MOTOROLA

ACCREDITED
TESTING CERT # 2518.01

FCC ID: IHDP56HS1
DECLARATION OF COMPLIANCE SAR ASSESSMENT Part 1 of 2

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

Date of Report: 7/3/2008
Report Revision: O
Report ID: i776 _Rev O_080703_SR6462

Responsible Engineer:	Kim Uong (Principle Staff EME Eng.)
Date/s Tested:	6/18/08 - 6/27/08
Manufacturer/Location:	Motorola, China
Sector/Group/Div.:	iDEN Subscriber
Date submitted for test:	6/11/08
DUT Description:	TDMA: 236:310 WiDEN (76.1%), 81:120, 2:6, 1:12, and 1:6; 64QAM, 16QAM, and QPSK Modulations; 0.6W Pulse Avg; MOTOtalk: 114:120 8FSK; 0.85W nominal (GPS and Bluetooth Capable).
Test TX mode(s):	iDEN: 1:6, 1:3; WiDEN: 236:310; MOTOTalk: 114:120
Max. Power output:	0.640W Pulsed Average (iDEN/WiDEN); 0.891W (MOTOtalk); 2.5mW (BlueTooth)
Nominal Power:	0.6W Pulse Average Conducted Power (iDEN/WiDEN); 0.85W (MOTOtalk); 1mW (BlueTooth)
Tx Frequency Bands:	806-825, 896-902 MHz (iDEN/WiDEN); 902-928 MHz (MOTOtalk); 2.402-2.480 GHz (Bluetooth)
Signaling type:	iDEN: 1:6, 1:3, 81:120; WiDEN: 236:310; MOTOTalk: 114:120; BT:FHSS
Model(s) Tested:	H02XAH6JR6AN/ NWF1341A
Model(s) Certified:	H02XAH6JR6AN/ NWF1341A
Serial Number(s):	364VJJC16H, 364VJJC0WT
Classification:	General Population/Uncontrolled
Rule Part(s):	15 & 90

DUT Photo
(Refer to Exhibit 7B)

Approved Accessories:
Antenna(s):
8575468M01 (Retractable antenna 806-928MHz, 1/4 wave, -0.68dBd to -0.48dBd)
8575466M01 (IFA 2400-2480MHz, 1/4 wave, 1.56dBd to 2.06dBd)

Battery(ies):
SNN5819A (High Performance Li-Ion Battery), NTN2484XXXA (BT60 Battery Door)

Body worn accessory(ies):
NNTN7495A (Swivel Carry Holster)

Audio/Data cable accessory(ies):
SKN6238A (Micro USB Data Cable), NNTN5330B (PTT Headset), NNTN5211B (2-Wire Surveillance Headset), NNTN6312A (3-Wire Surveillance Headset).

Max. Calc. : 1-g Avg. SAR: 1.35 W/kg (Body); 10-g Avg. SAR: 0.98 W/kg (Body)
Max. Calc. : 1-g Avg. SAR: 0.59 W/kg (Face); 10-g Avg. SAR: 0.42 W/kg (Face)
Max. Calc. : 1-g Avg. SAR: 1.45 W/kg (Head); 10-g Avg. SAR: 0.97 W/kg (Head)

The test results clearly demonstrate compliance with FCC General Population/Uncontrolled RF Exposure limits of 1.6W/kg per the requirements of 47 CFR 2.1093(d).
The test results clearly demonstrate compliance with ICNIRP (1998) Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300GHz), Health Physics 74, 494-522 RF Exposure limits of 2W/kg averaged over 10grams of contiguous tissue.

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.

I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. This reporting format is consistent with the suggested 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 - Deanna Zakharia
Deanna Zakharia G&PS EME Lab Senior Resource Manager, Laboratory Director

Approval Date: 7/3/2008

Certification Date: 7/3/2008

Certification No.: L1080710P

Part 1 of 2

APPENDICES

Part 2 of 2

Report Revision History

Date	Revision	Comments
7/3/2008	O	Initial release

1.0 Introduction and Overview

This report details the utilization, test setup, test equipment, and test results of the Specific Absorption Rate (SAR) measurements performed at the G&PS EME Test Lab for the model number H02XAH6JR6AN/ NWF1341A of FCC ID: IHDP56HS1. The results herein reflect initial test results.

2.0 Referenced Standards and Guidelines

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

- IEC62209-1(2005) Procedure to determine the specific absorption rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)
- 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) C95.1-2005 Edition
- International Commission on Non-Ionizing Radiation Protection (ICNIRP) 1998
- Ministry of Health (Canada) Safety Code 6. Limits of Human Exposure to Radio 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”

2.1 SAR Limits

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

3.0 Description of Device Under Test (DUT)

FCC ID: IHDP56HS1, a digital multi-service data capable devices 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. This device incorporates WiDEN technology with a maximum transmission duty cycle of 236:310 (76.1%). WiDEN uses the standard iDEN modulation modes in 1 to 4 standard 25KHz iDEN channels. WiDEN25, 50, 75, and 100 uses 1, 2, 3, and 4 25KHz channels respectfully. The highest duty cycle is in the WiDEN 25KHz mode. This device also possesses MOTOTalk, which is a Part 15 service, employs Frequency Hopping Spread Spectrum (FHSS) technology in the 900 MHz ISM band. MOTOtalk emissions have a maximum 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 also incorporate a Class 2 BlueTooth device which is a Frequency Hopping Spread Spectrum (FHSS) technology. The BlueTooth radio modem provides a wireless link to the audio accessories. The maximum actual transmission duty cycle is imposed by the BlueTooth standard: for single-slot operation the Bluetooth device transmits 366 microsec out of 625 microsec. Packet Data and WiDEN operations are possible with and without connection to an external data device, via a data cable. 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 phone, dispatch, MOTOtalk, Data, and WiDEN modes.

FCC ID: IHDP56HS1 is capable of operating in the 806-825MHz and 896-902MHz bands for iDEN and WiDEN modes, and operates in 902-928MHz for MOTOTalk mode. The rated conducted power is 0.60 watts pulsed averaged in 806-825MHz and 896-902MHz bands and 0.85 watts in the MOTOTalk band. The maximum conducted output power is 0.64 watts pulsed average and 0.891 watts respectively as defined by the upper limit of the production line final test station.

FCC ID: IHDP56HS1 is offered with the options and accessories listed on the coversheet.

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 SAR Dosimetric Assessment System (DASY4™) Version 4.7 build 71 manufactured by Schmid & Partner Engineering AG (SPEAG™), of Zurich Switzerland. The test system consists of a Stäubli RX90L robot, DAE3V1, and ET3DV6 E-Field probes. Please reference the SPEAG user manual and application notes for detailed probe, robot, and SAR 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 SAR 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 Rectangular Flat Phantom

Phantom ID	Phantom Material	Phantom Dimensions (cm)	Support structure opening dimensions (cm)	Support structure material	Loss Tangent (wood)
80302002D	High Density Polyethylene (HDPE)	80x30x20x0.2	68.58x20.32	Wood	< 0.05

4.2.2 SAM Phantom

Phantom ID	Material Parameters	Material Thickness (mm)	Support structure material	Loss Tangent (wood)
SAMTP1234	200MHz -3GHz; Er = <5, Loss Tangent = <0.05	2mm +/- 0.2mm	Wood	< 0.05

4.2.3 Elliptical Flat Phantom

Phantom ID	Material Parameters	Material Thickness (mm)	Support structure material	Loss Tangent (wood)
NA	300MHz -6GHz; Er = 4+/- 1, Loss Tangent = <0.05	Xmm +/- X.Xmm	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 simulated tissue used is also compliant to that specified in IEC62209-1 (2005) and adopted by CENELEC as EN62209-1 (2006).

