



MOTOROLA



CGISS EME Test Laboratory

8000 West Sunrise Blvd
Fort Lauderdale, FL. 33322

S.A.R. EME Compliance Test Report
Part 1 of 5

Date of Report: June 14, 2004
Report Revision: Rev. C
Manufacturer: Motorola
Product Description: CN620; Quad band GSM and Tri band WLAN (802.11a, b, and g)
FCC ID: **AZ489FT5829**
Device Model: H77UBH6JA5AA

Test Period: 2/19/04-3/24/04
EME Tech: Ed Church
Responsible Eng: Deanna Zakharia (Elect. Principle Staff 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.

Signature on File

6/15/04

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

Date Approved

Note: This report shall not be reproduced without written approval from an officially designated representative of the Motorola EME Laboratory.

TABLE OF CONTENTS

Part 1 of 5

- 1.0 Introduction
- 2.0 Reference Standards and Guidelines
- 3.0 Description of Test Sample
 - 3.1 Test Signal
 - 3.2 Test Output Power
- 4.0 Description of Test Equipment
 - 4.1 Description of S.A.R Measurement System
 - 4.2 Description of Phantom
 - 4.2.1 Flat Phantom
 - 4.2.2 SAM phantom
 - 4.3 Simulated Tissue Properties
 - 4.3.1 Type of Simulated Tissue
 - 4.3.2 Simulated Tissue Composition
 - 4.4 Test conditions
- 5.0 Probe Scan Procedures
 - 5.1 Shortened scan rationale
 - 5.2 Description of Test Procedure
 - 5.3 Device Test Positions
 - 5.3.1 Body
 - 5.3.2 Head
 - 5.3.3 Face
 - 5.4 Test Position Photographs
- 6.0 Measurement Uncertainty
- 7.0 S.A.R. Test Results
 - 7.1 S.A.R. results
 - 7.2 Peak S.A.R. location
 - 7.3 Highest S.A.R. results calculation methodology
- 8.0 Conclusion

Part 2 of 5

- Appendix A: Power Slump Data/Shortened scan
- Appendix B: Data Results
- Appendix C: Dipole System Performance Check Results

Part 3 of 5

- Appendix C: Dipole System Performance Check Results (Continued)
- Appendix D: Probe/Dipole Calibration Certificates

Part 4 of 5

- Appendix D: Probe/Dipole Calibration Certificates (continued)
- Appendix E: Illustration of Body-worn Accessories
- Appendix F: Accessories and options test status and separation distances

Part 5 of 5

- Appendix G: Explanation of 5GHz assessment and description of test methodology

REVISION HISTORY

Date	Revision	Comments
4/13/04	O	Release of Prototype results
4/15/04	A	Revised report partitions to accommodate FCC file size limitation
4/22/04	B	Revised report to update descriptive language in section 3.0 and 5.0
6/14/04	C	Revised parts 1 and 2 of the report to update revision history and to replace incorrect contour plots for applicable head assessments. Parts 3, 4, and 5 were updated to Rev C to be synchronized with the parts 1 and 2.

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 H77UBH6JA5AA, FCC ID: AZ489FT5829.

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: AZ489FT5829 is a class B GSM and WLAN capable device. The device is class 4 capable in the GSM 850 and 900 MHz bands and class 1 capable in the 1800 and 1900 MHz bands. The device also supports GPRS class 10 (2 uplink and 4 downlink slots) functionality. The WLAN section supports 802.11 b/g(2.4 GHz) and 802.11a(5.24 GHz). The following modes are supported with this device: (1) 1:8 duty cycle GSM voice only mode, (2) 14.3% duty cycle WLAN voice mode (6 Mbps, though higher data rates up to 54 Mbps is supported dependent on selected modulation scheme. Note that maximum power occurs at 36Mbps; however, the typical duty cycle is 4%), (3) GSM packet data (25% duty cycle, two TX slots in one frame), (4) WLAN packet data at 99.5% duty cycle for 11 Mbps CCK at 2.4 GHz, 97.1% for 36 Mbps in 2.4 GHz, and 97.1% for 36 Mbps in 5 GHz band, (5) 12 second dual mode simultaneous operation occur during voice mode to WLAN packet data handovers. Simultaneous transmission does not occur during handovers to GSM (GPRS) modes. This device incorporates two antennas; an internal PIFA and ¼ wave “Stubby” antennas. The internal PIFA antenna is utilized for WLAN modes only but supports both 2.4 and 5 GHz WLAN operation. The stubby antenna supports all four GSM bands (850/900/1800/1900) and both WLAN bands (2.4/5 GHz). During WLAN operation, the WLAN receiver selects the signal from both antennas alternately and makes a determination which signal is strongest. The antenna with the strongest signal is then selected for transmission. This device allows for PTT operation in the WLAN mode but not in the GSM mode. The same data rates apply while in PTT mode as for the voice mode described above.

This device will be marketed to and used by the general population. This device may be used while held against the head in phone mode (GSM and WLAN), in front of the face while in the hand in speaker phone and PTT mode (WLAN), and against the body in phone and data modes (GSM), as well as in phone, data, and PTT modes (WLAN).

FCC ID: AZ489FT5829 is capable of operating in the GSM bands of 824.2-848.8 MHz, 880.2-914.8 MHz, 1710.2-1784.8 MHz*, and 1850.2-1909.8MHz, as well as in the WLAN bands of 2412-2472 MHz and 5180-5320 MHz. The rated power is 1.51 watts for the GSM 850 band, 1.78 watts for GSM 900 band, 890mW for the 1800/1900 GSM bands, 25mW for the 802.11b 2.4GHz band, 16mW for the 802.11g 2.4GHz band, and 16mW for the 802.11a 5GHz band. The maximum output is 1.7 watts for the GSM 850 MHz band, 2 watts for the GSM 900MHz band, 1 watt for the GSM 1800/1900 MHz bands. Maximum power for the WLAN band is 40mW for 802.11b 2.4GHZ, 40mW for 802.11g 2.4GHZ, and 32mW for 802.11a 5GHz. All stated maximum powers are as defined by the upper limit of the production line final test station. *Note: The 1800 MHz band is not regulated by the FCC.

FCC ID: AZ489FT5829 is offered with the following options and accessories:

Antenna	Description
8585031F01	Fixed Stubby ¼ wave antenna; 824.2-848.8 MHz (0.31-0.59dBi gain); 880.2-914.8 MHz (0.04-0.26dBi gain); 1710.2-1784.8 MHz* (1.05-2.08dBi gain); 1850.2-1909.8 MHz (1.11-1.66dBi gain); 2412-2472 MHz (Stubby: 1.40-2.00dBi gain), 5180-5320 MHz (Stubby: 2.00-3.60dBi gain) <i>*Note: The 1800 MHz band is not regulated by the FCC.</i>
8585110F01	Internal PIFA ¼ wave antenna; 2412-2472 MHz (PIFA: 0.70-2.60dBi gain); 5180-5320 MHz (PIFA: 1.40-2.50dBi gain).

Batteries

SNN5588A	750mAh Lithium Ion
SNN5595B	1100mAh Lithium Ion
NNTN5161A	Battery cover (750mAh)
NNTN5445A	Battery cover (1100mAh)

Body-worn Accessories

NTNN5159A	Thin Carry Holster
NNTN5444A	Thick Carry Holster

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

Other applicable options:

NKN6560A	RS232 Data Cable
NKN6559A	USB Data Cable

3.1 Test Signal

Test Mode	☐	Call Simulator	☒	Simulator	☐
-----------	--------------------------	----------------	-------------------------------------	-----------	--------------------------

Test Signal mode:

Transmission Mode:

CW	
Native Transmission	X
GSM: 1:8 (12.5%), 1:4 (25%)	X
Other: WLAN-14.3%, 99.5%, 97.1%	X

3.2 Test Output Power

A table of the characteristic power slump versus time is provided in Appendix A for all tested batteries.

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 ET3DV6 and EX3DV3 E-Field probes. 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/SN1384 & EX3DV3/SN3512. 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)
1384	FCC Body	5/15/03	D900V2/085	11.340 +/- 0.02	11.17 +/- 10%	2/22/04-3/14/04 3 test days
1384	IEEE Head	5/15/03	D900V2/085	11.945 +/- 0.315	12.0 +/- 10%	2/19/04-3/24/04 5 test days
1384	IEEE Head	5/15/03	D1900V2/521	43.3 +/- 0.000	42.10 +/- 10%	2/25/04
1384	FCC Body	5/15/03	D1800V2/278	39.33 +/- 0.670	36.69 +/- 10%	3/15/04-3/22/04 4 test days
1384	IEEE Head	5/15/03	D1800V2/278	38.38 +/- 0.000	38.42 +/- 10%	2/24/04
1384	FCC Body	5/15/03	D2450V2/704	49.32 +/- 1.130	51.32 +/- 10%	3/18/04-3/19/04
1384	IEEE Head	5/15/03	D2450V2/704	54.195 +/- 1.795	52.64 +/- 10%	3/2/04-3/5/04 4 test days
3512	FCC Body	1/23/04	D5GHzV2/1010	82.585 +/- 0.265	80.82 +/- 10%	3/20/04-3/21/04

3512	IEEE Head	1/23/04	D5GHzV2/1010	85.175+/- 4.455	82.90 +/- 10%	3/6/04-3/24/04 5 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 high density polyethylene material. The phantom is mounted on a wooden supporting structure that has a loss tangent of < 0.05. Two support structures and two phantoms were used for this assessment. The dimensions of the two phantoms are L = 40cm, W = 30cm, H = 20cm, Surface Thickness = 0.2cm and L = 80cm, W = 60cm, H = 20cm, Surface Thickness = 0.2cm with support structure openings of 68.58 cm x 20.32 cm and 68.58cm x 25.4cm respectively.

