Prüfbericht-Nr.: *Test Report No.:*	**17043527 004**	**Auftrags-Nr.:** *Order No.:*	164021717	Seite 1 von 22 *Page 1 of 22*
Kunden-Referenz-Nr.: *Client Reference No.:*	N/A	**Auftragsdatum:** *Order date:*	17.09.2014	
Auftraggeber: *Client:*	Shenzhen Zowee Technology Co., Ltd., Science & Technology Industrial Park of Privately Owned Enterprises, Pingshan, Xili, Nanshan District, Shenzhen, China			
Prüfgegenstand: *Test item:*	Tablet PC			
Bezeichnung / Typ-Nr.: *Identification / Type No.:*	UB-15MS10, UB-15MS101, UB-15MS10SA, M1045, NS-15MS08, NS-15MS081, M8011			
Auftrags-Inhalt: *Order content:*	FCC/IC Certification			
Prüfgrundlage: *Test specification:*	CFR Title 47 Part 2 Subpart J Section 2.1093 ANSI/IEEE C95.1-1992 IEEE 1528-2003 FCC OET Bulletin 65 Supplement C (Edition 01-01) RSS-102 Issue 4 March 2010			
Wareneingangsdatum: *Date of receipt:*	08.10.2014			
Prüfmuster-Nr.: *Test sample No.:*	1401914, 1401915			
Prüfzeitraum: *Testing period:*	11.10.2014			
Ort der Prüfung: *Place of testing:*	Audix Technology (Shenzhen) Co., Ltd.			
Prüflaboratorium: *Testing laboratory:*	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: *Test result*:*	Pass			

geprüft von / *tested by:*			**kontrolliert von** / *reviewed by:*		
29.10.2014	Owen Tian/Project Manager		29.10.2014	Sam Lin/Technical Certicier	
Datum *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*	**Datum** *Date*	**Name / Stellung** *Name / Position*	**Unterschrift** *Signature*

Sonstiges / *Other:*

Zustand des Prüfgegenstandes bei Anlieferung: *Condition of the test item at delivery:*	Prüfmuster vollständig und unbeschädigt *Test item complete and undamaged*

* Legende:	1 = sehr gut	2 = gut	3 = befriedigend	4 = ausreichend	5 = mangelhaft
	P(ass) = entspricht o.g. Prüfgrundlage(n)		F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
Legend:	*1 = very good*	*2 = good*	*3 = satisfactory*	*4 = sufficient*	*5 = poor*
	P(ass) = passed a.m. test specification(s)		*F(ail) = failed a.m. test specification(s)*	*N/A = not applicable*	*N/T = not tested*

V04

STATEMENT OF COMPLIANCE

TEST ITEM	SPECIFICATION	RESULT
Specific Absorption Rate - Wi-Fi 802.11 b/g/n - 2.4GHz Band	OET Bulletin 65 Supplement C (Edition 01-01): *Evaluating compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields*	PASS

This device complies with Specific Absorption Rate (SAR) for general population/uncontrolled exposure limits (1.6W/kg) specified in CFR Title 47 Part 2 Subpart J Section 2.1093 and ANSI/IEEE C95.1-1992.

This device has been testd in accordance with the measurement methods and procedure specified in IEEE 1528-2003 and FCC OET Bulletin 65 Supplement C (edition 01-01).

Refer to the maximum results of Specific Absorption Rate (SAR) durning testing as below.

FREQUENCY BAND	EXPOSURE POSITION	EQUIPMENT CLASS	HIGHEST REPORTED SAR VALUE (W/KG)
802.11 b/g/n - 2.4GHz Band	Body	DTS	0.307

Contents

1. General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: System Performance Check
Appendix B: Test Plots of SAR Measurement
Appendix C: Calibration Certificate

2. Test Sites

2.1 Test Facilities

Audix Technology (Shenzhen) Co., Ltd.

No. 6, Ke Feng Road, Block 52, Shenzhen Science & Industry Park Nantou, Shenzhen, Guangdong, P.R. China

The tests at the test site have been conducted under the supervision of a TÜV engineer.

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Equipment	Manufacturer	Model No.	Serial No.	Last Cal Date	Cal. Interval
DASY5 SAR Test System	Speag	TX60 L speag	F09/5B1H1/01	July.12,14	1Year
Wireless Communication Test Set	Agilent	E5515C	GB44300243	May.09, 14	1Year
Power Meter	Anritsu	ML2487A	6K00002472	Apr. 28,14	1 Year
Power Sensor	Anritsu	MA2491A	032516	Apr. 28,14	1 Year
Signal Generator	HP	83732B	VS34490501	Apr. 28,14	1 Year
Amplifier	Milmega	ZHL-42W	C620601316	NCR	N/A
Dipole Validation Kits	Speag	D900V2	043	Mar.13,14	3Year
Dipole Validation Kits	Speag	D1900V2	5d018	Jun.10,13	3Year
Dipole Validation Kits	Speag	D2000V2	1023	Jun.11,13	3Year
Dipole Validation Kits	Speag	D2450V2	835	Mar.14,14	3Year
Dipole Validation Kits	Speag	D5GHzV2	1040	July.02,13	3Year
Attenuator	Agilent	8491A 3dB	MY39262001	Apr. 28,14	1Year
Attenuator	Agilent	8491A 10dB	MY39264375	Apr. 28,14	1Year
Data Acquisition Electronics	Speag	DAE4	899	July.25,14	2Year
E-Field Probe	Speag	ES3DV3	3139	July.25,14	2Year
E-Field Probe	Speag	EX3DV4	3767	July.27,14	2Year
Network Analyzer	Agilent	E5071B	MY42403549	Apr. 28,14	1Year