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 similar type 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	56.50	44.90
Diacetin	NA	NA
De ionized -Water	40.95	53.06
Salt	1.45	0.94
HEC	1.00	1.00
Bact.	0.10	0.10

Reference section 6.1 for target parameters

5.0 Additional Test Equipment

Equipment Type	Model Number	Serial Number	Calibration Due Date
Power Meter (Agilent)	E4418B	US39251150	4/16/2009
Power Meter (Agilent)	E4418B	GB40206553	4/16/2009
Power Meter (Agilent)	E4418B	US39251152	3/24/2009
Power Sensor (Agilent)	8482B	3318A07392	3/21/2009
Power Sensor (Agilent)	8482B	3318A07548	12/13/2008
Power Sensor (Agilent)	8482B	3318A06774	2/26/2009
Bi-Directional Coupler (NARDA)	3020A	40296	2/7/2010
Signal Generator (HP)	E4421B	US39270649	8/16/2008
AMP (Amplifier Research)	10W1000	5924	CNR
Dickson Temperature Recorder	TM320	07081356	7/27/08
OMEGA Temperature Recorder	HH202A	18800	8/30/08
OMEGA Temperature Recorder	HH202A	18801	3/26/09
OMEGA Temperature Recorder	HH202A	18812	4/25/09
Dipole			
Dipole (SPEAG)	D900V2	085	8/15/2008
Tissue Station			
Agilent PNA-L Network Analyzer	N5230A	MY45001092	5/22/2010
Dielectric Probe Kit (HP)	85070C	US99360076	CNR

6.0 SAR Measurement System Verification

The SAR measurements were conducted with probe model/serial number ET3DV6/SN1383. The system performance check was conducted daily and within 24 hours prior to testing. DASY output files of the probe/dipole calibration certificates and system performance test results are included in appendices B, C, D 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 G&PS 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 G&PS EME system performance validation are provided herein.

6.1 Equivalent Tissue Test Results

Simulated tissue prepared for SAR measurements is measured daily and within 24 hours prior to actual SAR 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 applicable equipment indicated in section 5.0.

Target versus Actual tissue parameters
(6/18/08-6/27/08, 6 test days)

FCC Body				
Frequency (MHz)	**Di-electric Constant Target**	**Di-electric Constant Meas. (Range)**	**Conductivity Target S/m**	**Conductivity Meas. (Range) S/m**
815.5	55.3	53.5-53.7	0.97	0.98-0.98
899	55.0	52.6-52.8	1.05	1.07-1.07
900	55.0	52.6-52.6	1.05	1.07-1.07
915	55.0	52.5-52.7	1.06	1.08-1.09

IEEE Head				
Frequency (MHz)	**Di-electric Constant Target**	**Di-electric Constant Meas. (Range)**	**Conductivity Target S/m**	**Conductivity Meas. (Range) S/m**
815.5	41.6	40.7-41.3	0.90	0.86-0.89
899	41.5	39.7-40.3	0.97	0.95-0.97
900	41.5	39.7-40.3	0.97	0.95-0.97
915	41.5	39.5-40.1	0.98	0.96-0.98

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 SAR @ 1W (mW/g)	Test Date(s)
1383	FCC Body	1/28/08	D900V2/SN085	12.10+/-0.00	11.52+/-10%	6/24/08 (1 test day)
1383	IEEE Head	1/28/08	D900V2/SN085	11.10+/-0.36	11.30+/-10%	6/18/08-6/27/08 (5 test days)

Note: See APPENDIX D for an explanation of the reference SAR targets stated above.
(System performance results reflects the median performance +/- ½ of the test date(s) performance ranges)

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 SAR 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, WiDEN, and MOTOtalk (FHSS 8FSK) transmission signaling operational at the body, head, and face using 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 SAR test plan for this product. SAR measurements were performed using a rectangular flat phantom and a SAM phantom with the applicable simulated tissue to assess performance at the body, head, and face respectively using the relevant transmission modes.

Note that a coarse-to-cube approximation methodology was utilized to determine the worst-case SAR performance configuration for each applicable body location. The test configurations that produced the highest SAR results for each body position using the coarse-to-cube approximation methodology were assessed using the full DASY4™ coarse and 5x5x7 zoom scans.

Per FCC TCB workshop (February 2008) and FCC OET draft 648474 (April 2008) “SAR Evaluation Considerations for handsets with multiple Transmitters and Antennas”, SAR measurements were not performed for the BlueTooth band due to the maximum output power for BlueTooth is 2.5mW and the separation distance between the BlueTooth antenna and the other antenna is 66mm.

Assessments at the Head (806-825MHz Band iDEN 1:3 mode) (Page 13 of 35; Table 1)

- The DUT was assessed at the right ear, at center frequency of the 806-825MHz band in the 1:3 transmission mode, using the offered battery and applicable test configurations at the head.

- The DUT was assessed at the band edges with antenna in and antenna out, using the applicable worst case configuration from the right ear.

- The DUT was assessed at the left ear, at center frequency of the 806-825MHz band in the 1:3 (iDEN phone) transmission mode, using the offered battery and applicable test configurations at the head.

- The DUT was assessed at the band edges for antenna in and antenna out, using the applicable worst case configuration from the left ear.

Assessments at the Head (896-902MHz Band iDEN 1:3 mode) (Page 14 of 35; Table 2)

- The DUT was assessed at the right ear, at center frequency of the 896-902MHz band in the 1:3 transmission mode, using the offered battery and applicable test configurations at the head.

- The DUT was assessed at the band edges with antenna in and antenna out, using the applicable worst case configuration from the right ear.

- The DUT was assessed at the left ear, at center frequency of the 896-902MHz band in the 1:3 (iDEN phone) transmission mode, using the offered battery and applicable test configurations at the head.

- The DUT was assessed at the band edges with antenna in and antenna out, using the applicable worst case configuration from the left ear.

Assessments at the Face (806-825MHz Band iDEN 1:6 mode) (Page 15 of 35; Table 3)

- The DUT was assessed at the face at the center frequency of 806-825MHz band in the 1:6 (iDEN Dispatch) transmission mode, with antenna in and antenna out, using the offered battery with flip opened and closed.

Assessments at the Face (896-902MHz Band iDEN 1:6 mode) (Page 15 of 35; Table 3)

- The DUT was assessed at the face, at the center frequency of 896-902MHz band in the 1:6 (iDEN Dispatch) transmission mode, with antenna in and antenna out, using the offered battery with flip opened and closed.

Assessments at the Face (902-928MHz band MOTOTalk mode) (Page 15 of 35; Tables 3)

- The DUT was assessed at the face, at the center frequency of 902-928MHz band in the 114:120 (MOTOTalk) transmission mode, using the offered battery with flip opened and closed.
- The DUT was assessed at the band edges with antenna in and antenna out, using the applicable worst case configuration from above.

Assessments at the Body (806-825MHz band WiDEN/iDEN modes) (Page 16 of 35; Tables 4)

- Assessment in the 806-825MHz, in the 231:310 (WiDEN) transmission mode, using the offered battery and body-worn accessories, with and without the offered data cable.
- Assessment of the offered audio cable options, in the 1:3 (iDEN phone) transmission mode, using the worse case configuration from above
- The DUT was assessed at the band edges with antenna in and antenna out, using the applicable worst case configuration from above.
- Assessment using the overall worst case test configuration from above, with antenna in and antenna out, and with the back and front housing of the DUT separated 2.5cm from the phantom.

Assessments at the Body (896-902MHz band WiDEN/iDEN modes) **(Page 17 of 35; Tables 5)**

- Assessment in the 896-902MHz, in the 231:310 (WiDEN) transmission mode, using the offered battery and body-worn accessories, with and without the offered data cable.
- Assessment of the offered audio cable options, in the 1:3 (iDEN phone) transmission mode, using the worse case configuration from above
- The DUT was assessed at the band edges with antenna in and antenna out, using the applicable worst case configuration from above.
- Assessment using the overall worst case test configuration from above, with antenna in and antenna out, and with the back and front housing of the DUT separated 2.5cm from the phantom.

Assessments at the Body (902-928MHz band MOTOTalk mode) **(Page 18 of 35; Tables 6)**

- Assessment in the 902-928MHz, in the 114:120 (MOTOTalk) transmission mode, using the offered battery and applicable body-worn and audio accessories.
- Assessment at the band edges of the 902-928MHz band with antenna in and antenna out, using the applicable worst case from above.
- Assessment using the overall worst case test configuration from above, with antenna in and antenna out, and with the back and front housing of the DUT separated 2.5cm from the phantom.