4.2.2 SAM Phantom

A SAM TP1234 and TP1209 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 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"

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

4.3.2 Simulated Tissue Composition

Note: SPEAG provides Motorola proprietary simulant ingredients for the 5GHz band

% of listed ingredients	900MHz		1800MHz		2450MHz		5200MHz	
	Head	Body	Head	Body	Head	Body	Head	Body
Sugar	56.50	44.90	NA	NA	NA	NA	NA	NA
DGBE (Glycol)	NA	NA	47.0	30.8	NA	30	NA	NA
Diacetin	NA	NA	NA	NA	51.0	NA	NA	NA
De ionized -Water	40.95	53.06	52.62	68.8	48.8	70	NA	NA

Salt	1.45	0.94	0.38	0.4	0.1	NA	NA	NA
HEC	1	1	NA	NA	0.1	NA	NA	NA
Bact.	0.1	0.1	NA	NA	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. For 5GHz a 10% tolerance is applicable per N. Kuster, "SECOND DRAFT: Frequency extension to 5 – 6 GHz," input document to IEC 62209 Part 2, July 2003. This measurement is done using the Agilent (HP) probe kit model 85070C and a HP8753D Network Analyzer.

Target tissue parameters

**Note: The 1800 MHz band is not regulated by the FCC.*

FCC Body				
Frequency (MHz)	Di-electric Constant Target	Di-electric Constant Meas. (Range)	Conductivity Target S/m	Conductivity Meas. (Range) S/m
837	55.2	53.4-54.7	0.97	0.95-0.96
898	55.0	52.8-54.2	1.05	1.01-1.03
900	55.0	52.8-54.1	1.05	1.02-1.03
1748	53.4	51.4-53.7	1.49	1.43-1.45
1880	53.3	51.0-51.0	1.52	1.57-1.58
1800	53.3	51.3-53.5	1.52	1.48-1.51
2437	52.7	51.9-52.6	1.94	1.90-1.98
2450	52.7	51.9-52.5	1.95	1.92-2.00
5200	49.0	46.8-47.1	5.30	5.48-5.53
5260	48.9	46.6-47.0	5.37	5.56-5.62

IEEE Head				
Frequency (MHz)	Di-electric Constant Target	Di-electric Constant Meas. (Range)	Conductivity Target S/m	Conductivity Meas. (Range) S/m
837	41.5	41.0-42.1	0.90	0.94-0.94
898	41.5	40.4-41.4	0.97	1.00-1.00
900	41.5	40.3-41.4	0.97	1.00-1.01
1748	40.1	40.6-40.9	1.37	1.31-1.32
1880	40.0	40.0-40.3	1.40	1.44-1.45
1800	40.0	40.2-40.4	1.40	1.37-1.37
1900	40.0	40.0-40.2	1.40	1.46-1.47

2437	39.2	37.6-37.8	1.79	1.78-1.79
2450	39.2	37.6-37.8	1.80	1.79-1.81
5200	36.0	34.4-35.1	4.66	4.70-4.82
5260	35.9	34.3-35.0	4.72	4.77-4.90

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 $\pm 2^{\circ}\text{C}$ of the temperature at which the dielectric properties were determined. The liquid depth in the phantom used for measurements was 15cm $\pm$ 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 $^{\circ}\text{C}$	Range: 20.0-22.4 $^{\circ}\text{C}$ Avg. 21.4 $^{\circ}\text{C}$
Relative Humidity	30 - 70 %	Range: 39.5-58.0% Avg. 47.9%
Tissue Temperature	NA	Range: 20.0-21.1 $^{\circ}\text{C}$ Avg. 20.55 $^{\circ}\text{C}$

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 Probe Scan Procedures

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.

5.1 Shortened scan rationale

APPENDIX A presents relevant shortened S.A.R. cube scans to assess the validity of the calculated results presented herein. The results of the shortened cube scans demonstrate that the scaling methodology used to determine the calculated S.A.R. results presented herein are valid.

5.2 Device test positions

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

5.2.1 Body

The DUT was positioned such that the carry case was centered against the flat phantom with the applicable accessory attachments. The DUT was positioned with its' back, front, and antenna (back towards the phantom) separated 2.5cm from the flat phantom.

5.2.2 Head

The DUT was placed in the cheek touch and 15° tilt positions at the left and right ears of the SAM phantom

5.2.3 Face

The DUT was placed with 2.5cm separation from the flat area of the SAM phantom.

5.3 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 with applicable tissue simulant to assess performance at the body and a SAM phantom with applicable tissue simulant to assess performance at the side of the head and in front of the face using the applicable transmission modes.

Assessments at the head voice mode (GSM 800MHz band) [pages 25/26 of 40; Tables 1&2]

The DUT was assessed at the TX center frequency of the band, in cheek touch position at the left ear of the SAM phantom, using the offered batteries, in the 1:8 transmission mode.

The DUT was assessed at the TX center frequency of the band, in the 15° tilt position, using the worst-case battery.

The DUT was assessed at the TX band edges, in 1:8 transmission mode, 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 using the worst case battery from above.

The DUT was assessed at the center frequency of the band, in the 1:8 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed and opened using the worst case battery from above.

Band edge assessment was done using the configuration from above that produced the highest S.A.R.

Assessments at the head voice mode (GSM 900MHz) [pages 26/27 of 40; Tables 3&4]

The DUT was assessed at the TX center frequency of the band, in cheek touch position at the left ear of the SAM phantom, using the offered batteries, in the 1:8 transmission mode.

The DUT was assessed at the TX center frequency of the band, in the 15° tilt position, using the worst-case battery from above.

The DUT was assessed at the TX band edges, in 1:8 transmission mode, 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 using the worst case battery from above.

The DUT was assessed across the frequency band, in the 1:8 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed using the worst case battery from above.

Assessments at the head voice mode (GSM 1800MHz) [pages 27/28 of 40; Table 5&6]

**Note: The 1800 MHz band is not regulated by the FCC.*

The DUT was assessed at the TX center frequency of the band, in cheek touch position at the left ear of the SAM phantom, using the offered batteries, in the 1:8 transmission mode.

The DUT was assessed at the TX center frequency of the band, in the 15° tilt position, using the worst-case battery.

The DUT was assessed at the TX band edges, in 1:8 transmission mode, 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 using the worst case battery from above.

The DUT was assessed across the frequency band, in the 1:8 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed using the worst case battery from above.

Assessments at the head voice mode (GSM 1900MHz) [pages 28/29 of 40; Tables 7&8]

The DUT was assessed at the TX center frequency of the band, in cheek touch position at the left ear of the SAM phantom, using the offered batteries, in the 1:8 transmission mode.

The DUT was assessed at the TX center frequency of the band, in the 15° tilt position, using the worst-case battery.

The DUT was assessed at the TX band edges, in 1:8 transmission mode, 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 using the worst case battery from above.

The DUT was assessed across the frequency band, in the 1:8 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed using the worst case battery from above.

Assessments at the body voice/data modes (GSM 800MHz) [pages 29/30 of 40; Tables 9&10]

The DUT was assessed at the TX center frequency of the band, against the flat phantom, in the 1:8 transmission mode, using each of the offered batteries, with the applicable offered body worn holster and audio accessory model NNTN4620A attached.

The DUT was assessed at the TX center frequency of the band using the worst case battery/holster combination from above, with the applicable offered audio accessories.

The DUT was assessed in the 1:4 transmission mode, using the worst case test configuration from above, with and without the applicable offered data cable accessories attached.

The DUT was assessed in the 1:4 transmission mode, at the edges of the band, using the over all worst case test configuration at the body from above.

The DUT was assessed in the 1:4 transmission mode, at the TX center frequency of the band, with the front and back of the DUT separated 2.5 cm from the phantom using the worst case test configuration from above.

Assessments at the body data mode (GSM 900MHz) [page 30 of 40; Table 11]

The DUT was assessed in the 1:4 transmission mode, across the TX band, using the worst case test configuration from the 800MHz band assessment at the body.

The DUT was assessed in the 1:4 transmission mode, against the phantom with its back and front separated 2.5 cm from the phantom, using the worst case test configuration from above.

Assessments at the body voice/data modes (GSM 1800MHz) [page 31 of 40; Tables 12&13]

**Note: The 1800 MHz band is not regulated by the FCC.*

The DUT was assessed at the TX center frequency of the band, against the flat phantom, in the 1:8 transmission mode, using each of the offered batteries, with the applicable offered body worn holster and audio accessory model NNTN4620A attached.

The DUT was assessed at the TX center frequency of the band using the worst case battery/holster combination from above, with the applicable offered audio accessories.

The DUT was assessed in the 1:4 transmission mode, using the worst case test configuration from above, with and without the applicable offered data cable accessories attached.

The DUT was assessed in the 1:4 transmission mode, at the edges of the band, using the over all worst case test configuration at the body from above.

The DUT was assessed in the 1:4 transmission mode, with the front and back of the DUT separated 2.5 cm from the phantom, using the worst case test configuration from above.

Assessments at the body voice/data mode (GSM 1900MHz) [pages 32/33 of 40; Tables 14&15]

The DUT was assessed at the TX center frequency of the band, against the flat phantom, in the 1:8 transmission mode, using each of the offered batteries, with the applicable offered body worn holster and audio accessory model NNTN4620A attached.

The DUT was assessed at the TX center frequency of the band using the worst case battery/holster combination from above, with the applicable offered audio accessories.

The DUT was assessed in the 1:4 transmission mode, using the worst case test configuration from above, with and without the applicable offered data cable accessories attached.

The DUT was assessed in the 1:4 transmission mode, at the edges of the band, using the over all worst case test configuration at the body from above.

The DUT was assessed in the 1:4 transmission mode, at the TX low frequency of the band, with the front, back, and antenna (with back towards the phantom) of the DUT separated 2.5 cm from the phantom, using the worst case test configuration from above.

