agilent)	8481H	2703A14631	9/29/2005
Power meter (HP/Agilent)	347B	PMHPJ112	9/29/05
Power meter (HP/Agilent)	347B	YYYYS841	11/1/05
Power meter (HP/Agilent)	E4418B	PMHPL009	3/10/05
Sig Gen (HP/Agilent)	E4421B	RSHPBT02	11/3/05
AMP (Amplifier Research)	1W1000	16625	CNR (Cal Not Req.)
Network Analyzer (HP/Agilent)	8753D	3410A06417	2/7/06
Dielectric Probe Kit (HP/Agilent)	85070C	US99360076	CNR
Speag Dipole	D900V2	084	3/22/04
Spectrum Analyzer (HP)	8561E	SPHPAP18	CNR

6.0 SAR Measurement System Verification

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 B and C respectively. The table below summarizes the system performance check results normalized to 1W.
Dipole validation scans at the head from SPEAG are provided in APPENDIX D. The GEMS 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 GEMS EME system performance validation are provided herein.

6.1 Equivalent Tissue Test Results

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.

Actual versus Target tissue parameters (3/2/05 – 3/4/05)

FCC Body				
Frequency (MHz)	**Di-electric Constant Target**	**Di-electric Constant Meas. (Range)**	**Conductivity Target S/m**	**Conductivity Meas. (Range) S/m**
900	55.0	54.0-55.0	1.05	1.03-1.05
915	55.0	53.9-54.9	1.06	1.05-1.06

IEEE Head				
Frequency (MHz)	Di-electric Constant Target	Di-electric Constant Meas. (Range)	Conductivity Target S/m	Conductivity Meas. (Range) S/m
900	41.5	40.4-40.4	0.97	1.00-1.00
915	41.5	40.3-40.3	0.98	1.01-1.01

6.2 System Check Test Results

Probe Serial #	Tissue Type	Probe Cal Date	Dipole Kit / Serial #	System Perf. Result when normalized to 1W (mW/g)	Reference S.A.R @ 1W (mW/g)	Test Date(s)
1393	FCC Body	4/28/04	SPEAG D900V2 /084	11.359 +/- 0.075	11.75 +/- 10%	3/2/05-3/4/05 3 test days

Note: see APPENDIX D for an explanation of the reference S.A.R. targets stated above.

The DASY4™ system is operated per the instructions in the DASY4™ Users Manual. The complete manual is available directly from SPEAG™. All measurement equipment used to assess EME S.A.R. compliance was calibrated according to 17025 A2LA guidelines.

7.0 DUT Test Strategy and Methodology

7.1 DUT Configuration(s)

The DUT is a portable device with iDEN and MOTOtalk (FHSS 8FSK) transmission signaling operational at the body, head, and face with the offered accessories. The device is placed in the test positions presented in Appendix G.

Test Plan

All options and accessories listed on the cover page of this report 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 and a SAM phantom with the applicable simulated tissue to assess performance at the body and face respectively using the relevant transmission modes. Note that the test plan for the derivative device presented herein reflects compliance assessment of the applicable operational mode that exceeded the previously reported results.
Note that a coarse-to-cube approximation methodology was utilized to determine the worst-case S.A.R. performance configuration for each applicable body location. The test configurations that produced the highest S.A.R. results for each body position using the coarse-to-cube approximation methodology were assessed using the full DASY4™ coarse and 7x7x7 cube scans.

Assessments at the Body (MOTOtalk) **[Pages 10, 11, 12 of 13; Tables 1&2]**

- DUT assessment at the body in the MOTOtalk 114:120 mode, at the center frequency of the band, with the offered holster and each of the audio accessories, with the antenna

retracted and extended, using the worst case offered battery from the Part 90 assessment at the body.
- DUT assessment at the body in the MOTOtalk 114:120 mode, at the band edges with the antenna extended and retracted, using the worst case test configuration from above.
- DUT assessment at the body without the body worn accessory in MOTOtalk 114:120 mode, with the DUT's back and front sides separated 2.5cm from the phantom, using the worst case test configuration from above.

Assessments at the Face (MOTOtalk) **[Page 12 of 13; Table 3]**

- DUT assessment at the face in the MOTOtalk 114:120 mode, at the low mid and high frequencies of the band, with the DUT front side separated 2.5cm from the SAM phantom, with the antenna extended and retracted, using the worst case offered battery from the Part 90 assessment at the head.

Shortened scan assessment at the Body **[APPENDIX E Part 2 of 2]**

- A "shortened" scan was performed using the offered battery and test configuration that produced the highest S.A.R. results per body position. Note that the shortened scan is obtained by first running a coarse scan to find the peak area and then, using a newly charged battery, perform a cube scan only. The shortened scan represents the cube scan performance results.