Shortened scan assessment **(Page 19 of 35; Tables 7)**

- A "shortened" scan was performed using the offered battery and test configuration that produced the highest SAR results overall. 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, a cube scan only was performed. 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 antenna in and antenna out, and the offered body worn accessory.
The DUT was positioned with antenna in and antenna out, and with its' front and back sides separated 2.5cm from the phantom.

7.2.2 Head

The DUT was placed against the right and left heads of the SAM phantom in the cheek touch and tilt positions, and with antenna in and antenna out.

7.2.3 Face

The DUT was positioned with the flip opened and closed, antenna in and antenna out, and 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 at least 15cm. 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 SAR tests reported herein:

	Target	Measured
Ambient Temperature	20 - 25 ˚C	Range: 21.1-21.9˚C Avg. 21.5˚C
Relative Humidity	30 - 70 %	Range: 49.7-60.6% Avg. 53.2%
Tissue Temperature	NA	Range: 19.0-21.6˚C Avg. 19.7˚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 SAR scans are repeated.

9.0 Test Results Summary

All SAR 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 per band (in bold with *). The worst case test configurations observed for each body location were assessed using the full DASY4^{TM} coarse and 5x5x7 zoom methodology and they are summarized in the worst case table below. The associated SAR plots are provided in APPENDIX E. Appendix E also presents shortened SAR 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 SAR results presented herein are valid.

Table 1

Assessments at the Head - iDEN 806-825MHz Band												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
Assessments at the Right Ear (Phone mode 1:3) iDEN 806-825MHz Band												
MeC-Rear-080618-03/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.628	-0.44	1.220	0.805	1.38	0.91
MeC-Rear-080618-06/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.627	0.0551	1.090	0.738	1.11	0.75
MeC-Rear-080618-07/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.627	-0.115	0.371	0.259	0.39	0.27
MeC-Rear-080618-08/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.625	-0.136	0.264	0.187	0.28	0.20
Band edges assessment - test at the same WC antenna in configuration from iDEN 806-825MHz Right Ear above												
MeC-Rear-080618-09/ 364VJJC16H	8575468M01 (IN)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.653	-9E-04	0.992	0.672	0.99	0.67
***MeC-Rear-080618-10/ 364VJJC16H**	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.655	-0.123	1.390	0.916	1.43	0.94
***MeC-Rear-080620-17/ 364VJJC0WT**	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.652	-0.073	1.320	0.893	1.34	0.91
Band edges assessment - test at the same WC antenna out configuration from iDEN 806-825MHz Right Ear above												
MeC-Rear-080618-11/ 364VJJC16H	8575468M01 (OUT)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.65	-0.014	1.110	0.755	1.11	0.76
MeC-Rear-080618-12/ 364VJJC16H	8575468M01 (OUT)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.652	-0.125	1.080	0.731	1.11	0.75
Assessments at the Left Ear (Phone mode 1:3) iDEN 806-825MHz Band												
JsT-Lear-080619-19/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.627	-0.107	1.260	0.834	1.32	0.87
JsT-Lear-080619-20/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.628	-0.061	1.060	0.690	1.10	0.71
MeC-Lear-080619-21/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.627	-0.015	0.339	0.239	0.35	0.24
MeC-Lear-080619-22/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.625	-0.059	0.239	0.170	0.25	0.18
Band edges assessment - test at the same WC antenna in configuration from iDEN 806-825MHz Left Ear above												
MeC-Lear-080619-23/ 364VJJC16H	8575468M01 (IN)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.652	-0.067	1.130	0.740	1.15	0.75
MeC-Lear-080619-24/ 364VJJC16H	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.654	0.103	1.310	0.829	1.31	0.83
Band edges assessment - test at the same WC antenna out configuration from iDEN 806-825MHz Left Ear above												
MeC-Lear-080619-25/ 364VJJC16H	8575468M01 (OUT)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.653	0.038	1.110	0.709	1.11	0.71
MeC-Lear-080619-26/ 364VJJC16H	8575468M01 (OUT)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.655	0.0851	1.020	0.661	1.02	0.66

Table 2

Assessments at the Head - iDEN 896-902MHz Band												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
Assessments at the Right Ear (Phone mode 1:3) iDEN 896-902MHz Band												
JsT-Rear-080619-03/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.671	0.329	0.965	0.650	0.97	0.65
JsT-Rear-080619-04/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.67	0.0079	0.886	0.583	0.89	0.58
JsT-Rear-080619-05/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.671	0.0221	0.179	0.126	0.18	0.13
JsT-Rear-080619-06/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.67	0.103	0.143	0.101	0.14	0.10
Band edges assessment - test at the same WC antenna in configuration from iDEN 896-902MHz Right Ear above												
***JsT-Rear-080619-07/ 364VJJC16H**	8575468M01 (IN)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.667	0.14	0.994	0.663	0.99	0.66
JsT-Rear-080619-08/ 364VJJC16H	8575468M01 (IN)	901.98125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.67	-0.158	0.920	0.620	0.95	0.64
Band edges assessment - test at the same WC antenna out configuration from iDEN 896-902MHz Right Ear above												
JsT-Rear-080619-09/ 364VJJC16H	8575468M01 (OUT)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.671	0.0273	0.807	0.546	0.81	0.55
JsT-Rear-080619-10/ 364VJJC16H	8575468M01 (OUT)	901.98125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.671	0.0308	0.825	0.550	0.83	0.55
Assessments at the Left Ear (Phone mode 1:3) iDEN 896-902MHz Band												
JsT-Lear-080619-11/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.672	-0.188	0.781	0.523	0.82	0.55
JsT-Lear-080619-12/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.671	0.0793	0.645	0.423	0.65	0.42
JsT-Lear-080619-13/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.67	-0.027	0.174	0.121	0.18	0.12
JsT-Lear-080619-14/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Tilt	None	None	0.672	0.0802	0.166	0.117	0.17	0.12
Band edges assessment - test at the same WC antenna in configuration from iDEN 896-902MHz Left Ear above												
JsT-Lear-080619-15/ 364VJJC16H	8575468M01 (IN)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.67	0.163	0.992	0.644	0.99	0.64
JsT-Lear-080619-16/ 364VJJC16H	8575468M01 (IN)	901.98125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.669	-0.071	0.924	0.596	0.94	0.61
Band edges assessment - test at the same WC antenna out configuration from iDEN 896-902MHz Left Ear above												
JsT-Lear-080619-17/ 364VJJC16H	8575468M01 (OUT)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.67	0.0143	0.827	0.525	0.83	0.53
JsT-Lear-080619-18/ 364VJJC16H	8575468M01 (OUT)	901.98125	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.67	-0.079	0.818	0.532	0.83	0.54