Assessments at the head (WLAN 2450MHz) [pages 33/34/35 of 40; Tables 16, 17, 18, 19]

The DUT was assessed with the PIFA antenna, at the TX center frequency of the band, in cheek touch position, at the left ear of the SAM phantom, using the offered batteries, in the 1:7 transmission mode.

The DUT was assessed with the PIFA antenna, at the TX center frequency of the band, in the 15° tilt position, at the left ear of the SAM phantom, using the worst-case battery from above.

The DUT was assessed with the PIFA antenna, at the TX band edges, in 1:7 transmission mode, at the left ear of the SAM phantom, using the test configuration from above that produced the highest S.A.R results.

The DUT was assessed with the “Stubby” antenna, at the TX center frequency of the band, in cheek touch position, at the left ear of the SAM phantom, using the offered batteries, in the 1:7 transmission mode.

The DUT was assessed with the “Stubby” at the TX center frequency of the band, in the 15° tilt position, at the left ear of the SAM phantom, using the worst-case battery from above.

The DUT was assessed at the TX band edges, in 1:7 transmission mode, at the left ear of the SAM phantom, 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 using the worst case battery from above.

The DUT was assessed with the PIFA antenna, across the frequency band, in the 1:7 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed using the worst case battery from above.

The DUT was assessed with the “Stubby” antenna, across the frequency band, in the 1:7 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed, using the worst case battery from above.

Assessments at the head (WLAN 5200MHz) [pages 35, 36, 37 of 40; Tables 20, 21, 22, 23]

The DUT was assessed with the PIFA antenna, at the TX center frequency of the band, in cheek touch position at the left ear of the SAM phantom, using the offered batteries, in the 1:7 transmission mode.

The DUT was assessed with the PIFA antenna, at the TX center frequency of the band, in the 15° tilt position, using the worst-case battery.

The DUT was assessed with the PIFA antenna, at the TX band edges, in 1:7 transmission mode, using the test configuration from above that produced the highest S.A.R results.

The DUT was assessed with the “Stubby” antenna, at the TX center frequency of the band, in cheek touch position at the left ear of the SAM phantom, using the offered batteries, in the 1:7 transmission mode.

The DUT was assessed with the “Stubby” at the TX center frequency of the band, in the 15° tilt position, using the worst-case battery.

The DUT was assessed at the TX band edges, in 1:7 transmission mode, 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 using the worst case battery from above.

The DUT was assessed with the PIFA antenna, across the frequency band, in the 1:7 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed using the worst case battery from above.

The DUT was assessed with the “Stubby” antenna, across the frequency band, in the 1:7 transmission mode, with 2.5cm separation distance from the flat area of the SAM phantom, with the flip closed, using the worst case battery from above.

Assessments at the body (WLAN 2450MHz) [pages 37, 38 of 40; Tables 24 & 25]

The DUT was assessed with the PIFA antenna, at the TX center frequency of the band, against the flat phantom, in CW transmission mode, using each of the offered batteries, with the applicable offered body worn holster.

The DUT was assessed with the “Stubby” antenna, at the TX center frequency of the band, against the flat phantom, in CW transmission mode, using each of the offered batteries, with the applicable offered body worn holster.

The DUT was assessed at the TX center frequency of the band using the worst case test configuration from above, along with the applicable offered audio and data cable accessories.

The DUT was assessed in CW transmission mode, at the edges of the band, using the worst case test configuration with audio accessories from above.

The DUT was assessed in the CW transmission mode, at the TX center frequency of the band, with the front and back of the DUT separated 2.5 cm from the phantom using the worst case battery from above.

Assessments at the body (WLAN 5200MHz) [pages 39 & 40 of 40; Tables 26&27]

The DUT was assessed with the PIFA antenna, at the TX center frequency of the band, against the flat phantom, in CW transmission mode, using each of the offered batteries, with the applicable offered body worn holster.

The DUT was assessed with the “Stubby” antenna, at the TX center frequency of the band, against the flat phantom, in CW transmission mode, using each of the offered batteries, with the applicable offered body worn holster.

The DUT was assessed at the TX center frequency of the band using the worst case test configuration from above, along with the applicable offered audio and data cable accessories.

The DUT was assessed in CW transmission mode, at the edges of the band, using the worst case test configuration with audio accessories from above.

The DUT was assessed in the CW transmission mode, at the TX center frequency of the band, with the front and back of the DUT separated 2.5 cm from the phantom using the worst case battery from above.

Shortened scan assessment at the body

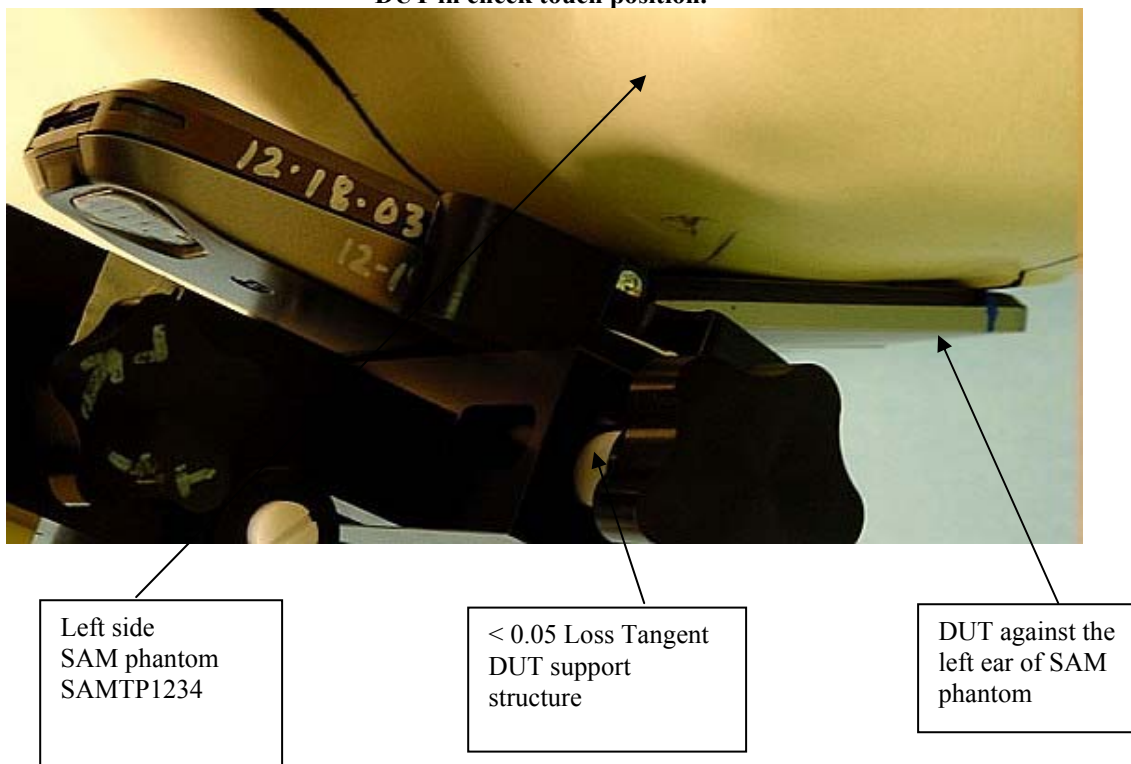
A “shortened” scan was performed using the test configuration that produced the highest S.A.R. results overall at the body.

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.

5.4 Test Position Photographs

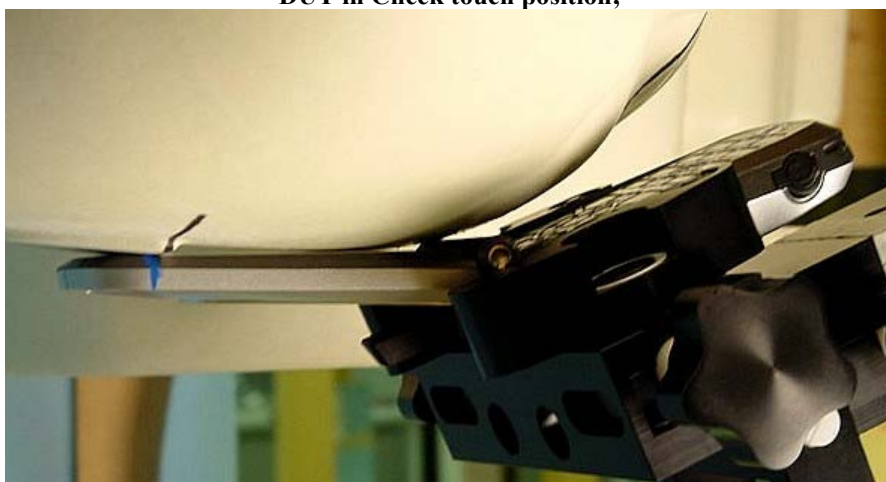
**Figure 1: Highest S.A.R. Test Position (@ Left Ear)
DUT in cheek touch position.**



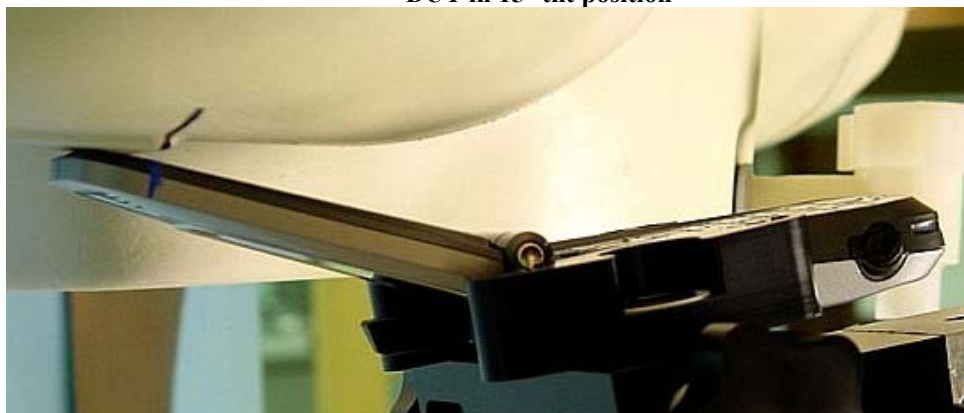
**Figure 2. Assessment @ the Left ear
DUT in 15° tilt position**



**Figure 3. Assessment @ the Right ear
DUT in Cheek touch position;**



**Figure 4. Assessment @ the Right ear
DUT in 15° tilt position**



**Figure 5. Assessment @ the Face; flip closed
DUT front 2.5cm separation distance from flat phantom.**



**Figure 6. Assessment @ the Face; flip open
DUT 2.5cm separation distance from flat phantom.**



**Figure 7. Assessment @ Body
DUT w/ holster model NNTN5444A against the flat phantom
(Same position used to assess each of the applicable audio accessories.)**



Figure 8. Assessment @ the Body
DUT w/ belt clip model NNTN5444A and attached data cable model NKN6560A.
(Same position used w/ data cable model NKN6559A attached)



Figure 9. Assessment @ the Body
DUT w/ belt clip model NTNN5159A.
(Same position used w/ audio accessory model NNTN4620A attached)



Figure 10. Assessment @ the Body
DUT front w/ 2.5cm separation.