3. General Product Information

3.1 Product Function and Intended Use

The EUTs are tablet with Wi-Fi, Bluetooth & GPS function.
The models UB-15MS10, UB-15MS101, UB-15MS10SA & M1045 are identical except the model name; the models NS-15MS08, NS-15MS081 & M8011 are identical except the model name.
The models UB-15MS10 & NS-15MS08 have the same circuit, PCB layout and RF module, only some functions are different.
The differences between UB-15MS10 and NS-15MS08:

Model	PCBA	Function	Screen	DDR	EMMC	Antenna
UB-15MS10	With GPS board & POPO-Pin for keyboard	With light sensor, GPS & compass	10.1”	2G	Internal 32G	With GPS antenna
NS-15MS08	Without	Without	8”	1G	Internal 16G + external 16G	Without GPS antenna, the position of Wi-Fi antenna is different

For details refer to the User Manual and Circuit Diagram.

3.2 Ratings and System Details

Table 2: Technical Specification

Device type:	Portable device			
EUT Name:	Tablet PC			
Type Identification:	UB-15MS10, UB-15MS101, UB-15MS10SA, M1045, NS-15MS08, NS-15MS081, M8011			
Serial Number	A000096952-001			
FCC ID:	2AAP6UB15MS10			
Operating mode(s) / WiFi:	IEEE 802.11b	IEEE 802.11g	IEEE 802.11n (HT20)	IEEE 802.11n (HT40)
Test modulation	DSSS (DBPSK, DQPSK), CCK)	OFDM (DBPSK, DQPSK)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)	OFDM (BPSK, QPSK, 16-QAM, 64-QAM)
Transmit Frequency Range (MHz):	2412 - 2472	2412 - 2472	2412 - 2472	2422 - 2462
Maximum tune-up average output power (dBm):	17	14	13	13
Operating mode(s) / Bluetooth:	Bluetooth 4.0			
Test modulation	GFSK, π/4DQPSK, 8DPSK for BDR & EDR mode, GFSK for LE mode			
Transmit Frequency Range (MHz):	2402-2480			
Maximum tune-up average output power (dBm):	2			
Hardware version:	Xpower VerA			
Software version:	Win8.1 with bing			
Antenna type:	Integrated antenna			
Battery options:	DC 3.7V			

Table 3: List of WLAN Channel of 802.11b/g/n mode

802.11b		802.11g		802.11n (HT20)		802.11n (HT40)	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
1	2412	1	2412	1	2412	3	2422
2	2417	2	2417	2	2417	4	2427
3	2422	3	2422	3	2422	5	2432
4	2427	4	2427	4	2427	6	2437
5	2432	5	2432	5	2432	7	2442
6	2437	6	2437	6	2437	8	2447
7	2442	7	2442	7	2442	9	2452
8	2447	8	2447	8	2447	10	2457
9	2452	9	2452	9	2452	11	2462
10	2457	10	2457	10	2457		
11	2462	11	2462	11	2462		

Table 4: List of Bluetooth Channel

Bluetooth (BDR & EDR)		Bluetooth (LE)	
Channel Number	Frequency (MHz)	Channel Number	Frequency (MHz)
0	2402	0	2402
39	2441	19	2440
78	2480	39	2480

3.3 Independent Operation Modes

The basic operation modes are:

A. WiFi transmitting
   1. 802.11b
      a) CH1
      b) CH6
      c) CH11
   2. 802.11g
      a) CH1
      b) CH6
      c) CH11
   3. 802.11n (HT20)
      a) CH1
      b) CH6
      c) CH11
   4. 802.11n (HT40)
      a) CH3
      b) CH7
      c) CH11

B. Off

3.4 Submitted Documents

- Bill of Material
- Constructional Drawing
- PCB Layout
- Photo Document
- Circuit Diagram
- Instruction Manual
- Rating Label

4. Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

The EUT is commanded to operate at maximum transmitting power. The EUT shall use its internal transmitter. The antenna, battery and accessories shall be those specified by the manufacturer. The EUT battery must be fully charged and checked periodically during the test to ascertain uniform power output.

Table 5: Configuration of EUT

Operation mode	Frequency Range (MHz)	Modulation	Default Test Channel			Power Control Level
			Low	Middle	High	
802.11b/g/n(HT20)	2412-2462	DSSS, OFDM	CH1	CH6	CH11	Test software was used to configure the EUT to transmit at maximum output power
802.11n(HT40)	2422-2462	OFDM	CH1	CH6	CH11	
Bluetooth (BDR & EDR)	2402-2480	FHSS	CH0	CH39	CH78	
Bluetooth (LE)	2402-2480	GFSK	CH0	CH19	CH39	

According to clause 3.1, test was applied on models UB-15MS10 & NS-15MS08.

5. Tissue Simulating Liquid Ingredients

The liquid is consisted of Water, Salt, Glycol, Sugar, Preventol and Cellulose. The liquid has previously been proven to be suited for worst-case. The following table shows the detail solution.