Table 3

Assessments at the Face – iDEN (806-825MHz Band ,896-902MHz Band) and MOTOTalk (902-928MHz Band)												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
Assessments at the Face (Dispatch mode 1:6) iDEN 806-825MHz Band												
***HvH-Face-080620-02/ 364VJJC16H**	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip opened	None	0.627	0.05	0.102	0.073	0.05	0.04
HvH-Face-080620-03/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.626	0.0602	0.074	0.053	0.04	0.03
HvH-Face-080620-04/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip opened	None	0.628	0.556	0.061	0.043	0.03	0.02
Assessments at the Face (Dispatch mode 1:6) iDEN 896-902MHz Band												
HvH-Face-080620-05/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip opened	None	0.671	0.0873	0.054	0.038	0.03	0.02
***HvH-Face-080620-06/ 364VJJC16H**	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.67	0.0686	0.138	0.098	0.07	0.05
HvH-Face-080620-07/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.671	-0.105	0.119	0.084	0.06	0.04
Assessments at the Face (MOTOTalk mode 114:120) 902-928MHz Band												
HvH-Face-080620-08/ 364VJJC16H	8575468M01 (IN)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip opened	None	0.932	-0.039	0.467	0.330	0.24	0.17
HvH-Face-080620-09/ 364VJJC16H	8575468M01 (IN)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.928	0.0643	1.000	0.707	0.50	0.35
HvH-Face-080620-10/ 364VJJC16H	8575468M01 (OUT)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.928	-0.011	0.945	0.670	0.47	0.34
MOTOTalk Band edges assessment - test at the same WC antenna in configuration from MOTOTalk 902-928MHz above												
HvH-Face-080620-11/ 364VJJC16H	8575468M01 (IN)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.924	-0.014	1.110	0.785	0.56	0.39
***MeC-Face-080620-15/ 364VJJC0WT**	8575468M01 (IN)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.92	0.0344	1.160	0.822	0.58	0.41
HvH-Face-080620-12/ 364VJJC16H	8575468M01 (IN)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.923	0.0079	0.877	0.617	0.44	0.31
MOTOTalk Band edges assessment - test at the same WC antenna out configuration from MOTOTalk 902-928MHz above												
HvH-Face-080620-13/ 364VJJC16H	8575468M01 (OUT)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.922	-0.003	0.984	0.700	0.49	0.35
MeC-Face-080620-14/ 364VJJC16H	8575468M01 (OUT)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.923	-0.049	0.921	0.652	0.47	0.33

Table 4

Assessments at the Body – WiDEN/iDEN 806-825MHz Band												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
Assessments at the Body (WiDEN mode 236:310) 806-825MHz Band												
JsT-Ab-080623-03/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.628	0.38	0.905	0.626	0.94	0.65
JsT-Ab-080623-04/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.627	0.039	1.260	0.874	1.30	0.91
JsT-Ab-080623-07/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	SKN6238A	0.627	0.104	0.786	0.552	0.81	0.57
JsT-Ab-080623-08/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	SKN6238A	0.626	-0.039	1.050	0.734	1.10	0.77
Audio cables assessment at the body (iDEN mode 1:3) using the same WC configuration from WiDEN 806-825MHz Body above												
JsT-Ab-080623-09/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5330B	0.626	0.0461	0.449	0.316	0.46	0.32
JsT-Ab-080623-10/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5211B	0.627	0.056	0.376	0.265	0.38	0.27
JsT-Ab-080623-11/ 364VJJC16H	8575468M01 (OUT)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.626	0.0184	0.371	0.263	0.38	0.27
Band edges assessment - test at the same WC antenna in configuration from WiDEN/iDEN 806-825MHz Body above												
JsT-Ab-080623-12/ 364VJJC16H	8575468M01 (IN)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.661	0.328	0.558	0.391	0.57	0.40
JsT-Ab-080623-13/ 364VJJC16H	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.663	-0.012	1.040	0.728	1.06	0.74
Band edges assessment - test at the same WC antenna out configuration from WiDEN/iDEN 806-825MHz Body above												
***JsT-Ab-080623-14/ 364VJJC16H**	8575468M01 (OUT)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.66	-0.032	1.380	0.972	1.41	0.99
JsT-Ab-080623-15/ 364VJJC16H	8575468M01 (OUT)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.663	-0.085	1.160	0.818	1.20	0.85
2.5cm assessment - test at the same WC antenna in configuration from WiDEN/iDEN 806-825MHz Body above												
JsT-Ab-080623-17/ 364VJJC16H	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Back @ 2.5cm	None	None	0.663	-0.05	0.934	0.651	0.96	0.67
JsT-Ab-080623-18/ 364VJJC16H	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None	None	0.662	-0.19	0.592	0.418	0.63	0.44
2.5cm assessment - test at the same WC antenna out configuration from WiDEN/iDEN 806-825MHz Body above												
JsT-Ab-080624-02/ 364VJJC16H	8575468M01 (OUT)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Back @ 2.5cm	None	None	0.661	-0.169	1.250	0.882	1.32	0.93
JsT-Ab-080624-03/ 364VJJC16H	8575468M01 (OUT)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None	None	0.66	-0.138	0.904	0.642	0.95	0.67

Table 5

Assessments at the Body – WiDEN/iDEN 896-902MHz Band												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
Assessments at the Body (WiDEN mode 236:310) 896-902MHz Band												
JsT-Ab-080624-04/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.67	-0.019	1.180	0.812	1.20	0.83
***MeC-Ab-080624-39/ 364VJJC0WT**	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.668	-0.056	1.210	0.832	1.24	0.86
JsT-Ab-080624-05/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.671	-0.011	1.050	0.742	1.07	0.75
JsT-Ab-080624-06/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	SKN6238A	0.671	0.006	0.952	0.662	0.97	0.67
JsT-Ab-080624-07/ 364VJJC16H	8575468M01 (OUT)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	SKN6238A	0.67	0.0287	0.910	0.637	0.92	0.65
Audio cables assessment at the body (iDEN mode 1:3) using the same WC configuration from WiDEN 896-902MHz Body above												
JsT-Ab-080624-08/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5330B	0.671	-0.007	0.359	0.250	0.36	0.25
JsT-Ab-080624-09/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5211B	0.672	-0.039	0.368	0.258	0.37	0.26
JsT-Ab-080624-10/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.671	0.0036	0.423	0.295	0.42	0.30
Band edges assessment - test at the same WC antenna in configuration from WiDEN/iDEN 896-902MHz Body above												
JsT-Ab-080624-11/ 364VJJC16H	8575468M01 (IN)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.667	0.0177	1.160	0.805	1.18	0.82
JsT-Ab-080624-12/ 364VJJC16H	8575468M01 (IN)	901.98125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.668	-0.023	1.160	0.804	1.18	0.82
Band edges assessment - test at the same WC antenna out configuration from WiDEN/iDEN 896-902MHz Body above												
JsT-Ab-080624-13/ 364VJJC16H	8575468M01 (OUT)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.667	0.0962	1.090	0.764	1.11	0.78
JsT-Ab-080624-14/ 364VJJC16H	8575468M01 (OUT)	901.98125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.667	-0.022	1.080	0.758	1.10	0.77
2.5cm assessment - test at the same WC antenna in configuration from WiDEN/iDEN 896-902MHz Body above												
JsT-Ab-080624-16/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Back @2.5cm	None	None	0.671	-0.145	0.970	0.673	1.02	0.71
JsT-Ab-080624-17/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None	None	0.671	-0.17	0.631	0.443	0.67	0.47
2.5cm assessment - test at the same WC antenna out configuration from WiDEN/iDEN 896-902MHz Body above												
JsT-Ab-080624-19/ 364VJJC16H	8575468M01 (OUT)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Back @2.5cm	None	None	0.665	-0.721	0.723	0.505	0.87	0.60
JsT-Ab-080624-20/ 364VJJC16H	8575468M01 (OUT)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None	None	0.664	-0.118	0.598	0.418	0.62	0.44