Figure 11. Assessment @ the Body
DUT Back w/ 2.5cm separation. Same position used with antenna separated 2.5cm



Figure 12: Robot Test System (Flat Phantom)

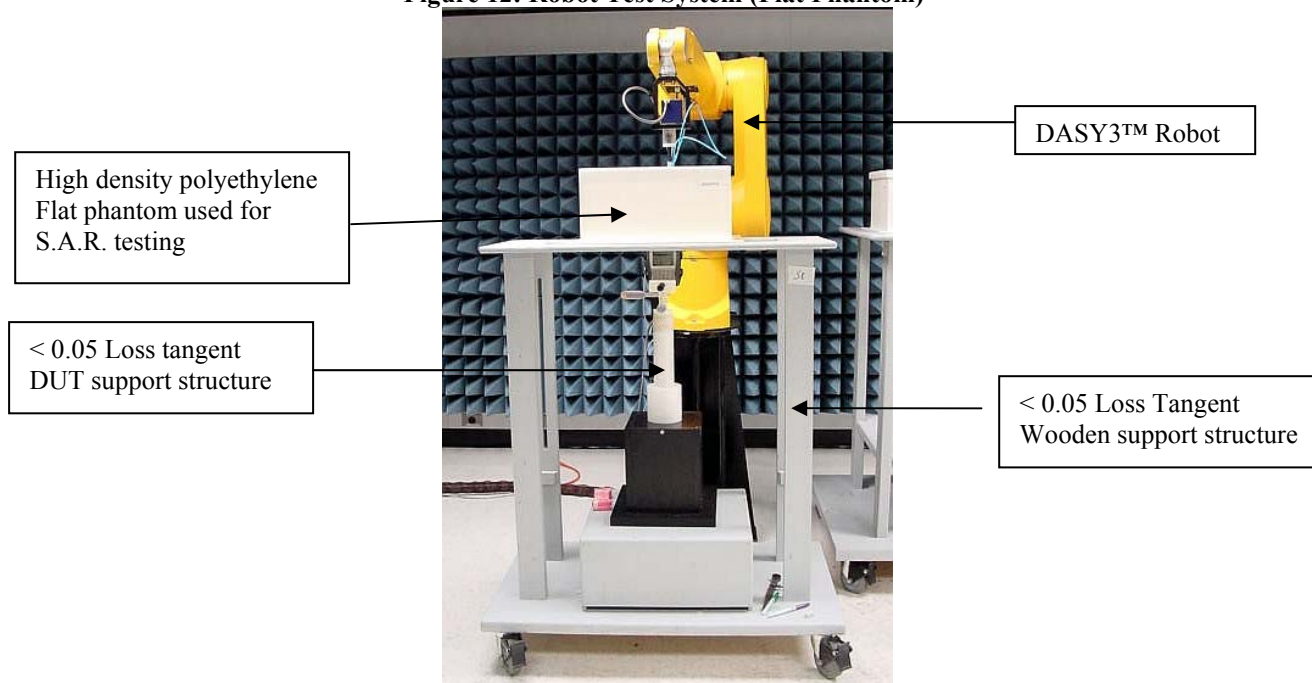


Figure 13: Robot Test System (SAM phantom)



6.0 Measurement Uncertainty

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

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = f(d,k)</i>	<i>f</i>	<i>g</i>	<i>h =</i> <i>c x f / e</i>	<i>i =</i> <i>c x g / e</i>	<i>k</i>
	IEEE 1528 section	Tol. (± %)	Prob Dist		<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	1 g <i>u_i</i> (±%)	10 g <i>u_i</i> (±%)	
Uncertainty Component				Div.					<i>v_i</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)			<i>k</i> =2				23	22	

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

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = f(d,k)</i>	<i>f</i>	<i>g</i>	<i>h =</i>		<i>k</i>
							<i>c x f / e</i>	<i>i =</i>	
							1 g	10 g	
Uncertainty Component	IEEE 1528 section	Tol. (± %)	Prob. Dist.	Div.	<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	<i>u_i</i> (±%)	<i>u_i</i> (±%)	<i>v_i</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)			<i>k</i> =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) *c_i* - sensitivity coefficient that should be applied to convert the variability of the uncertainty component into a variability of SAR.

g) *u_i* – SAR uncertainty

h) *v_i* - degrees of freedom for standard uncertainty and effective degrees of freedom for the expanded uncertainty.

Table 3: Uncertainty Budget for Device Under Test: 3 – 6 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = f(d,k)</i>	<i>f</i>	<i>g</i>	<i>h =</i> <i>c x f / e</i>	<i>i =</i> <i>c x g / e</i>	<i>k</i>
	IEEE 1528 section	Tol. (± %)	Prob Dist		<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	1 g <i>u_i</i> (±%)	10 g <i>u_i</i> (±%)	
Uncertainty Component				Div.					<i>v_i</i>
Measurement System									
Probe Calibration	E.2.1	8.3	N	1.00	1	1	8.3	8.3	∞
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	2.1	R	1.73	1	1	1.2	1.2	∞
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	6.0	N	1.00	0.64	0.43	3.8	2.6	∞
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	N	1.00	0.6	0.49	3.6	2.9	∞
Combined Standard Uncertainty			RSS				13	13	1121
Expanded Uncertainty (95% CONFIDENCE LEVEL)			<i>k</i> =2				27	26	

Table 4: Uncertainty Budget for System Check: 3 – 6 GHz

<i>a</i>	<i>b</i>	<i>c</i>	<i>d</i>	<i>e = f(d,k)</i>	<i>f</i>	<i>g</i>	<i>h =</i> <i>c x f / e</i>	<i>i =</i> <i>c x g / e</i>	<i>k</i>
Uncertainty Component	IEEE 1528 section	Tol. (± %)	Prob. Dist.	<i>c_i</i> Div.	<i>c_i</i> (1 g)	<i>c_i</i> (10 g)	1 g <i>u_i</i> (±%)	10 g <i>u_i</i> (±%)	<i>v_i</i>
Measurement System									
Probe Calibration	E.2.1	8.3	N	1.00	1	1	8.3	8.3	∞
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	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	2.1	R	1.73	1	1	1.2	1.2	∞
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				11	11	99999
Expanded Uncertainty (95% CONFIDENCE LEVEL)									
			<i>k=2</i>				22	21	

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) *c_i* - sensitivity coefficient that should be applied to convert the variability of the uncertainty component into a variability of SAR.
- g) *u_i* – SAR uncertainty
- h) *v_i* - 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. performances for the relevant test configuration. DASY3™ S.A.R. measurement scans are provided in APPENDIX B for the highest observed S.A.R. performances.

Note:

APPENDIX G presents the results of the simultaneous transmission of the co-located transmitters for the GSM 900 and WLAN 5GHZ bands using a Motorola developed algorithm. Also presented in APPENDIX G is a detailed explanation of the algorithm used for the simultaneous transmission assessment which reflects the latest proposal by Motorola for inclusion into the IEC 62209 part II standard. In addition, APPENDIX G presents Motorola's procedure for assessing S.A.R. performance in the 5GHz band and includes a detailed description on the rationale for the methodology. As demonstrated in section 7.1 the highest S.A.R. test configuration found was in the cheek touch position at the left ear of the SAM phantom with the internal "Stubby" antenna. A simultaneous transmission evaluation was performed using this worst case test configuration for both bands of interest. The evaluation showed that adding the peak spatial-average S.A.R. values together, accounting for drift, gives a conservative S.A.R. result of 1.51mW/g without applying time averaging. Taking into consideration that there is a 12 second handover time interval (see section 3.0) for the simultaneous transmission a time averaging factor was applied to the end result to appropriately scale the S.A.R. by the ratio of 12 seconds to 30 minutes.

The final S.A.R. result for the simultaneous transmission of the GSM 900MHz and WLAN 5GHz co-located transmitters after applying time averaging is 0.01mW/g.

7.1 S.A.R. results

*Note: The 1800 MHz band is not regulated by the FCC.