Table 6: Composition of Tissue Simulating Liquid

Ingredients (% by weight)	Frequency (MHz)									
	450		835		915		1900		2450	
Tissue Type	Head	Body	Head	Body	Head	Body	Head	Body	Head	Body
Water	38.56	51.16	41.45	52.4	41.05	56.0	54.9	40.4	62.7	73.2
Salt (NaCl)	3.95	1.49	1.45	1.4	1.35	0.76	0.18	0.5	0.5	0.04
Sugar	56.32	46.78	56.0	45.0	56.5	41.76	0.0	58.0	0.0	0.0
HEC	0.98	0.52	1.0	1.0	1.0	1.21	0.0	1.0	0.0	0.0
Bactericide	0.19	0.05	0.1	0.1	0.1	0.27	0.0	0.1	0.0	0.0
Triton X-100	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.8	0.0
DGBE	0.0	0.0	0.0	0.0	0.0	0.0	44.92	0.0	0.0	26.7
Dielectric Constant	43.42	58.0	42.54	56.1	42.0	56.8	39.9	54.0	39.8	52.5
Conductivity (S/m)	0.85	0.83	0.91	0.95	1.0	1.07	1.42	1.45	1.88	1.78

Salt: 99+% Pure Sodium Chloride Sugar: 98+% Pure Sucrose
Water: De-ionized, 16 MΩ+ resistivity HEC: Hydroxyethyl Cellulose
DGBE: 99+% Di(ethylene glycol) butyl ether, [2-(2-butoxyethoxy)ethanol]
Triton X-100 (ultra pure): Polyethylene glycol mono [4-(1,1, 3, 3-tetramethylbutyl)phenyl]ether

5.1 Specific Absorption Rate (SAR) System Check

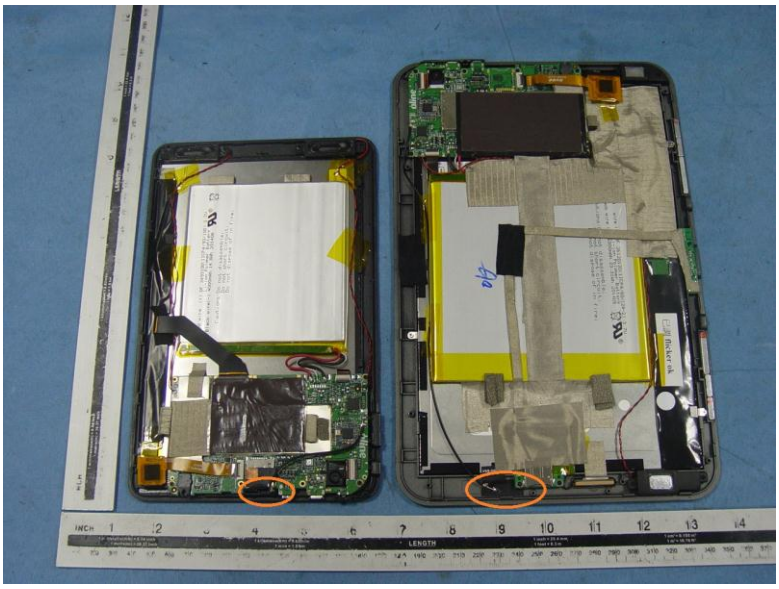
Dielectric parameters of the tissue simulating liquid were verified prior to the SAR evaluation using the dielectric proble kit and the network analyzer.

A system check measurement was made following the determination of the dielectric parameters of the tissue simulating liquid, using the dipole validation kit. A power level of 250 mW for 2.4GHz band or 100mW for 5GHz band as supplied to the dipole antenna, which was placed under the flat section of the twin SAM phantom. The system check results (dielectric parameters and SAR values) are given in the following table.

Table 7: System Check Results of for Body of Tissue Simulating Liquid

Frequency (MHz)	Description	SAR(W/kg)		Dielectric Parameters		Temp ℃
		1g	10g	ε_r	σ(s/m)	
2450	Recommended value ±10% window	12.8 11.52 - 14.08	5.86 5.27 - 6.45	52.7	1.95	---
	Measurement value (2014-10-11)	9.22	4.31	52.238	2.001	20.2

5.2 Exposure Positions Consideration



Distance of the Antenna to the EUT surface/edge of UB-15MS10						
	Rear	**Front**	**Top**	**Bottom**	**Right**	**Left**
Distance	≤5mm	>5mm	>5mm	≤5mm	>5mm	>5mm

Positions for SAR test of UB-15MS10						
	Rear	**Front**	**Top**	**Bottom**	**Right**	**Left**
Test position	Yes	No	No	Yes	Yes	No

Distance of the Antenna to the EUT surface/edge of NS-15MS08						
	Rear	**Front**	**Top**	**Bottom**	**Right**	**Left**
Distance	≤5mm	>5mm	>5mm	≤5mm	>5mm	>5mm

Distance of the Antenna to the EUT surface/edge of NS-15MS08						
	Rear	**Front**	**Top**	**Bottom**	**Right**	**Left**
Test position	Yes	No	No	Yes	No	No

5.3 Phantom Description

The used SAM Phantom meets the requirements specified in Edition 01-01 of Supplement C to OET Bulletin 65 for Specific Absorption Rate (SAR) measurements.

Phantom for compliance testing of handheld and body-mounted wireless devices in the frequency range of 30 MHz to 6 GHz. ELI is fully compatible with the IEC 62209-2 standard and all known tissue simulating liquids. ELI has been optimized regarding its performance and can be integrated into our standard phantom tables. A cover prevents evaporation of the liquid. Reference markings on the phantom allow installation of the complete setup, including all predefined phantom positions and measurement grids, by teaching three points. The phantom is compatible with all SPEAG dosimetric probes and dipoles.

Material	Vinylester, glass fiber reinforced (VE-GF)
Liquid Compatibility	Compatible with all SPEAG tissue simulating liquids (incl. DGBE type)
Shell Thickness	2.0 ± 0.2 mm (bottom plate)
Dimensions	Major axis: 600 mm, Minor axis: 400 mm
Filling Volume	approx. 30 liters
Wooden Support	SPEAG standard phantom table

The bottom plate contains three pair of bolts for locking the device holder. The device holder positions are adjusted to the standard measurement positions in the three sections. A white cover is provided to tap the phantom during off-periods to prevent water evaporation and changes in the liquid parameters.