7.2 Device Positioning Procedures

Reference Appendix G for photos of the DUT tested positions.

7.2.1 Body

The DUT was positioned in normal use configuration against the phantom with the offered body worn accessory.
The DUT was positioned with its' front and back sides separated 2.5cm from the phantom.

7.2.2 Head

NA

7.2.3 Face

The DUT was positioned with its' front side separated 2.5cm from the phantom.

8.0 Environmental 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^{o}C of the temperature at which the dielectric properties were determined. The liquid depth within 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: 20.0-22.3˚C Avg. 20.91˚C
Relative Humidity	30 - 70 %	Range: 28.3 - 57.4% Avg. 45.6%
Tissue Temperature	NA	Range: 20.5-21.0˚C Avg. 20.75 ˚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.

9.0 Test Results Summary

All S.A.R. results obtained by the tests described in Section 7.1 are listed below. As noted in section 7.1, a coarse-to-cube approximation methodology, was utilized to ascertain the worst-case test configuration for each body location. The worst case test configurations observed for each body location were then assessed using the full DASY4™ coarse and 7x7x7 cube methodology, and they are presented as bolded results. The associated S.A.R. plots are provided in APPENDIX E. Appendix E also 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 E demonstrate that the scaling methodology used to determine the calculated S.A.R. results presented herein are valid.

Table1

DUT assessment at the body; MOTOtalk, 114:120 mode												
Run Number/ SN	**Antenna**	**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)**
Assessment of audio accessory												
AG-Ab-050302-09/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NSN6066A	0.852	-0.033	1.00	0.70	0.53	0.37
AG-Ab-050302-10/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NSN6066A	0.839	0.259	0.612	0.431	0.32	0.23
AG-Ab-050303-06/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5004A	0.845	-0.016	2.100	1.460	1.11	0.77
AG-Ab-050303-07/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5004A	0.840	0.044	1.970	1.370	1.04	0.73
AG-Ab-050303-08/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5005A	0.845	0.013	1.650	1.150	0.87	0.61
AG-Ab-050303-09/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5005A	0.853	-0.155	1.650	1.150	0.89	0.62
AG-Ab-050303-10/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	SYN8390B	0.836	0.015	1.590	1.110	0.85	0.59
AG-Ab-050303-11/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	SYN8390B	0.850	-0.009	1.390	0.974	0.73	0.51

Table1 (continued)

DUT assessment at the body; MOTOtalk, 114:120 mode												
Run Number/ SN	**Antenna**	**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)**
AG-Ab-050303-12/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.840	0.0042	2.160	1.500	1.15	0.80
AG-Ab-050303-13/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.848	-0.0027	1.300	0.912	0.68	0.48
AG-Ab-050303-14/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NTN8496A	0.845	0.0865	1.650	1.150	0.87	0.61
AG-Ab-050303-15/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NTN8496A	0.858	0.0352	1.320	0.923	0.69	0.48
AG-Ab-050303-16/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN4033A	0.828	0.0104	1.560	1.090	0.84	0.59
AG-Ab-050303-17/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN4033A	0.840	0.0948	1.360	0.948	0.72	0.50
AG-Ab-050303-18/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5006A	0.845	-0.0656	1.530	1.070	0.82	0.57
EC-Ab-050303-19/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5006A	0.850	-0.0933	1.270	0.886	0.68	0.47
EC-Ab-050303-20/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NTN8513B	0.847	0.0110	1.420	0.987	0.75	0.52
EC-Ab-050303-21/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NTN8513B	0.850	0.0931	1.340	0.937	0.70	0.49
EC-Ab-050303-22/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5330A	0.852	0.0593	1.700	1.180	0.89	0.62
EC-Ab-050303-23/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5330A	0.855	-0.0354	1.570	1.090	0.82	0.57
EC-Ab-050303-24/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN4620A	0.865	-0.0241	1.990	1.380	1.03	0.71
EC-Ab-050303-25/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN4620A	0.853	0.0447	1.580	1.110	0.83	0.58
EC-Ab-050303-26/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5211A	0.855	-0.0662	1.450	1.010	0.77	0.53
EC-Ab-050303-27/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5211A	0.859	-0.0174	1.280	0.892	0.67	0.46
EC-Ab-050303-28/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5751A	0.853	0.00932	2.110	1.470	1.10	0.77
EC-Ab-050303-29/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	NNTN5751A	0.870	0.0451	1.710	1.190	0.88	0.61
EC-Ab-050303-30/364YFABY2J	IN	915.5250	SNN5705C	Against phantom	NNTN5821A	SYN7875C	0.853	0.0254	1.570	1.090	0.82	0.57
EC-Ab-050303-31/364YFABY2J	OUT	915.5250	SNN5705C	Against phantom	NNTN5821A	SYN7875C	0.862	0.0784	1.400	0.977	0.72	0.50