Table1

DUT assessment at the head; Cheek Touch, Tilt, and edges; 1:8(12.5%) mode; (GSM) 824.2-848.8MHz band												
Run Number/ SN	Antenna type	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 the left Ear												
EC-Lear-R1-040219-04/365ADY006P	Stubby	836.4	SNN5588A	Cheek Touch	None	None	1.81	-0.03	1.45	0.882	1.46	0.89
EC-Lear-R1-040219-05/365ADY006P	Stubby	836.4	SNN5595B	Cheek Touch	None	None	1.80	0.00	1.390	0.857	1.39	0.86
EC-Lear-R1-040219-06/365ADY006P	Stubby	836.4	SNN5588A	15° tilt	None	None	1.80	-0.14	0.218	0.156	0.23	0.16
EC-Lear-R1-040219-07/365ADY006P	Stubby	824.4	SNN5588A	Cheek Touch	None	None	1.78	-0.19	1.380	0.844	1.44	0.88
EC-Lear-R1-040219-08/365ADY006P	Stubby	848.8	SNN5588A	Cheek Touch	None	None	1.72	0.07	1.280	0.780	1.28	0.78

Assessment at the Right Ear												
EC-Rear-R1-040219-09/365ADY006P	Stubby	836.4	SNN5588A	Cheek Touch	None	None	1.80	-0.39	1.150	0.722	1.23	0.79
EC-Rear-R1-040220-02/365ADY006P	Stubby	836.4	SNN5588A	15° tilt	None	None	1.82	-0.22	0.219	0.158	0.23	0.17
EC-Rear-R1-040220-03/365ADY006P	Stubby	824.4	SNN5588A	Cheek Touch	None	None	1.77	-0.25	1.160	0.731	1.23	0.77
EC-Rear-R1-040220-04/365ADY006P	Stubby	848.8	SNN5588A	Cheek Touch	None	None	1.72	-0.07	1.060	0.664	1.08	0.68

Table 2

DUT assessment at the Face; 2.5cm separation; 1:8(12.5%) mode; (GSM) 824.2-848.8MHz band												
Run Number/ SN	Antenna type	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-R1-040220-05/365ADY006P	Stubby	836.4	SNN5588A	DUT front 2.5cm Flip closed	None	None	1.82	-0.16	0.236	0.167	0.25	0.17
EC-Face-R1-040324-08/365ADY006P	Stubby	836.4	SNN5588A	DUT front 2.5cm Flip open	None	None	1.79	-0.15	0.139	0.098	0.14	0.10
EC-Face-R1-040220-06/365ADY006P	Stubby	824.4	SNN5588A	DUT front 2.5cm Flip closed	None	None	1.77	-0.02	0.274	0.194	0.28	0.20
EC-Face-R1-040220-07/365ADY006P	Stubby	848.8	SNN5588A	DUT front 2.5cm Flip closed	None	None	1.71	-0.03	0.204	0.144	0.21	0.15

Table 3

DUT assessment at the head; Cheek Touch, Tilt, and edges; 1:8(12.5%) mode; (GSM) 880.2-914.8MHz band												
Run Number/ SN	Antenna type	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 the left Ear												
EC-Lear-R1-040221-08/365ADY006P	Stubby	897.4	SNN5588A	Cheek Touch	None	None	2.14	-0.02	1.420	0.872	1.43	0.88
EC-Lear-R1-040221-09/365ADY006P	Stubby	897.4	SNN5595B	Cheek Touch	None	None	2.10	0.00	1.280	0.791	1.28	0.79
EC-Lear-R1-040221-10/365ADY006P	Stubby	897.4	SNN5588A	15° tilt	None	None	2.13	-0.20	0.204	0.142	0.21	0.15
EC-Lear-R1-040221-11/365ADY006P	Stubby	880.2	SNN5588A	Cheek Touch	None	None	2.10	0.05	1.490	0.913	1.49	0.91
EC-Lear-R1-040221-12/365ADY006P	Stubby	914.8	SNN5588A	Cheek Touch	None	None	2.12	0.06	1.340	0.831	1.34	0.83
Assessment at the right Ear												
EC-Rear-R1-040221-13/365ADY006P	Stubby	897.4	SNN5588A	Cheek Touch	None	None	2.11	-0.23	1.220	0.757	1.29	0.80

EC-Rear-R1-040221-14/365ADY006P	Stubby	897.4	SNN5588A	15° tilt	None	None	2.13	-0.01	0.200	0.142	0.20	0.14
EC-Rear-R1-040221-15/365ADY006P	Stubby	880.2	SNN5588A	Cheek Touch	None	None	2.11	-0.13	1.300	0.810	1.34	0.84
EC-Rear-R1-040221-16/365ADY006P	Stubby	914.8	SNN5588A	Cheek Touch	None	None	2.12	-0.11	1.190	0.738	1.22	0.76

Table 4

DUT assessment at the Face; 2.5cm separation; 1:8(12.5%) mode; (GSM) 880.2-914.8MHz band												
Run Number/ SN	Antenna type	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-R1-040221-17/365ADY006P	Stubby	897.4	SNN5588A	DUT front 2.5cm Flip closed	None	None	2.14	-0.13	0.292	0.204	0.30	0.21
EC-Face-R1-040221-18/365ADY006P	Stubby	880.2	SNN5588A	DUT front 2.5cm Flip closed	None	None	2.10	-0.15	0.289	0.203	0.30	0.21
EC-Face-R1-040221-19/365ADY006P	Stubby	914.8	SNN5588A	DUT front 2.5cm Flip closed	None	None	2.11	-0.09	0.248	0.173	0.25	0.18

Table 5

DUT assessment at the head; Cheek Touch, Tilt, and edges; 1:8(12.5%) mode; (GSM) 1710.2-1784.8MHz band												
Run Number/ SN	Antenna type	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 the left Ear												
EC-Lear-R1-040224-02/365ADY006P	Stubby	1747.6*	SNN5588A	Cheek Touch	None	None	1.10	0.06	0.952	0.531	0.95	0.53
EC-Lear-R1-040224-05/365ADY006P	Stubby	1747.6*	SNN5595B	Cheek Touch	None	None	1.11	-0.11	0.834	0.481	0.86	0.49
EC-Lear-R1-040224-06/365ADY006P	Stubby	1747.6*	SNN5588A	15° tilt	None	None	1.09	-0.43	0.250	0.167	0.28	0.18
EC-Lear-R1-040224-07/365ADY006P	Stubby	1710.2*	SNN5588A	Cheek Touch	None	None	1.07	0.15	0.864	0.486	0.86	0.49
EC-Lear-R1-040224-08/365ADY006P	Stubby	1784.8*	SNN5588A	Cheek Touch	None	None	1.08	0.06	0.952	0.523	0.95	0.52
Assessment at the right Ear												
EC-Rear-R1-040224-09/365ADY006P	Stubby	1747.6*	SNN5588A	Cheek Touch	None	None	1.10	-0.12	0.920	0.537	0.95	0.55
EC-Rear-R1-040224-10/365ADY006P	Stubby	1747.6*	SNN5588A	15° tilt	None	None	1.11	-0.03	0.316	0.191	0.32	0.19
EC-Rear-R1-040224-11/365ADY006P	Stubby	1710.2*	SNN5588A	Cheek Touch	None	None	1.08	-0.15	0.846	0.496	0.88	0.51
EC-Rear-R1-040224-12/365ADY006P	Stubby	1784.8*	SNN5588A	Cheek Touch	None	None	1.08	-0.08	0.978	0.569	1.00	0.58

Table 6

DUT assessment at the Face; 2.5cm separation; 1:8(12.5%) mode; (GSM) 1710.2-1784.8MHz 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-R1-040224-13/365ADY006P	Stubby	1747.6*	SNN5588A	DUT front 2.5cm Flip closed	None	None	1.10	-0.25	0.113	0.072	0.12	0.08
EC-Face-R1-040224-14/365ADY006P	Stubby	1710.2*	SNN5588A	DUT front 2.5cm Flip closed	None	None	1.09	-0.12	0.100	0.065	0.10	0.07
EC-Face-R1-040224-15/365ADY006P	Stubby	1784.8*	SNN5588A	DUT front 2.5cm Flip closed	None	None	1.08	-0.10	0.112	0.071	0.12	0.07

Table 7

DUT assessment at the head; Cheek Touch, Tilt, and edges; 1:8(12.5%) mode; (GSM) 1850.2-1909.8MHz band												
Run Number/ SN	Antenna type	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 the left Ear												
EC-Lear-R1-040225-02/365ADY006P	Stubby	1880.2	SNN5588A	Cheek Touch	None	None	1.02	0.08	0.709	0.408	0.71	0.41
EC-Lear-R1-040225-03/365ADY006P	Stubby	1880.2	SNN5595B	Cheek Touch	None	None	1.02	0.07	0.764	0.424	0.76	0.42
EC-Lear-R1-040225-04/365ADY006P	Stubby	1880.2	SNN5595B	15° tilt	None	None	1.01	-0.37	0.170	0.106	0.19	0.12
EC-Lear-R1-040225-05/365ADY006P	Stubby	1850.2	SNN5595B	Cheek Touch	None	None	1.02	0.12	0.788	0.437	0.79	0.44
EC-Lear-R1-040225-06/365ADY006P	Stubby	1909.8	SNN5595B	Cheek Touch	None	None	0.986	0.07	0.750	0.418	0.76	0.42
Assessment at the right Ear												
EC-Rear-R1-040225-07/365ADY006P	Stubby	1880.2	SNN5595B	Cheek Touch	None	None	1.02	-0.06	0.943	0.534	0.96	0.54
EC-Rear-R1-040225-08/365ADY006P	Stubby	1880.2	SNN5595B	15° tilt	None	None	1.02	0.00	0.265	0.148	0.27	0.15
EC-Rear-R1-040225-09/365ADY006P	Stubby	1850.2	SNN5595B	Cheek Touch	None	None	1.08	-0.12	0.946	0.558	0.97	0.57
EC-Rear-R1-040225-10/365ADY006P	Stubby	1909.8	SNN5595B	Cheek Touch	None	None	0.989	-0.10	0.935	0.528	0.97	0.55