On the phantom top, three reference markers are provided to identify the phantom position with respect to the robot.

5.4 Scanning Procedure

The DASY5 installation includes predefined files with recommended procedures for measurements and validation. All test positions (head or body-worn) are tested with the same configuration of test steps differing only in the grid definition for the different test positions.

The “area scan” measures the SAR above the DUT or verification dipole on a parallel plane to the surface. It is used to locate the approximate location of the peak SAR with 2D spline interpolation. The robot performs a stepped movement along one grid axis while the local electrical field strenth is measured by the probe. The probe is touching the surface of the SAM during acquisition of measurement values. The standard scan uses large grid spacing for faster measurement. Standard grid spacing for head measurements is 15 mm in x- and y-dimension. If a finer resolution is needed, the grid spacing can be reduced. Grid spacing and orientation have no influence on the SAR result. For special applications where the standard scan method does not find the peak SAR within the grid, e.g. mobile phones with flip cover, the grid can be adapted in orientation.

A “7x7x7 zoom scan” measures the field in a volume around the 2D peak SAR value acquired in the previous “coarse” scan. This is a fine 7x7 grid where the robot additionally moves the probe in 7 steps along the z-axis away from the bottom of the Phantom. Grid spacing for the

cube measurement is 5 mm in x and y-direction and 5 mm in z-direction. DASY5 is also able to perform repeated zoom scans if more than 1 peak is found during area scan.

5.5 Spatial Peak SAR Evaluation

The procedure for spatial peak SAR evaluation has been implemented according to the test standard. It can be conducted for 1g and 10g, as well as for user-specific masses. The DASY software includes all numerical procedures necessary to evaluate the spatial peak SAR value.

The base for the evaluation is a "cube" measurement. The measured volume must include the 1g and 10g cubes with the highest averaged SAR values. For that purpose, the center of the measured volume is aligned to the interpolated peak SAR value of a previously performed area scan.

The entire evaluation of the spatial peak values is performed within the post-processing engine. The system always gives the maximum values for the 1g and 10g cubes. The algorithm to find the cube with highest averaged SAR is divided into the following stages:

- Extraction of the measured data (grid and values) from the Zoom Scan
- Calculation of the SAR value at every measurement point based on all stored data (A/D values and measurement parameters)
- Generation of a high-resolution mesh within the measured volume
- Interpolation of all measured values form the measurement grid to the high-resolution grid
- Extrapolation of the entire 3-D field distribution to the phantom surface over the distance from sensor to Surface
- Calculation of the averaged SAR within masses of 1g and 10g

Extrapolation

The extrapolation is based on a least square algorithm. Through the points in the first 3 cm along the z-axis, polynomials of order four are calculated. These polynomials are then used to evaluate the points between the surface and the probe tip. The points, calculated from the surface, have a distance of 1 mm from each other.

Interpolation

The interpolation of the points is done with a 3d-Spline. The 3d-Spline is composed of three one-dimensional splines with the "Not a knot"-condition (x, y and z -direction).

5.6 Test Operation and Test Software

Test operation refers to test setup in chapter 5.

A communication link is set up with the test mode software for WiFi mode test. During the test, at the each test frequency channel, the EUT is operated at the RF continuous emission mode.

802.11 b/g/n operating modes are tested independently according to the service requirements in each frquency band.802.11b/g/n modes are tested on channel 1, 6, 11. However, if output power reduction is necessary for channels 1 and/or 11 to meet restricted band requirements the highest output channel closest to each of these channels must be tested instead.

802.11 a/n is tested for UNII operations on channel 36 and 48 in 5.15-5.25GHz band. Also 5.8GHz band is alos available for §15.247, hence channels 149, 157 and 165 should be tested instead of the UNII channels.

SAR is not required for 802.11g/n when the maximum average output power is less than ¼ dB higher than that measured on the corresponding 802.11b channels.

Each channel should be tested at the lowest data rate, and repeated SAR measurement is required only when the measured SAR is ≥ 0.8 W/kg.

For each frequency band testing at higher data rates and higher order modulations is not required when the maximum average output power for each of these configurations is less than ¼ dB higher than those measured at the lowest data rate.

5.7 Special Accessories and Auxiliary Equipment

None.

6. Test Results

6.1 Huaman Exposure to Radiofrequency Electromagnetic Fields

RESULT: **Passed**

Date of testing	:	2014-10-11
Test standard	:	CFR Title 47 Part 2 Subpart J Section 2.1093 ANSI/IEEE C95.1-1992 IEEE 1528-2003 FCC OET Bulletin 65 Suppplement C (Edition 01-01)
FCC KDB Publication	:	KDB 447498 D01 v05r01 KDB 248227 D01 v01r02 KDB 616217 D04 v01r01 KDB 865664 D01 v01r01
Limits	:	1.6W/kg

Test setup

Operation mode	:	A.1
Ambient temperature	:	24℃
Relative humidity	:	51%
Atmospheric pressure	:	101.0kPa

Table 8: Conducted Power of 802.11b/g/n (HT20)