Table 6

Assessments at the Body - MOTOTalk mode 902-928MHz Band												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
Assessments at the Body (MOTOTalk mode 114:120) 902-928MHz Band												
JsT-Ab-080624-21/ 364VJJC16H	8575468M01 (IN)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5330B	0.934	0.0278	1.450	1.010	0.73	0.51
JsT-Ab-080624-22/ 364VJJC16H	8575468M01 (OUT)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5330B	0.932	0.0094	1.740	1.210	0.87	0.61
Audio cables assessment at the body (iDEN mode 1:3) using the same WC configuration from MOTOTalk 902-928MHz Body above												
JsT-Ab-080624-23/ 364VJJC16H	8575468M01 (OUT)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN5211B	0.929	0.0276	1.740	1.210	0.87	0.61
JsT-Ab-080624-24/ 364VJJC16H	8575468M01 (OUT)	915.525	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.932	-0.007	1.790	1.250	0.90	0.63
Band edges assessment for antenna in/out - using the over all WC audio from MOTOTalk 902-928MHz Body above												
MeC-Ab-080624-25/ 364VJJC16H	8575468M01 (IN)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.922	-0.042	1.620	1.130	0.82	0.57
MeC-Ab-080624-26/ 364VJJC16H	8575468M01 (IN)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.924	-0.055	1.590	1.100	0.81	0.56
MeC-Ab-080624-27/ 364VJJC16H	8575468M01 (OUT)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.925	-0.068	1.610	1.120	0.82	0.57
MeC-Ab-080624-28/ 364VJJC16H	8575468M01 (OUT)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.923	0.0935	1.970	1.370	0.99	0.69
***MeC-Ab-080624-35/ 364VJJC0WT**	8575468M01 (OUT)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.92	-0.338	2.010	1.400	1.09	0.76
2.5cm assessment - test at the same WC antenna in configuration from MOTOTalk 902-928MHz Body above												
MeC-Ab-080624-30/ 364VJJC16H	8575468M01 (IN)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Back @2.5cm	None	NNTN6312A	0.921	-0.02	1.730	1.200	0.87	0.60
MeC-Ab-080624-31/ 364VJJC16H	8575468M01 (IN)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None	NNTN6312A	0.922	-0.125	0.952	0.662	0.49	0.34
2.5cm assessment - test at the same WC antenna out configuration from MOTOTalk 902-928MHz Body above												
MeC-Ab-080624-33/ 364VJJC16H	8575468M01 (OUT)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Back @2.5cm	None	NNTN6312A	0.925	-0.004	1.590	1.110	0.80	0.56
MeC-Ab-080624-34/ 364VJJC16H	8575468M01 (OUT)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None	NNTN6312A	0.926	-0.163	0.979	0.690	0.51	0.36

Table 7

*Worst case configuration per body location from above (including shortened scan) –using the DASY 4 full coarse and 5x5x7 cube scan measurements.												
Run Number/SN	**Antenna**	**Freq. (MHz)**	**Battery**	**Test Position**	**Carry Case**	**Additional Attachments**	**Initial Power (W)**	**SAR Drift (dB)**	**Meas. 1g-SAR (mW/g)**	**Meas. 10g-SAR (mW/g)**	**Max. Calc. 1g-SAR (mW/g)**	**Max. Calc. 10g-SAR (mW/g)**
FULL SCAN MeC-Rear-080620-18/ 364VJJC16H	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.654	-0.05	1.380	0.899	1.40	0.91
FULL SCAN MeC-Rear-080619-27/ 364VJJC0WT	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.654	-0.493	1.290	0.865	1.45	0.97
Shorten scan MeC-Rear-080619-28/ 364VJJC0WT	8575468M01 (IN)	824.9875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.652	-0.107	1.320	0.868	1.35	0.89
FULL SCAN MeC-Rear-080620-19/ 364VJJC16H	8575468M01 (IN)	896.01875	SNN5819A w/ Batt cover NTN2484XXXA	Touch	None	None	0.668	0.0538	1.100	0.702	1.10	0.70
FULL SCAN HvH-Face-080627-02/ 364VJJC16H	8575468M01 (IN)	815.5125	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip opened	None	0.631	-0.00687	0.104	0.0759	0.05	0.04
FULL SCAN HvH-Face-080627-03/ 364VJJC16H	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.676	-0.00121	0.140	0.0985	0.07	0.05
FULL SCAN MeC-Face-080620-16/ 364VJJC0WT	8575468M01 (IN)	902.525	SNN5819A w/ Batt cover NTN2484XXXA	Radio's Front @2.5cm	None, Flip closed	None	0.921	-0.046	1.170	0.828	0.59	0.42
FULL SCAN MeC-Ab-080624-38/ 364VJJC16H	8575468M01 (OUT)	806.0125	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.659	-0.194	1.270	0.920	1.35	0.98
FULL SCAN MeC-Ab-080624-40/ 364VJJC0WT	8575468M01 (IN)	898.99375	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	None	0.667	0.0095	1.190	0.843	1.21	0.86
FULL SCAN MeC-Ab-080624-36/ 364VJJC0WT	8575468M01 (OUT)	927.475	SNN5819A w/ Batt cover NTN2484XXXA	Against phantom	NNTN7495A	NNTN6312A	0.921	-0.181	1.870	1.340	0.97	0.70

9.1 Highest SAR results calculation methodology

The calculated maximum 1-gram and 10-gram averaged SAR results reported herein for the full DASY ™ coarse and 5x5x7 cube measurements are determined by scaling the measured SAR to account for power leveling variations and power slump. For this device the Maximum Calculated 1-gram and 10-gram averaged peak SAR is calculated using the following formula:

Max. Calc. 1-g/10-g Avg. SAR = ((SAR 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-g/10-g Avg. SAR (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 SAR values found for FCC ID: IHDP56HS1 model H02XAH6JR6AN/ NWF1341A.

Max. Calc. : 1-g Avg. SAR: 1.35 W/kg (Body); 10-g Avg. SAR: 0.98 W/kg (Body)
Max. Calc. : 1-g Avg. SAR: 0.59 W/kg (Face); 10-g Avg. SAR: 0.42 W/kg (Face)
Max. Calc. : 1-g Avg. SAR: 1.45 W/kg (Head); 10-g Avg. SAR: 0.97 W/kg (Head)

The test results clearly demonstrate compliance with FCC General Population/Uncontrolled RF Exposure limits of 1.6W/kg per the requirements of 47 CFR 2.1093(d).

The highest SAR levels also clearly demonstrate compliance to ICNIRP (1998) Guidelines for limiting exposure in time-varying electric, magnetic, and electromagnetic fields (up to 300GHz) RF Exposure limits of 2.0 W/kg averaged over 10grams of contiguous tissue.

Appendix A
Measurement Uncertainty

Uncertainty Budget for Device Under Test, for 30 MHz to 3 GHz

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	5.9	N	1.00	1	1	5.9	5.9	∞
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	0.3	N	1.00	1	1	0.3	0.3	∞
Response Time	E.2.7	1.1	R	1.73	1	1	0.6	0.6	∞
Integration Time	E.2.8	1.1	R	1.73	1	1	0.6	0.6	∞
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	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	∞
Test sample Related									
Test Sample Positioning	E.4.2	3.2	N	1.00	1	1	3.2	3.2	29
Device Holder Uncertainty	E.4.1	4.0	N	1.00	1	1	4.0	4.0	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	3.3	N	1.00	0.64	0.43	2.1	1.4	∞
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	1.9	N	1.00	0.6	0.49	1.1	0.9	∞
Combined Standard Uncertainty			RSS				11	11	411
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				22	22	

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Uncertainty Budget for System Validation (dipole & flat phantom) for 30 MHz to 3 GHz

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	5.9	N	1.00	1	1	5.9	5.9	∞
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	0.3	N	1.00	1	1	0.3	0.3	∞
Response Time	E.2.7	1.1	R	1.73	1	1	0.6	0.6	∞
Integration Time	E.2.8	0.0	R	1.73	1	1	0.0	0.0	∞
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	3.3	R	1.73	0.64	0.43	1.2	0.8	∞
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	1.9	R	1.73	0.6	0.49	0.6	0.5	∞
Combined Standard Uncertainty			RSS				9	9	99999
Expanded Uncertainty (95% CONFIDENCE LEVEL)			k=2				18	17	

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Notes:
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.