Table 8

DUT assessment at the Face; 2.5cm separation; 1:8(12.5%) mode; (GSM) 1850.2-1909.8MHz 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-R1-040225-11/365ADY006P	Stubby	1880.2	SNN5595B	DUT front 2.5cm Flip closed	None	None	1.01	-0.06	0.109	0.067	0.11	0.07
EC-Face-R1-040225-12/365ADY006P	Stubby	1850.2	SNN5595B	DUT front 2.5cm Flip closed	None	None	1.03	-0.13	0.112	0.069	0.12	0.07
EC-Face-R1-040225-13/365ADY006P	Stubby	1909.8	SNN5595B	DUT front 2.5cm Flip closed	None	None	0.985	-0.06	0.107	0.066	0.11	0.07

Table 9

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; 1:8(12.5%) mode; (GSM) 824.2-848.8MHz band												
Run Number/ SN	Antenna type	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 offered batteries and carry cases												
EC-Ab-R1-040322-12/365ADY006P	Stubby	836.4	SNN5588A	Against phantom	NTNN5159A	NNTN4620A	1.790	-0.21	0.532	0.379	0.56	0.40
EC-Ab-R1-040313-09/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NNTN4620A	1.81	-0.17	0.636	0.447	0.66	0.47
Assessment of worst case battery with offered audio accessories												
EC-Ab-R1-040313-10/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	SYN8390B	1.78	-0.11	0.689	0.484	0.71	0.50
EC-Ab-R1-040313-11/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NTN8496A	1.80	-0.15	0.736	0.517	0.76	0.54
EC-Ab-R1-040313-12/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	SYN7875C	1.79	-0.16	0.513	0.362	0.53	0.38
EC-Ab-R1-040313-13/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	SYN8146C	1.79	-0.15	0.710	0.498	0.74	0.52
EC-Ab-R1-040313-14/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NTN8513B	1.81	-0.09	0.544	0.382	0.56	0.39
EC-Ab-R1-040313-15/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NNTN4033A	1.78	-0.24	0.421	0.294	0.45	0.31
EC-Ab-R1-040314-02/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NNTN5004A	1.81	-0.11	0.613	0.430	0.63	0.44
EC-Ab-R1-040314-03/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	1.79	-0.12	0.629	0.441	0.65	0.45

Table 10

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; 1:4(25%) mode; (GSM) 824.2-848.8MHz band (continued)												
Run Number/ SN	Antenna type	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 offered data cables												
EC-Ab-R1-040313-04/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	None	1.82	-0.34	1.270	0.894	1.37	0.97
EC-Ab-R1-040313-05/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.82	-0.14	0.654	0.460	0.68	0.48
EC-Ab-R1-040313-06/365ADY006P	Stubby	836.4	SNN5595B	Against phantom	NNTN5444A	NKN6559A	1.82	-0.13	0.874	0.614	0.90	0.63
Assessment of band edges												
EC-Ab-R1-040313-07/365ADY006P	Stubby	824.2	SNN5595B	Against phantom	NNTN5444A	None	1.82	-0.13	1.260	0.890	1.30	0.92
EC-Ab-R1-040313-08/365ADY006P	Stubby	848.8	SNN5595B	Against phantom	NNTN5444A	None	1.78	-0.14	1.170	0.816	1.21	0.84
Assessment at 2.5cm separation												
EC-Ab-R1-040314-05/365ADY006P	Stubby	836.4	SNN5595B	DUT Back 2.5cm	NNTN5444A	None	1.82	-0.20	0.691	0.498	0.72	0.52
EC-Ab-R1-040314-06/365ADY006P	Stubby	836.4	SNN5595B	DUT Front 2.5cm	NNTN5444A	None	1.82	-0.17	0.422	0.310	0.44	0.32

Table 11

DUT assessment at the body; 1:4(25%) mode; (GSM) 880.2-914.8MHz band												
Run Number/ SN	Antenna type	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 worst case configuration from 800MHz assessment												
EC-Ab-R1-040314-07/365ADY006P	Stubby	897.4	SNN5595B	Against phantom	NNTN5444A	None	2.14	-0.23	1.210	0.837	1.28	0.88
EC-Ab-R1-040314-08/365ADY006P	Stubby	880.2	SNN5595B	Against phantom	NNTN5444A	None	2.09	-0.17	1.170	0.813	1.22	0.85
EC-Ab-R1-040314-09/365ADY006P	Stubby	914.8	SNN5595B	Against phantom	NNTN5444A	None	2.19	-0.32	1.270	0.876	1.37	0.94
Assessment at 2.5cm with worst case battery from above												
EC-Ab-R1-040314-11/365ADY006P	Stubby	914.8	SNN5595B	DUT Back 2.5cm	None	None	2.19	-0.20	0.611	0.433	0.64	0.45
EC-Ab-R1-040314-12/365ADY006P	Stubby	914.8	SNN5595B	DUT Front 2.5cm	None	None	2.19	-0.19	0.376	0.270	0.39	0.28

Table 12

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; 1:8(12.5%) mode; (GSM) 1710.2-1784.8MHz band												
Run Number/ SN	Antenna type	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 offered batteries and carry cases												
EC-Ab-R1-040322-02/365ADY006P	Stubby	1747.6*	SNN5588A	Against phantom	NTNN5159A	NNTN4620A	1.09	-0.27	0.264	0.165	0.28	0.18
EC-Ab-R1-040315-04/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NNTN4620A	1.10	-0.06	0.374	0.230	0.38	0.23
Assessment of worst case battery with offered audio accessories												
EC-Ab-R1-040315-05/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	SYN8390B	1.08	-0.10	0.330	0.202	0.34	0.21
EC-Ab-R1-040315-06/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	SYN8146C	1.09	-0.08	0.359	0.220	0.37	0.22
EC-Ab-R1-040315-07/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	SYN7875C	1.09	-0.10	0.369	0.228	0.38	0.23
EC-Ab-R1-040315-08/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NTN8496A	1.10	-0.09	0.354	0.217	0.36	0.22
EC-Ab-R1-040315-09/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NTN8513B	1.08	-0.08	0.366	0.226	0.37	0.23
EC-Ab-R1-040315-10/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NNTN4033A	1.07	-0.09	0.358	0.220	0.37	0.23
EC-Ab-R1-040315-12/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NNTN5004A	1.10	-0.10	0.334	0.204	0.34	0.21
EC-Ab-R1-040315-13/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	1.08	-0.03	0.381	0.234	0.38	0.24

Table 13

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; 1:4(25%) mode; (GSM) 1710.2-1784.8MHz band												
Run Number/ SN	Antenna type	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 offered data cables												
EC-Ab-R1-040315-14/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	None	1.10	-0.12	0.628	0.384	0.65	0.40
EC-Ab-R1-040316-02/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.10	-0.16	0.699	0.425	0.73	0.44
EC-Ab-R1-040316-03/365ADY006P	Stubby	1747.6*	SNN5595B	Against phantom	NNTN5444A	NKN6559A	1.10	-0.13	0.621	0.380	0.64	0.39

Assessment of band edges												
EC-Ab-R1-040316-04/365ADY006P	Stubby	1710.2*	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.05	-0.11	0.620	0.382	0.64	0.39
EC-Ab-R1-040316-05/365ADY006P	Stubby	1784.8*	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.15	-0.16	0.648	0.387	0.67	0.40
Assessment at 2.5cm separation												
EC-Ab-R1-040316-07/365ADY006P	Stubby	1747.6*	SNN5595B	DUT Back 2.5cm	NNTN5444A	NKN6560A	1.10	-0.10	0.326	0.208	0.33	0.21
EC-Ab-R1-040316-08/365ADY006P	Stubby	1747.6*	SNN5595B	DUT Front 2.5cm	NNTN5444A	NKN6560A	1.10	-0.03	0.184	0.119	0.19	0.12

Table 14

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; 1:8(12.5%) mode; (GSM) 1850.2-1909.8MHz band												
Run Number/ SN	Antenna type	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 offered batteries and carry cases												
EC-Ab-R1-040322-03/365ADY006P	Stubby	1880.2	SNN5588A	Against phantom	NTNN5159A	NNTN4620A	1.02	-0.10	0.255	0.157	0.26	0.16
EC-Ab-R1-040316-11/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NNTN4620A	1.01	-0.09	0.309	0.187	0.32	0.19
Assessment of worst case battery with offered audio accessories												
EC-Ab-R1-040316-12/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	SYN8390B	1.00	-0.12	0.306	0.184	0.32	0.19
EC-Ab-R1-040316-13/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	SYN8146C	1.00	-0.11	0.307	0.185	0.32	0.19
EC-Ab-R1-040316-14/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	SYN7875C	1.00	-0.08	0.325	0.196	0.33	0.20
EC-Ab-R1-040316-15/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NTN8496A	0.99	-0.08	0.304	0.183	0.31	0.19
EC-Ab-R1-040316-16/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NTN8513B	1.00	-0.07	0.309	0.185	0.31	0.19
EC-Ab-R1-040317-02/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NNTN4033A	1.00	-0.16	0.310	0.185	0.32	0.19
EC-Ab-R1-040317-04/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NNTN5004A	1.01	-0.10	0.330	0.198	0.34	0.20
EC-Ab-R1-040317-05/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	1.00	-0.09	0.303	0.183	0.31	0.19

Table 15

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; 1:4(25%) mode; (GSM) 1850.2-1909.8MHz band												
Run Number/ SN	Antenna type	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 offered data cables												
EC-Ab-R1-040317-06/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	None	1.07	-0.14	0.534	0.321	0.55	0.33
EC-Ab-R1-040317-07/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.07	-0.11	0.654	0.384	0.67	0.39
EC-Ab-R1-040317-08/365ADY006P	Stubby	1880.2	SNN5595B	Against phantom	NNTN5444A	NKN6559A	1.07	-0.15	0.563	0.330	0.58	0.34
Assessment of band edges												
EC-Ab-R1-040317-09/365ADY006P	Stubby	1850.2	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.05	-0.14	0.663	0.392	0.69	0.41
EC-Ab-R1-040317-10/365ADY006P	Stubby	1909.8	SNN5595B	Against phantom	NNTN5444A	NKN6560A	1.07	-0.04	0.567	0.330	0.57	0.33
Assessment at 2.5cm separation												
EC-Ab-R1-040317-11/365ADY006P	Stubby	1850.2	SNN5595B	DUT Back w/ ant. 2.5cm	NNTN5444A	NKN6560A	1.05	-0.09	0.435	0.271	0.44	0.28
EC-Ab-R1-040317-12/365ADY006P	Stubby	1850.2	SNN5595B	DUT Back 2.5cm	NNTN5444A	NKN6560A	1.05	-0.07	0.284	0.179	0.29	0.18
EC-Ab-R1-040317-13/365ADY006P	Stubby	1850.2	SNN5595B	DUT Front 2.5cm	NNTN5444A	NKN6560A	1.05	-0.01	0.173	0.111	0.17	0.11