802.11b/g/n (HT20)	Conducted Power (dBm)					
	CH1 / 2412		CH6 / 2437		CH11 / 2462	
	Rated Average Power	Measured Average Power	Rated Average Power	Measured Average Power	Rated Average Power	Measured Average Power
802.11b (1Mbps)	17	15.85	17	15.52	17	15.71
802.11b (5.5Mbps)	17	19.03	17	18.73	17	18.84
802.11b (11Mbps)	17	20.09	17	19.83	17	19.63
802.11g (6Mbps)	14	12.65	14	13.62	14	13.74
802.11g (24Mbps)	14	15.03	14	14.85	14	14.83
802.11g (54Mbps)	14	16.59	14	16.54	14	15.69
802.11n (HT20) (MSC0)	13	13.42	13	12.82	13	13.03
802.11n (HT20) (MSC4)	13	15.18	13	15.20	13	15.29
802.11n (HT20) (MSC7)	13	15.20	13	15.30	13	15.40

Table 9: Conducted Power of 802.11n (HT40)

802.11b/g/n (HT40)	Conducted Power (dBm)					
	CH3 / 2422		CH7 / 2437		CH11 / 2452	
	Rated Average Power	Measured Average Power	Rated Average Power	Measured Average Power	Rated Average Power	Measured Average Power
802.11n (HT40) (MSC0)	13	12.91	13	12.47	13	13.56
802.11n (HT40) (MSC4)	13	14.83	13	14.61	13	14.81
802.11n (HT40) (MSC7)	13	15.12	13	14.75	13	14.83

Table 10: Conducted Power of Bluetooth (BDR & EDR)

Bluetooth	Conducted Power (dBm)		
	CH0 / 2402	CH39 / 2441	CH78 / 2480
Basic Date Rate	2.42	2.17	1.58
Enhanced Data Rate	-0.87	-1.27	-1.81

Table 11: Conducted Power of Bluetooth (LE)

Bluetooth	Conducted Power (dBm)		
	CH0 / 2402	CH13 / 2440	CH39 / 2480
LE	-1.62	-1.81	-2.42

Note:
According to KDB 447498 D01 v05r01, the 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50mm are determined by:
[(max. power of channel, including tune-up tolerance, mW)/(min.test separation distance, mm)]×[$\sqrt{f_{(GHz)}}$] ≤ 3.0 for 1-g SAR and ≤ 7.5 for 10-g extremity SAR

The maximum output power of Bluetooth is 2.42 (1.746mW), and the minimum separation distance is 5mm, hence the exclusion thresholds is 0.52 < 3.0, therefore RF exposure evaluation is not required.

Table 12: Test result of SAR Values

Operation Mode	Test Position	Separation Distance (cm)	Channel	Measure Level (1g) W/kg	Scaled SAR Value (W/kg)	Test Plots
802.11b (model UB-15MS10)	Rear	0	CH1	0.306	N/A (Note 1)	1
	Rear	0	CH6	0.307		2
	Rear	0	CH11	0.262		3
	Right	0	CH1	0.169		4
	Right	0	CH6	0.169		5
	Right	0	CH11	0.069		6
	Bottom	0	CH1	0.231		7
	Bottom	0	CH6	0.260		8
	Bottom	0	CH11	0.217		9
802.11b (model NS-15MS08)	Rear	0	CH1	0.101		10
	Rear	0	CH6	0.094		11
	Rear	0	CH11	0.085		12
	Bottom	0	CH1	0.063		13
	Bottom	0	CH6	0.059		14
	Bottom	0	CH11	0.061		15

Note 1: Due to maximum measured power were greater than the rated power, hence the scaled SAR value is not required.

Refer to attached Appendix B for details of test results.

6.2 Measurement Uncertainty

6.2.1 Measurement uncertainty evaluation

This measurement uncertainty budget is suggested by IEEE P1528. The breakdown of the individual uncertainties is as follows:

Table 13: Measurement Uncertainties

No.	source	Type	Uncertainty Value (%)	Probability Distribution	k	c_i	Standard ncertainty u_i' (%)	Degree of freedom V_{eff} or v_i
1	System repetivity	A	0.5	N	1	1	0.5	9
Measurement system								
2	-probe calibration	B	6	N	1	1	6	∞
3	-axial isotropy of the probe	B	4.7	R	$\sqrt{3}$	$\sqrt{0.5}$	1.9	∞
4	- Hemispherical isotropy of the probe	B	9.4	R	$\sqrt{3}$	$\sqrt{0.5}$	3.9	∞
5	-boundary effect	B	1.9	R	$\sqrt{3}$	1	1.1	∞
6	-probe linearity	B	4.7	R	$\sqrt{3}$	1	2.7	∞
7	- System detection limits	B	1.0	R	$\sqrt{3}$	1	0.6	∞
8	-readout Electronics	B	1.0	N	1	1	1.0	∞
9	-response time	B	0	R	$\sqrt{3}$	1	0	∞
10	-integration time	B	4.3	R	$\sqrt{3}$	1	2.5	∞
11	-noise	B	0	R	$\sqrt{3}$	1	0	∞
12	-RF Ambient Conditions	B	3	R	$\sqrt{3}$	1	1.7	∞
13	-Probe Positioner Mechanical Tolerance	B	0.4	R	$\sqrt{3}$	1	0.2	∞
14	-Probe Positioning with respect to Phantom Shell	B	2.9	R	$\sqrt{3}$	1	1.7	∞
15	-Extrapolation, interpolation and Integration Algorithms for Max. SAR Evaluation	B	3.9	R	$\sqrt{3}$	1	2.3	∞
Test sample Related								
16	-Test Sample Positioning	A	2.9	N	1	1	2.9	71
17	-Device Holder Uncertainty	A	4.1	N	1	1	4.1	5
18	-Output Power Variation - SAR drift measurement	B	5.0	R	$\sqrt{3}$	1	2.9	∞
Physical parameter								
19	-phantom	B	4.0	R	$\sqrt{3}$	1	2.3	∞
20	Algorithm for correcting SAR for deviations in permittivity and conductivity	B	1.9	N	1	0. 84	0. 9	∞