Appendix B
Probe Calibration Certificates

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Client **Motorola CGISS**

Certificate No: ET3-1383_Jan08

CALIBRATION CERTIFICATE

Object	ET3DV6 - SN:1383
Calibration procedure(s)	QA CAL-01.v6 and QA CAL-12.v5 Calibration procedure for dosimetric E-field probes
Calibration date:	January 28, 2008
Condition of the calibrated item	In Tolerance

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).
The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

Primary Standards	ID #	Cal Date (Calibrated by, Certificate No.)	Scheduled Calibration
Power meter E4419B	GB41293874	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Power sensor E4412A	MY41495277	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Power sensor E4412A	MY41498087	29-Mar-07 (METAS, No. 217-00670)	Mar-08
Reference 3 dB Attenuator	SN: S5054 (3c)	8-Aug-07 (METAS, No. 217-00719)	Aug-08
Reference 20 dB Attenuator	SN: S5086 (20b)	29-Mar-07 (METAS, No. 217-00671)	Mar-08
Reference 30 dB Attenuator	SN: S5129 (30b)	8-Aug-07 (METAS, No. 217-00720)	Aug-08
Reference Probe ES3DV2	SN: 3013	2-Jan-08 (SPEAG, No. ES3-3013_Jan08)	Jan-09
DAE4	SN: 654	20-Apr-07 (SPEAG, No. DAE4-654_Apr07)	Apr-08

Secondary Standards	ID #	Check Date (in house)	Scheduled Check
RF generator HP 8648C	US3642U01700	4-Aug-99 (SPEAG, in house check Oct-07)	In house check: Oct-09
Network Analyzer HP 8753E	US37390585	18-Oct-01 (SPEAG, in house check Oct-07)	In house check: Oct-08

	Name	Function	Signature
Calibrated by:	Katja Pokovic	Technical Manager	
Approved by:	Niels Kuster	Quality Manager	

Issued: January 28, 2008

Calibration Laboratory of
Schmid & Partner
Engineering AG
Zeughausstrasse 43, 8004 Zurich, Switzerland

S Schweizerischer Kalibrierdienst
C Service suisse d'étalonnage
S Servizio svizzero di taratura
S Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)
The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: SCS 108

Glossary:

TSL	tissue simulating liquid
NORMx,y,z	sensitivity in free space
ConF	sensitivity in TSL / NORMx,y,z
DCP	diode compression point
Polarization φ	φ rotation around probe axis
Polarization ϑ	ϑ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\vartheta = 0$ is normal to probe axis

Calibration is Performed According to the Following Standards:

a) IEEE Std 1528-2003, "IEEE Recommended Practice for Determining the Peak Spatial-Averaged Specific Absorption Rate (SAR) in the Human Head from Wireless Communications Devices: Measurement Techniques", December 2003
b) IEC 62209-1, "Procedure to measure the Specific Absorption Rate (SAR) for hand-held devices used in close proximity to the ear (frequency range of 300 MHz to 3 GHz)", February 2005

Methods Applied and Interpretation of Parameters:

- *NORMx,y,z:* Assessed for E-field polarization $\vartheta = 0$ ($f \leq 900$ MHz in TEM-cell; $f > 1800$ MHz: R22 waveguide). NORMx,y,z are only intermediate values, i.e., the uncertainties of NORMx,y,z does not effect the E^2-field uncertainty inside TSL (see below *ConvF*).
- *NORM(f)x,y,z = NORMx,y,z * frequency_response* (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of *ConvF*.
- *DCPx,y,z:* DCP are numerical linearization parameters assessed based on the data of power sweep (no uncertainty required). DCP does not depend on frequency nor media.
- *ConvF and Boundary Effect Parameters:* Assessed in flat phantom using E-field (or Temperature Transfer Standard for $f \leq 800$ MHz) and inside waveguide using analytical field distributions based on power measurements for $f > 800$ MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to *NORMx,y,z * ConvF* whereby the uncertainty corresponds to that given for *ConvF*. A frequency dependent *ConvF* is used in DASY version 4.4 and higher which allows extending the validity from ± 50 MHz to ± 100 MHz.
- *Spherical isotropy (3D deviation from isotropy)*: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- *Sensor Offset*: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.

Probe ET3DV6

SN:1383

Manufactured:	August 16, 1999
Last calibrated:	February 15, 2007
Recalibrated:	January 28, 2008

Calibrated for DASY Systems

(Note: non-compatible with DASY2 system!)

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DASY - Parameters of Probe: ET3DV6 SN:1383

Sensitivity in Free Space[A] Diode Compression[B]

NormX	**1.80** ± 10.1%	$\mu V/(V/m)^2$	DCP X	**92** mV
NormY	**1.62** ± 10.1%	$\mu V/(V/m)^2$	DCP Y	**89** mV
NormZ	**1.68** ± 10.1%	$\mu V/(V/m)^2$	DCP Z	**92** mV

Sensitivity in Tissue Simulating Liquid (Conversion Factors)

Please see Page 8.

Boundary Effect

TSL **900 MHz** **Typical SAR gradient: 5 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	5.9	1.7
SAR_{be} [%]	With Correction Algorithm	0.8	0.7

TSL **1810 MHz** **Typical SAR gradient: 10 % per mm**

Sensor Center to Phantom Surface Distance		**3.7 mm**	**4.7 mm**
SAR_{be} [%]	Without Correction Algorithm	15.2	9.5
SAR_{be} [%]	With Correction Algorithm	0.8	0.4

Sensor Offset

Probe Tip to Sensor Center	**2.7** mm
Optical Surface Detection	**NOT in Tolerance**

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor k=2, which for a normal distribution corresponds to a coverage probability of approximately 95%.

[A] The uncertainties of NormX,Y,Z do not affect the E^2-field uncertainty inside TSL (see Page 8).

[B] Numerical linearization parameter: uncertainty not required.

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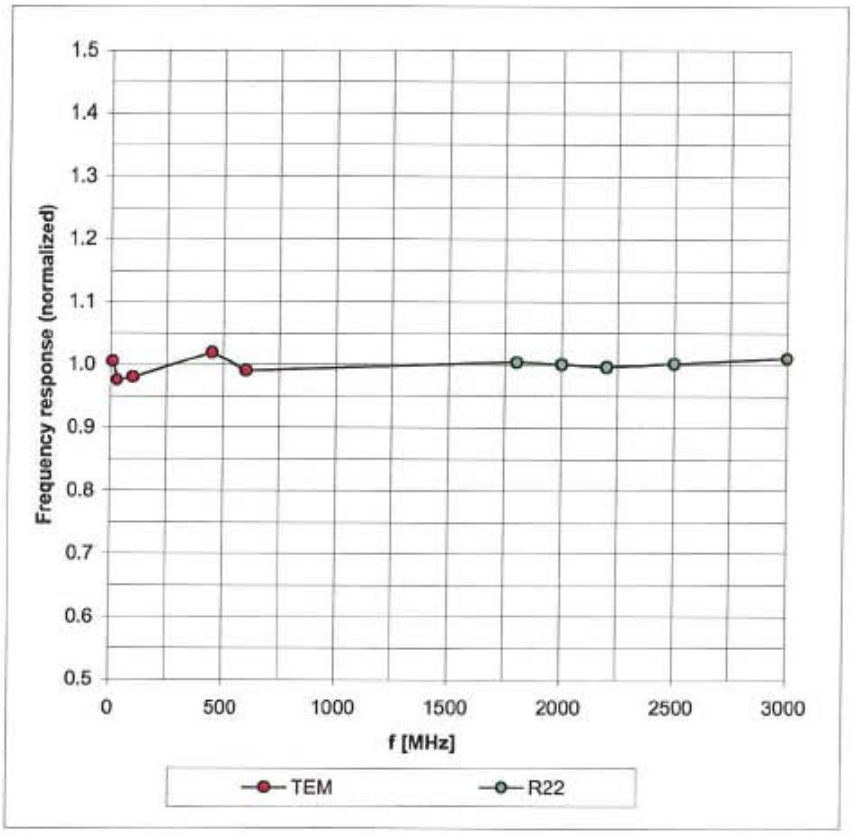
Frequency Response of E-Field

(TEM-Cell:ifi110 EXX, Waveguide: R22)



Uncertainty of Frequency Response of E-field: ± 6.3% (k=2)