Table 16

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 14.3% mode; (WLAN) 2412-2472MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 the left ear with PIFA antenna and offered batteries												
EC-Lear-R1-040302-11/365ADY006P	PIFA	2437	SNN5595B	Cheek touch	None	None	39	-0.55	0.0317	0.017	0.04	0.02
EC-Lear-R1-040302-14/365ADY006P	PIFA	2437	SNN5588A	Cheek touch	None	None	40.3	-0.63	0.0294	0.015	0.03	0.02
EC-Lear-R1-040302-16/365ADY006P	PIFA	2437	SNN5595B	15D tilt	None	None	39.7	0.12	0.0052	0.004	0.01	<0.01
Assessment of the band edges at the left ear with PIFA antenna												
EC-Lear-R1-040303-02/365ADY006P	PIFA	2412	SNN5595B	Cheek touch	None	None	46.5	-0.45	0.0383	0.020	0.04	0.02
EC-Lear-R1-040303-03/365ADY006P	PIFA	2472	SNN5595B	Cheek touch	None	None	38.0	-0.09	0.0193	0.011	0.02	0.01

Table 17

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 14.3% mode; (WLAN) 2412-2472MHz band (continued)												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 the left ear with “Stubby” antenna and offered batteries												
EC-Lear-R1-040303-05/365ADY006P	Stubby	2437	SNN5595B	Cheek touch	None	None	39.3	-0.67	0.0314	0.017	0.04	0.02
EC-Lear-R1-040303-06/365ADY006P	Stubby	2437	SNN5588A	Cheek touch	None	None	40.2	-0.87	0.030	0.016	0.04	0.02
EC-Lear-R1-040303-07/365ADY006P	Stubby	2437	SNN5595B	15D tilt	None	None	39.4	-0.40	0.009	0.006	0.01	0.01
Assessment of the band edges at the left ear with “Stubby” antenna												
EC-Lear-R1-040303-10/365ADY006P	Stubby	2412	SNN5595B	Cheek touch	None	None	46.9	-0.26	0.032	0.018	0.03	0.02
EC-Lear-R1-040303-11/365ADY006P	Stubby	2472	SNN5595B	Cheek touch	None	None	38.2	-0.91	0.025	0.013	0.03	0.02

Table 18

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 14.3% mode; (WLAN) 2412-2472MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 the right ear with PIFA antenna, with worst case battery from left ear assessment												
EC-Rear-R1-040304-02/365ADY006P	PIFA	2437	SNN5595B	Cheek touch	None	None	39.2	-0.30	0.0318	0.020	0.04	0.02
EC-Rear-R1-040304-03/365ADY006P	PIFA	2437	SNN5595B	15D tilt	None	None	39.4	-0.36	0.008	0.008	0.01	0.01
Assessment of the band edges at the right ear												
EC-Rear-R1-040304-04/365ADY006P	PIFA	2412	SNN5595B	Cheek touch	None	None	47.9	-0.29	0.0365	0.022	0.04	0.02
EC-Rear-R1-040304-05/365ADY006P	PIFA	2472	SNN5595B	Cheek touch	None	None	38.1	-0.45	0.0211	0.014	0.03	0.02
Assessment at the right ear with “Stubby” antenna, with worst case battery from left ear assessment												
EC-Rear-R1-040304-08/365ADY006P	Stubby	2437	SNN5595B	Cheek touch	None	None	40.1	-0.77	0.0371	0.022	0.04	0.03
EC-Rear-R1-040304-09/365ADY006P	Stubby	2437	SNN5595B	15D tilt	None	None	40.4	-0.50	0.0148	0.010	0.02	0.01
Assessment of the band edges at the right ear												
EC-Rear-R1-040304-10/365ADY006P	Stubby	2412	SNN5595B	Cheek touch	None	None	47.4	-0.82	0.0431	0.025	0.05	0.03
EC-Rear-R1-040304-12/365ADY006P	Stubby	2472	SNN5595B	Cheek touch	None	None	38.1	-1.01	0.0327	0.020	0.04	0.03

Table 19

DUT assessment at the Face; 2.5cm separation w/ worst case battery from left ear assessment; 14.3% mode; (WLAN) 2412-2472MHz band												
Run Number/ SN	Antenna type	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 PIFA antenna and worst case battery from left ear assessment												
EC-Face-R1-040304-13/365ADY006P	PIFA	2437	SNN5595B	DUT Front 2.5cm Flip closed	None	None	39.7	-1.02	0.0047	0.003	<0.01	<0.01
EC-Face-R1-040305-03/365ADY006P	PIFA	2412	SNN5595B	DUT Front 2.5cm Flip closed	None	None	47.6	-1.28	0.0045	0.003	<0.01	<0.01
EC-Face-R1-040305-04/365ADY006P	PIFA	2472	SNN5595B	DUT Front 2.5cm Flip closed	None	None	38.3	-1.61	0.0036	0.002	<0.01	<0.01
Assessment with "Stubby" antenna and worst case battery from left ear assessment												
EC-Face-R1-040305-05/365ADY006P	Stubby	2437	SNN5595B	DUT Front 2.5cm Flip closed	None	None	39.8	-0.33	0.0045	0.003	<0.01	<0.01
EC-Face-R1-040305-08/365ADY006P	Stubby	2412	SNN5595B	DUT Front 2.5cm Flip closed	None	None	47.6	-0.42	0.0045	0.003	<0.01	<0.01
EC-Face-R1-040305-10/365ADY006P	Stubby	2472	SNN5595B	DUT Front 2.5cm Flip closed	None	None	38.3	-0.60	0.0035	0.002	<0.01	<0.01

Table 20

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 14.3% mode; (WLAN) 5180-5320MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 the left ear with PIFA antenna												
EC-Lear-R1-040310-05/365ADY006P	PIFA	5260	SNN5588A	Cheek touch	None	None	31.0	0.84	0.05	NA	0.05	NA
EC-Lear-R1-040310-06/365ADY006P	PIFA	5260	SNN5595B	Cheek touch	None	None	31.1	0.15	0.04	NA	0.04	NA
EC-Lear-R1-040310-07/365ADY006P	PIFA	5260	SNN5588A	15D tilt	None	None	31.3	0.32	0.04	NA	0.04	NA
Assessment of the band edges at the left ear with PIFA antenna												
EC-Lear-R1-040310-08/365ADY006P	PIFA	5180	SNN5588A	15D tilt	None	None	35.5	0.44	0.05	NA	0.05	NA
EC-Lear-R1-040310-09/365ADY006P	PIFA	5320	SNN5588A	15D tilt	None	None	28.3	0.14	0.04	NA	0.05	NA

Table 21

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 14.3% mode; (WLAN) 5180-5320MHz band (continued)												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 the left ear with “Stubby” antenna and offered batteries												
EC-Lear-R1-040311-03/365ADY006P	Stubby	5260	SNN5588A	Cheek touch	None	None	30.2	-1.24	0.05	NA	0.07	NA
EC-Lear-R1-040311-05/365ADY006P	Stubby	5260	SNN5595B	Cheek touch	None	None	30.9	-0.09	0.05	NA	0.05	NA
EC-Lear-R1-040311-06/365ADY006P	Stubby	5260	SNN5588A	15D tilt	None	None	30.7	-0.03	0.04	NA	0.04	NA
Assessment of the band edges at the left ear with “Stubby” antenna												
EC-Lear-R1-040311-07/365ADY006P	Stubby	5180	SNN5588A	Cheek touch	None	None	35.0	-0.03	0.05	NA	0.05	NA
EC-Lear-R1-040311-08/365ADY006P	Stubby	5320	SNN5588A	Cheek touch	None	None	28.2	-0.30	0.07	NA	0.09	NA

Table 22

DUT assessment at the head; Cheek Touch, Tilt, and band edges; 14.3% mode; (WLAN) 5180-5320MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 the right ear with PIFA antenna, with worst case battery from left ear assessment												
EC-Rear-R1-040312-02/365ADY006P	PIFA	5260	SNN5588A	Cheek touch	None	None	30.1	-0.48	0.03	NA	0.04	NA
EC-Rear-R1-040312-03/365ADY006P	PIFA	5260	SNN5588A	15D tilt	None	None	30.6	0.26	0.03	NA	0.03	NA
Assessment of the band edges at the right ear with PIFA antenna												
EC-Rear-R1-040312-04/365ADY006P	PIFA	5180	SNN5588A	Cheek touch	None	None	35.3	-0.13	0.03	NA	0.03	NA
EC-Rear-R1-040312-05/365ADY006P	PIFA	5320	SNN5588A	Cheek touch	None	None	28.4	-0.30	0.03	NA	0.04	NA
Assessment at the right ear with “Stubby” antenna, with worst case battery from left ear assessment												
EC-Rear-R1-040312-06/365ADY006P	Stubby	5260	SNN5588A	Cheek touch	None	None	30.0	-0.44	0.07	NA	0.08	NA
EC-Rear-R1-040312-07/365ADY006P	Stubby	5260	SNN5588A	15D tilt	None	None	30.9	0.43	0.04	NA	0.04	NA
Assessment of the band edges at the right ear with “Stubby” antenna												
EC-Rear-R1-040312-08/365ADY006P	Stubby	5180	SNN5588A	Cheek touch	None	None	35.6	-0.36	0.05	NA	0.05	NA
EC-Rear-R1-040312-10/365ADY006P	Stubby	5320	SNN5588A	Cheek touch	None	None	28.5	-0.40	0.06	NA	0.07	NA