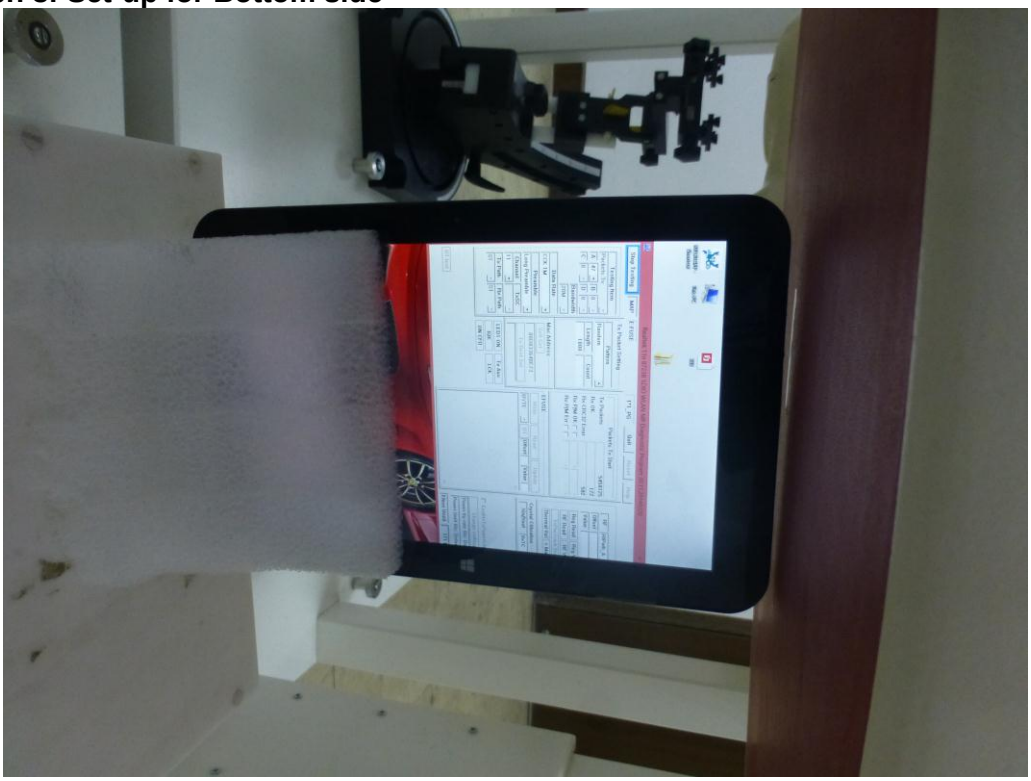
21	-Liquid conductivity (measurement uncertainty)	B	2.5	N	1	0. 71	1. 8	9
22	-Liquid permittivity (measurement uncertainty)	B	2.5	N	1	0. 26	0. 7	9
23	-Liquid conductivity -temperature uncertainty	B	1.7	R	$\sqrt{3}$	0. 71	0. 7	∞
24	-Liquid permittivity -temperature uncertainty	B	0.3	R	$\sqrt{3}$	0. 26	0. 05	∞
Combined standard uncertainty		$u_c^{'} = \sqrt{\sum_{i=1}^{24} c_i^2 u_i^2}$					11.24	
Expanded uncertainty (confidence interval of 95 %)		$u_e = 2u_c$		N	k=2		22.48	

7. Photographs of the Test Set-Up

Photograph 1: Set-up for Rear side

Photograph 2: Set-up for Right side

Photograph 3: Set-up for Bottom side



8. List of Tables

9. List of Photographs

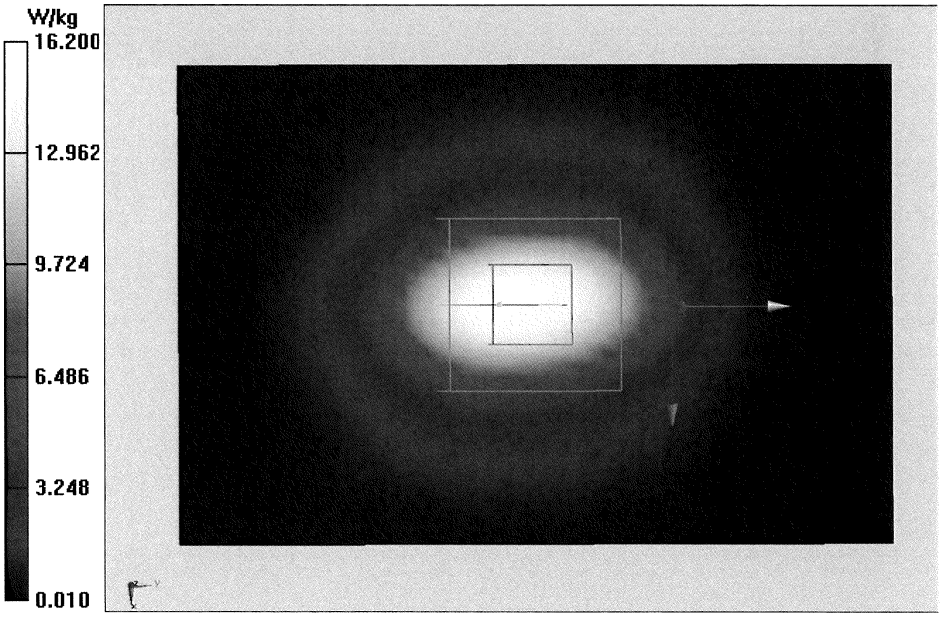
Test Laboratory: Audix SAR Lab Date: 11/10/2014