Table 2

DUT assessment at the body; MOTOtalk, 114:120 mode (continued)												
Run Number/ SN	**Antenna**	**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)**
Assessment at band edges												
*EC-Ab-050303-32/364YFABY2J	IN	902.5250	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.857	0.0650	2.240	1.550	1.16	0.81
EC-Ab-050303-33/364YFABY2J	OUT	902.5250	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.855	0.0867	1.670	1.160	0.87	0.60
EC-Ab-050303-34/364YFABY2J	IN	927.4750	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.858	0.1080	1.530	1.060	0.79	0.55
EC-Ab-050303-35/364YFABY2J	OUT	927.4750	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.848	0.1040	1.330	0.927	0.70	0.49
Assessment at 2.5cm												
EC-Ab-050303-37/364YFABY2J	IN	902.5250	SNN5705C	DUT back 2.5cm	None	SYN8146C	0.854	-0.134	1.300	0.906	0.70	0.49
EC-Ab-050303-39/364YFABY2J	IN	902.5250	SNN5705C	DUT front 2.5cm	None	SYN8146C	0.874	0.140	1.430	1.010	0.73	0.51
***Assessment with the worst case test configuration above using the full DASY 4 coarse and 7x7x7 cube scan measurements.**												
EC-Ab-050304-11/364YFABY2J (Shortened scan)	IN	902.5250	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.850	0.1590	2.070	1.510	1.08	0.79
EC-Ab-050304-10/364YFABY2J	IN	902.5250	SNN5705C	Against phantom	NNTN5821A	SYN8146C	0.864	0.2210	1.990	1.450	1.03	0.75

Table 3

DUT assessment at the Face; 114:120 mode												
Run Number/ SN	**Antenna**	**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)**
Assessment with DUT front separated 2.5cm from the SAM phantom												
EC-Face-050304-13/364YFABY2J	IN	915.5250	SNN5705B	DUT front 2.5cm	None	None	0.846	0.1290	1.020	0.723	0.54	0.38
EC-Face-050304-14/364YFABY2J	OUT	915.5250	SNN5705B	DUT front 2.5cm	None	None	0.847	-0.5390	0.729	0.516	0.43	0.31
*EC-Face-050304-15/364YFABY2J	IN	902.5250	SNN5705B	DUT front 2.5cm	None	None	0.855	-0.8960	1.130	0.803	0.72	0.51
EC-Face-050304-16/364YFABY2J	OUT	902.5250	SNN5705B	DUT front 2.5cm	None	None	0.857	0.2890	1.060	0.756	0.55	0.39
EC-Face-050304-17/364YFABY2J	IN	927.4750	SNN5705B	DUT front 2.5cm	None	None	0.862	0.4560	1.080	0.755	0.56	0.39
EC-Face-050304-18/364YFABY2J	OUT	927.4750	SNN5705B	DUT front 2.5cm	None	None	0.860	0.2280	0.590	0.419	0.31	0.22
***Assessment with the worst case test configuration above using the full DASY 4 coarse and 7x7x7 cube scan measurements.**												
EC-Face-050304-19/364YFABY2J	IN	902.5250	SNN5705B	DUT front 2.5cm	None	None	0.856	-0.7670	1.220	0.871	0.76	0.54
EC-Face-050304-20/364YFABY2J	IN	902.5250	SNN5705B	DUT front 2.5cm	None	None	0.854	-0.0907	1.560	1.100	0.83	0.59

9.1 Highest S.A.R. results calculation methodology

The calculated maximum 1-gram and 10-gram averaged S.A.R. results reported herein for the full DASY ™ coarse and 7x7x7 cube measurements 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/10-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) - (for conservative results positive drifts are not accounted for)
SAR_{meas}. = Measured 1 gram averaged peak S.A.R. (mW/g)
DC % = Transmission mode duty cycle in % where applicable
50% duty cycle is applied for PTT operation.

10.0 Conclusion

The highest Operational Maximum Calculated 1-gram and 10-gram average S.A.R. values found for FCC ID: AZ489FT5832 derivative model H79XAN6RR4AN.

At the Body: **1-g Avg. = 1.08mW/g; 10-g Avg. = 0.79mW/g**
At the Face: **1-g Avg. = 0.83mW/g; 10-g Avg. = 0.59mW/g**

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