Table 23

DUT assessment at the Face; 2.5cm separation w/ worst case battery from left ear assessment; 14.3% mode; (WLAN) 5180-5320MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 PIFA antenna and worst case battery from left ear assessment												
EC-Face-R1-040306-05/365ADY006P	PIFA	5260	SNN5588A	DUT Front 2.5cm Flip closed	None	None	26.2	1.55	0.01	NA	0.01	NA
EC-Face-R1-040324-10/365ADY006P	PIFA	5180	SNN5588A	DUT Front 2.5cm Flip closed	None	None	27.5	2.40	0.01	NA	0.01	NA
EC-Face-R1-040324-11/365ADY006P	PIFA	5320	SNN5588A	DUT Front 2.5cm Flip closed	None	None	32.5	1.21	0.01	NA	0.01	NA
Assessment with “Stubby” antenna and worst case battery from left ear assessment												
EC-Face-R1-040324-12/365ADY006P	Stubby	5260	SNN5588A	DUT Front 2.5cm Flip closed	None	None	26.7	-0.63	0.01	NA	0.01	NA
EC-Face-R1-040324-13/365ADY006P	Stubby	5180	SNN5588A	DUT Front 2.5cm Flip closed	None	None	27.9	1.59	0.01	NA	0.01	NA
EC-Face-R1-040324-14/365ADY006P	Stubby	5320	SNN5588A	DUT Front 2.5cm Flip closed	None	None	32.1	-0.73	0.01	NA	0.01	NA

Table 24

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; *14.3% and **99.5% modes; (WLAN) 2412-2472MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 offered batteries and carry cases with PIFA antenna												
**EC-Ab-R1-040318-02/365ADY006P	PIFA	2437	SNN5588A	Against phantom	NTNN5159A	None	45.1	-1.70	0.060	0.034	0.09	0.05
**EC-Ab-R1-040318-03/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	None	42.9	-1.69	0.091	0.048	0.13	0.07
Assessment of offered batteries and carry cases with “Stubby” antenna												
**EC-Ab-R1-040318-05/365ADY006P	Stubby	2437	SNN5588A	Against phantom	NTNN5159A	None	45.2	-2.35	0.034	0.020	0.06	0.03
**EC-Ab-R1-040318-06/365ADY006P	Stubby	2437	SNN5595B	Against phantom	NNTN5444A	None	42.2	-1.86	0.043	0.024	0.07	0.04
Assessment of worst case battery and antenna from above with offered data cable and audio accessories												
**EC-Ab-R1-040318-07/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NKN6560A	42.7	-2.09	0.066	0.039	0.11	0.06
**EC-Ab-R1-040318-09/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NKN6559A	42.6	-1.70	0.068	0.039	0.10	0.06

*EC-Ab-R1-040318-10/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NNTN4620A	42.8	-0.66	0.023	0.013	0.03	0.02
--------------------------------	------	------	----------	-----------------	-----------	-----------	------	-------	-------	-------	------	------

Table 25

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; *14.3% and **99.5% modes; (WLAN) 2412-2472MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 worst case battery with offered data cable and audio accessories (continued)												
*EC-Ab-R1-040318-11/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	SYN8390B	42.7	-0.76	0.022	0.013	0.03	0.02
*EC-Ab-R1-040318-12/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	SYN8146C	42.7	-0.74	0.024	0.013	0.03	0.02
*EC-Ab-R1-040318-13/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	SYN7875C	38.1	-0.41	0.022	0.012	0.03	0.01
*EC-Ab-R1-040319-02/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NTN8496A	40.8	-1.15	0.024	0.013	0.03	0.02
*EC-Ab-R1-040319-03/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NTN8513B	41.2	-1.18	0.023	0.013	0.03	0.02
*EC-Ab-R1-040319-04/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NNTN4033A	41.6	-0.76	0.025	0.014	0.03	0.02
*EC-Ab-R1-040319-06/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NSN6066A	40.7	-1.05	0.015	0.009	0.01	0.01
*EC-Ab-R1-040319-07/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NNTN5004A	40.5	-0.90	0.025	0.014	0.03	0.02
*EC-Ab-R1-040319-08/365ADY006P	PIFA	2437	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	40.8	-1.81	0.023	0.013	0.04	0.02
Assessment of band edges with worst case test configuration from audio accessory assessment from above												
*EC-Ab-R1-040319-09/365ADY006P	PIFA	2412	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	43.4	-0.67	0.025	0.014	0.03	0.02
*EC-Ab-R1-040319-10/365ADY006P	PIFA	2484	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	30.3	0.34	0.011	0.006	0.01	0.01
Assessment at 2.5cm separation with applicable worst case test configuration from above												
**EC-Ab-R1-040319-12/365ADY006P	PIFA	2437	SNN5595B	DUT Back 2.5cm	None	None	40.8	-2.49	0.032	0.019	0.06	0.03
**EC-Ab-R1-040319-13/365ADY006P	PIFA	2437	SNN5595B	DUT Front 2.5cm	None	None	40.9	-1.28	0.020	0.012	0.03	0.02

Table 26

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; *14.3% and **97.1% modes; (WLAN) 5180-5320MHz band												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 offered batteries and carry cases with PIFA antenna												
**EC-Ab-R1-040320-02/365ADY006P	PIFA	5260	SNN5588A	Against phantom	NTNN5159A	None	26.3	-1.85	0.040	NA	0.08	NA
**EC-Ab-R1-040320-04/365ADY006P	PIFA	5260	SNN5595B	Against phantom	NNTN5444A	None	25.5	-2.78	0.050	NA	0.12	NA
Assessment of offered batteries and carry cases with “Stubby” antenna												
**EC-Ab-R1-040320-05/365ADY006P	Stubby	5260	SNN5588A	Against phantom	NTNN5159A	None	25.9	-2.21	0.060	NA	0.12	NA
**EC-Ab-R1-040320-06/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	None	25.2	-1.88	0.080	NA	0.16	NA
Assessment of worst case battery with offered data cable and audio accessories												
**EC-Ab-R1-040320-07/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NKN6560A	25.5	-0.82	0.090	NA	0.14	NA
**EC-Ab-R1-040320-08/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NKN6559A	25.4	-1.54	0.100	NA	0.18	NA
*EC-Ab-R1-040320-09/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NNTN4620A	30.3	0.45	0.020	NA	0.02	NA
*EC-Ab-R1-040320-10/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	SYN8390B	30.6	-0.10	0.020	NA	0.02	NA
*EC-Ab-R1-040320-11/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	SYN8146C	30.7	-0.40	0.02	NA	0.02	NA
*EC-Ab-R1-040320-12/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	SYN7875C	30.3	-0.31	0.020	NA	0.02	NA
*EC-Ab-R1-040320-13/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NTN8496A	30.5	-0.86	0.020	NA	0.03	NA
*EC-Ab-R1-040321-02/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NTN8513B	30.4	-0.05	0.020	NA	0.02	NA
*EC-Ab-R1-040321-03/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NSN6066A	30.4	0.04	0.020	NA	0.01	NA
*EC-Ab-R1-040321-04/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NNTN4033A	30.6	-0.03	0.020	NA	0.02	NA
*EC-Ab-R1-040321-05/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NNTN5004A	30.5	0.23	0.020	NA	0.02	NA
*EC-Ab-R1-040321-06/365ADY006P	Stubby	5260	SNN5595B	Against phantom	NNTN5444A	NNTN5005A	30.5	0.16	0.020	NA	0.02	NA

Table 27

DUT assessment at the body; against phantom, band edges, and 2.5cm separation; *14.3% and **97.1% modes; (WLAN) 5180-5320MHz band (continued)												
Run Number/ SN	Antenna type	Freq. (MHz)	Battery	Test position	Carry Case	Additional attachments	Initial Power (mW)	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 band edges with worst case test configuration from audio accessory assessment from above												
*EC-Ab-R1-040321-07/365ADY006P	Stubby	5180	SNN5595B	Against phantom	NNTN5444A	NTN8496A	35.3	0.27	0.020	NA	0.02	NA
*EC-Ab-R1-040321-08/365ADY006P	Stubby	5320	SNN5595B	Against phantom	NNTN5444A	NTN8496A	28.2	0.33	0.020	NA	0.02	NA
Assessment at 2.5cm separation with applicable worst case test configuration from above												
**EC-Ab-R1-040321-09/365ADY006P	Stubby	5260	SNN5595B	DUT Back w/ant. 2.5cm	None	NKN6560A	25.6	-2.31	0.080	NA	0.17	NA
**EC-Ab-R1-040321-11/365ADY006P	Stubby	5260	SNN5595B	DUT Front 2.5cm	None	NKN6560A	25.4	-1.22	0.040	NA	0.07	NA

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:

$$\text{Max. Calc. 1-g Avg. SAR} = ((\text{S.A.R. meas.} / (10^{(\text{Pdrift}/10)})) * (\text{Pmax}/\text{Pint})) * \text{DC}\%$$

P_{max} = Maximum Power (W)

P_{int} = Initial Power (W)

P_{drift} = DASY drift results (dB)

$\text{SAR}_{\text{meas.}}$ = 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: AZ489FT5829 model H77UBH6JA5AA.

At the Body: 1-g Avg. = 1.37 mW/g; 10-g Avg. = 0.97 mW/g

At the Face: 1-g Avg. = 0.30 mW/g; 10-g Avg. = 0.21 mW/g

At the Head: 1-g Avg. = 1.49 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).