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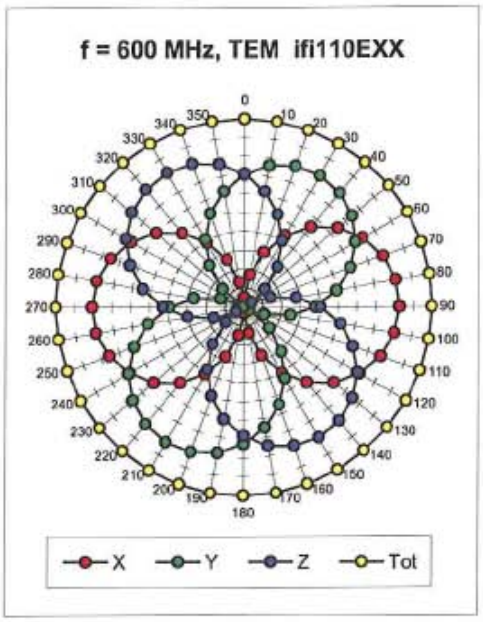
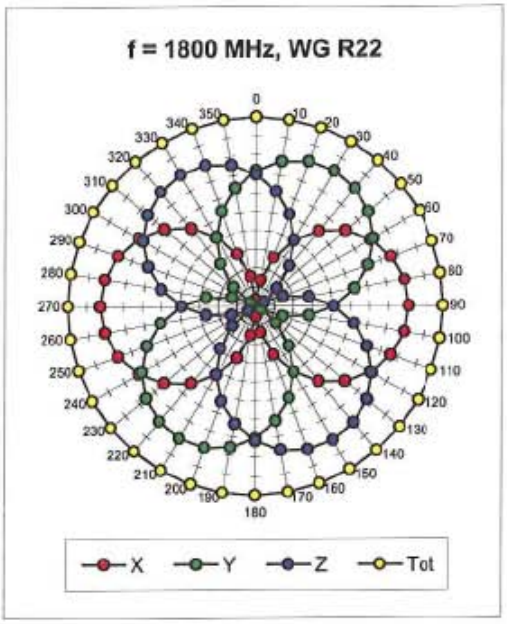
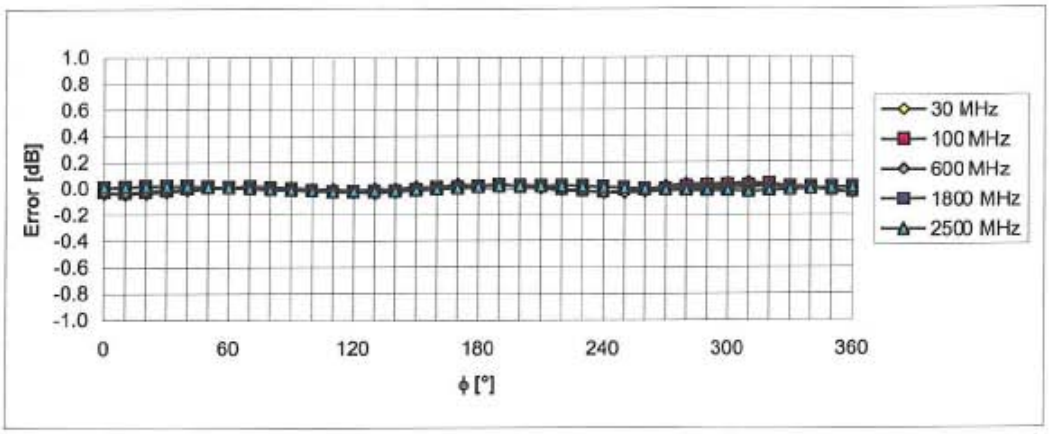
Receiving Pattern (ϕ), ϑ = 0°







Uncertainty of Axial Isotropy Assessment: ± 0.5% (k=2)

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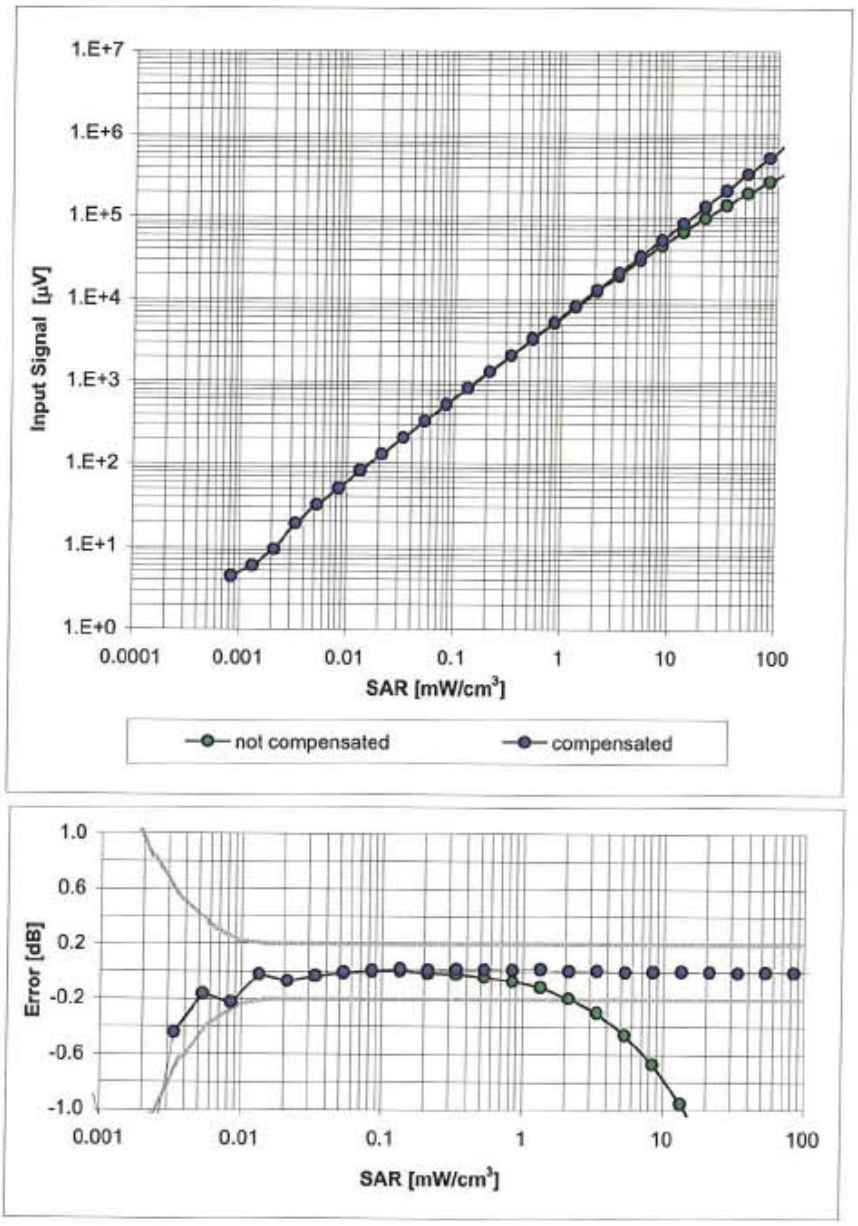
Dynamic Range f(SAR_{head})

(Waveguide R22, f = 1800 MHz)



Uncertainty of Linearity Assessment: ± 0.6% (k=2)

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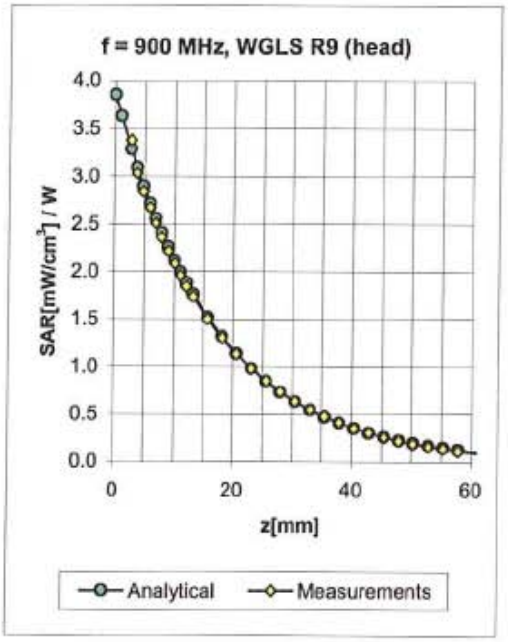
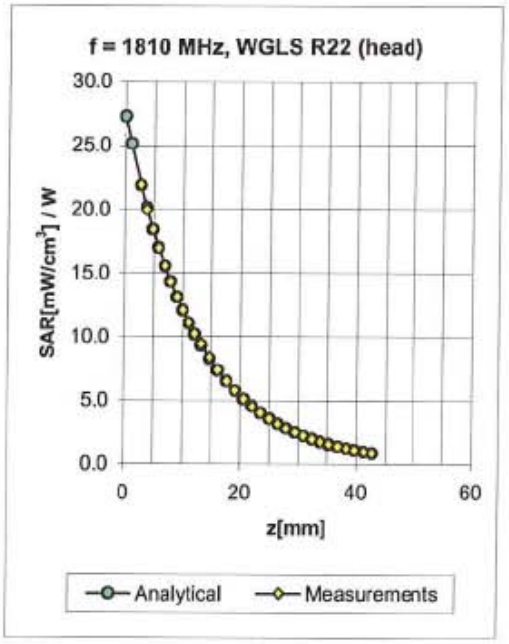
Conversion Factor Assessment





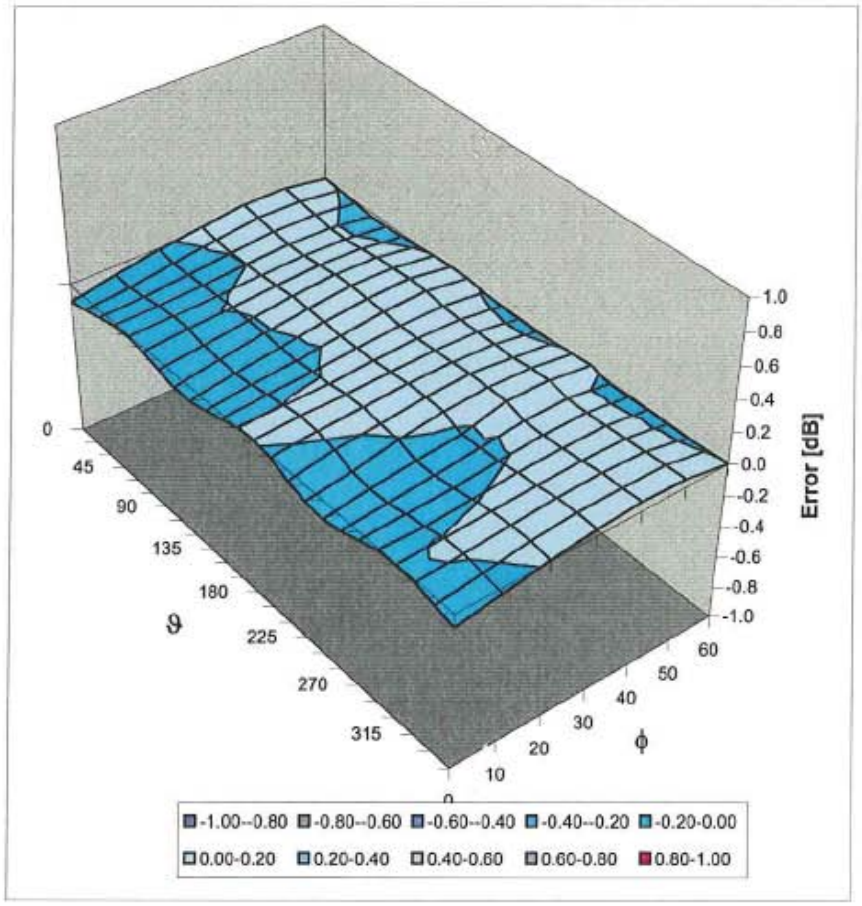
f [MHz]	Validity [MHz][C]	TSL	Permittivity	Conductivity	Alpha	Depth	ConvF Uncertainty
450	± 50 / ± 100	Head	43.5 ± 5%	0.87 ± 5%	0.39	1.98	7.23 ± 13.3% (k=2)
900	± 50 / ± 100	Head	41.5 ± 5%	0.97 ± 5%	0.90	1.49	6.54 ± 11.0% (k=2)
1810	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.63	2.58	5.08 ± 11.0% (k=2)
1950	± 50 / ± 100	Head	40.0 ± 5%	1.40 ± 5%	0.63	2.66	4.94 ± 11.0% (k=2)
2300	± 50 / ± 100	Head	39.4 ± 5%	1.71 ± 5%	0.70	2.33	4.79 ± 11.8% (k=2)
2450	± 50 / ± 100	Head	39.2 ± 5%	1.80 ± 5%	0.91	1.81	4.62 ± 11.8% (k=2)
450	± 50 / ± 100	Body	56.7 ± 5%	0.94 ± 5%	0.32	2.01	7.71 ± 13.3% (k=2)
900	± 50 / ± 100	Body	55.0 ± 5%	1.05 ± 5%	0.90	1.47	6.16 ± 11.0% (k=2)
1810	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.72	2.21	4.85 ± 11.0% (k=2)
1950	± 50 / ± 100	Body	53.3 ± 5%	1.52 ± 5%	0.80	2.05	4.64 ± 11.0% (k=2)
2300	± 50 / ± 100	Body	52.8 ± 5%	1.85 ± 5%	0.84	2.01	4.41 ± 11.8% (k=2)
2450	± 50 / ± 100	Body	52.7 ± 5%	1.95 ± 5%	1.02	1.69	4.17 ± 11.8% (k=2)

[C] The validity of ± 100 MHz only applies for DASY v4.4 and higher (see Page 2). The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band.

ET3DV6 SN:1383 January 28, 2008

Deviation from Isotropy in HSL

Error (ϕ, ϑ), f = 900 MHz



Uncertainty of Spherical Isotropy Assessment: ± 2.6% (k=2)

Schmid & Partner Engineering AG

s p e a g

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

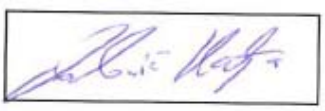
Additional Conversion Factors

for Dosimetric E-Field Probe

Type:	**ET3DV6**
Serial Number:	**1383**
Place of Assessment:	**Zurich**
Date of Assessment:	**January 30, 2008**
Probe Calibration Date:	**January 28, 2008**

Schmid & Partner Engineering AG hereby certifies that conversion factor(s) of this probe have been evaluated on the date indicated above. The assessment was performed using the FDTD numerical code SEMCAD of Schmid & Partner Engineering AG. Since the evaluation is coupled with measured conversion factors, it has to be recalculated yearly, i.e., following the re-calibration schedule of the probe. The uncertainty of the numerical assessment is based on the extrapolation from measured value at 900 MHz or at 1810 MHz.

Assessed by:



Schmid & Partner Engineering AG

s p e a g

Zeughausstrasse 43, 8004 Zurich, Switzerland
Phone +41 44 245 9700, Fax +41 44 245 9779
info@speag.com, http://www.speag.com

Dosimetric E-Field Probe ET3DV6 - SN:1383

Conversion factor (± standard deviation)

150 MHz	*ConvF*	**8.9 ± 10%**	ε_r = 52.3 σ = 0.76 mho/m (head tissue)
250 MHz	*ConvF*	**8.1 ± 10%**	ε_r = 47.6 σ = 0.83 mho/m (head tissue)
300 MHz	*ConvF*	**8.0 ± 9%**	ε_r = 45.3 σ = 0.87 mho/m (head tissue)
750 MHz	*ConvF*	**6.8 ± 7%**	ε_r = 41.9 σ = 0.89 mho/m (head tissue)
150 MHz	*ConvF*	**8.6 ± 10%**	ε_r = 61.9 σ = 0.80 mho/m (body tissue)
250 MHz	*ConvF*	**8.1 ± 10%**	ε_r = 59.4 σ = 0.88 mho/m (body tissue)
300 MHz	*ConvF*	**8.0 ± 9%**	ε_r = 58.2 σ = 0.92 mho/m (body tissue)
750 MHz	*ConvF*	**6.6 ± 7%**	ε_r = 55.5 σ = 0.96 mho/m (body tissue)

Important Note:

For numerically assessed probe conversion factors, parameters Alpha and Delta in the DASY software must have the following entries: Alpha = 0 and Delta = 1.

Please see also Section 4.7 of the DASY4 Manual.