Body_2450MHz

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx
Communication System: UID 0, CW ; Frequency: 2450 MHz
Medium parameters used: f = 2450 MHz; σ = 2.001 S/m; ε_r = 52.238; ρ = 1000 kg/m^3
Phantom section: Flat Section
DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/Body_2450MHz/Area Scan (41x61x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm
Maximum value of SAR (interpolated) = 16.2 W/kg
Configuration/Body_2450MHz/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 98.4 V/m; Power Drift = -0.02 dB
Peak SAR (extrapolated) = 19.8 W/kg
SAR(1 g) = 9.22 W/kg; SAR(10 g) = 4.31 W/kg
Maximum value of SAR (measured) = 10.5 W/kg



Test Plots 1: Rear side, CH1, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH1-Back(2412MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2412 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2412 MHz; σ = 1.923 S/m; ε_r = 51.846; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH1-Back/Area Scan (61x91x1): Interpolated grid: dx=1.500 mm, dy=1.500 mm

Maximum value of SAR (interpolated) = 0.285 W/kg

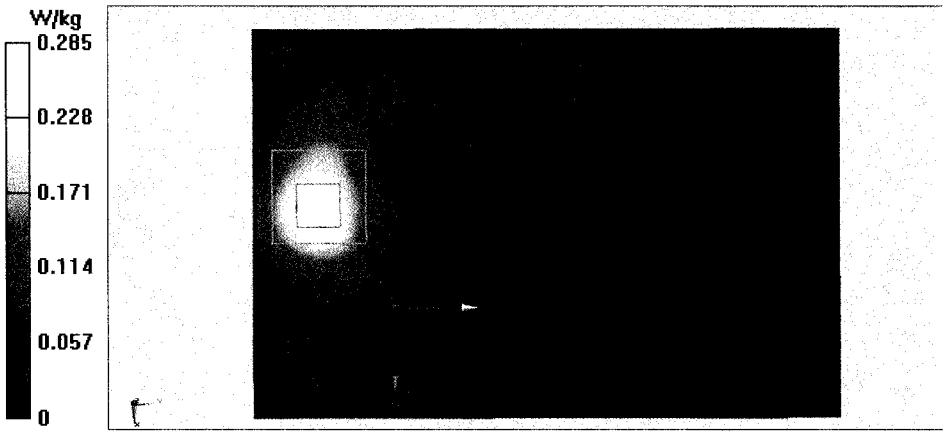
Configuration/802.11b_CH1-Back/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.427 V/m; Power Drift = 0.04 dB

Peak SAR (extrapolated) = 0.859 W/kg

SAR(1 g) = 0.306 W/kg; SAR(10 g) = 0.134 W/kg

Maximum value of SAR (measured) = 0.350 W/kg



Test Plots 2: Rear side, CH6, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH6-Back(2437MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2437 MHz;Communication System PAR: 0 dB;Medium parameters used (interpolated): f = 2437 MHz; σ = 1.981 S/m; ε_r = 52.174; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH6(2437MHz)-Back/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.233 W/kg

Configuration/802.11b_CH6(2437MHz)-Back/Zoom Scan (7x7x7)/Cube 0:

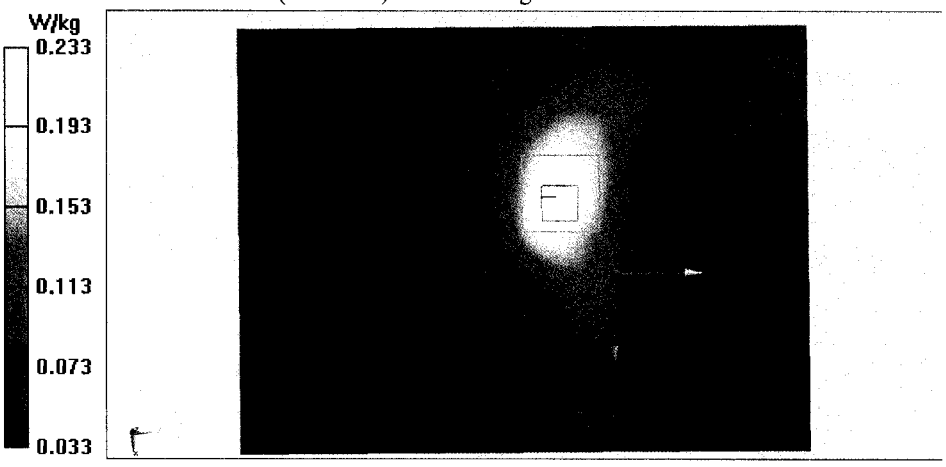
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 7.315 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.793 W/kg

SAR(1 g) = 0.307 W/kg; SAR(10 g) = 0.153 W/kg

Maximum value of SAR (measured) = 0.332 W/kg



Test Plots 3: Rear side, CH11 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH11-Back(2462MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2462 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2462 MHz; σ = 2.024 S/m; ε_r = 53.281; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH11(2462MHz)-Back/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.196 W/kg

Configuration/802.11b_CH11(2462MHz)-Back/Zoom Scan (7x7x7)/Cube 0:

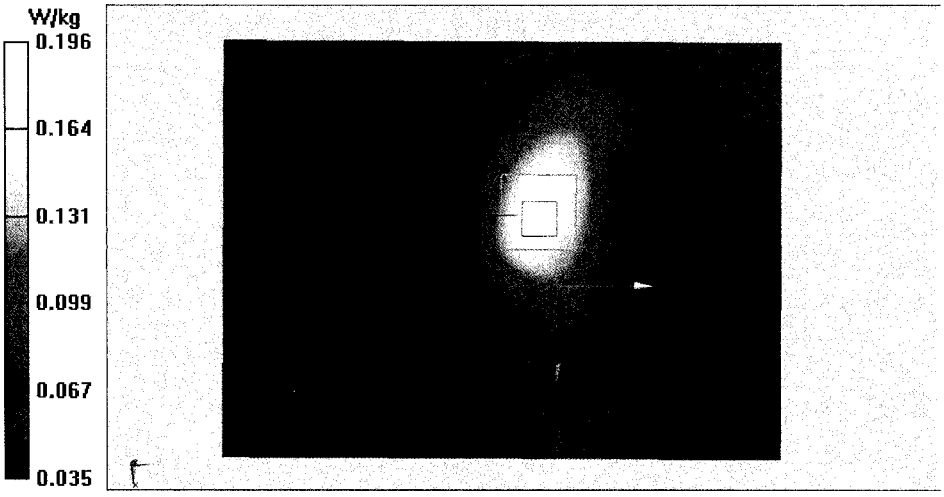
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 6.956 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.740 W/kg

SAR(1 g) = 0.262 W/kg; SAR(10 g) = 0.132 W/kg

Maximum value of SAR (measured) = 0.287 W/kg



Test Plots 4: Right side, CH1, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH1-Right

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);
Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2412 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2412 MHz;
σ = 1.923 S/m; ε_r = 51.846; ρ = 1000 kg/m^3 ;Phantom section: Flat Section
DASY5 Configuration:

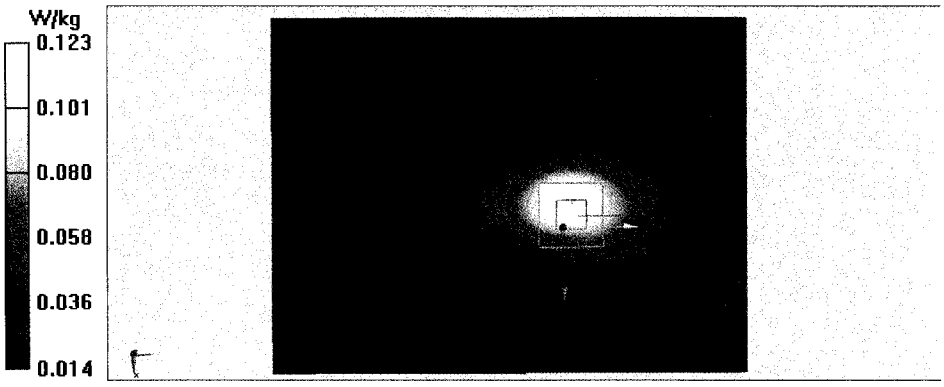
- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH1-Right(2412MHz)/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.123 W/kg

Configuration/802.11b_CH1-Right(2412MHz)/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 7.464 V/m; Power Drift = 0.10 dB
Peak SAR (extrapolated) = 0.401 W/kg
SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.081 W/kg
Maximum value of SAR (measured) = 0.192 W/kg



Test Plots 5: Right side, CH6, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH6-Right

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2437 MHz;Communication System PAR: 0 dB;Medium parameters used (interpolated): f = 2437 MHz; σ = 1.981 S/m; ε_r = 52.174; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH6-Right(2437MHz)/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.133 W/kg

Configuration/802.11b_CH6-Right(2437MHz)/Zoom Scan (7x7x7)/Cube 0:

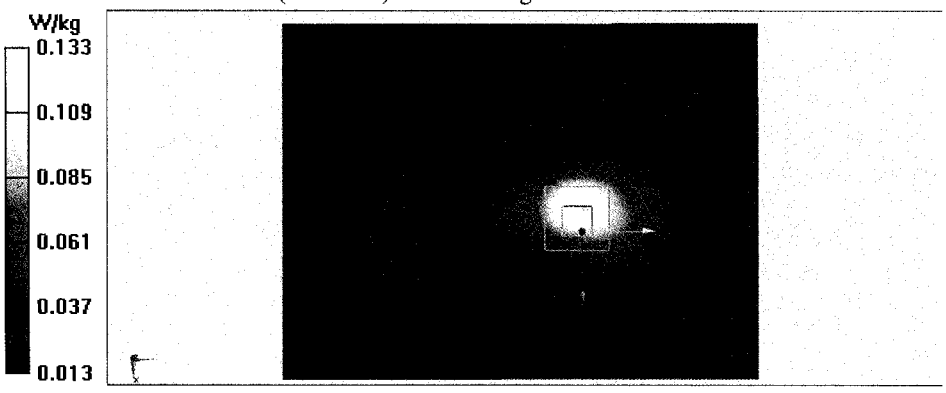
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 9.550 V/m; Power Drift = 0.02 dB

Peak SAR (extrapolated) = 0.407 W/kg

SAR(1 g) = 0.169 W/kg; SAR(10 g) = 0.081 W/kg

Maximum value of SAR (measured) = 0.193 W/kg



Test Plots 6: Right side, CH11, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH11-Right(2462MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2462 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2462 MHz; σ = 2.024 S/m; ε_r = 53.281; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH11(2462MHz)-Right/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.0676 W/kg

Configuration/802.11b_CH11(2462MHz)-Right/Zoom Scan (7x7x7)/Cube 0:

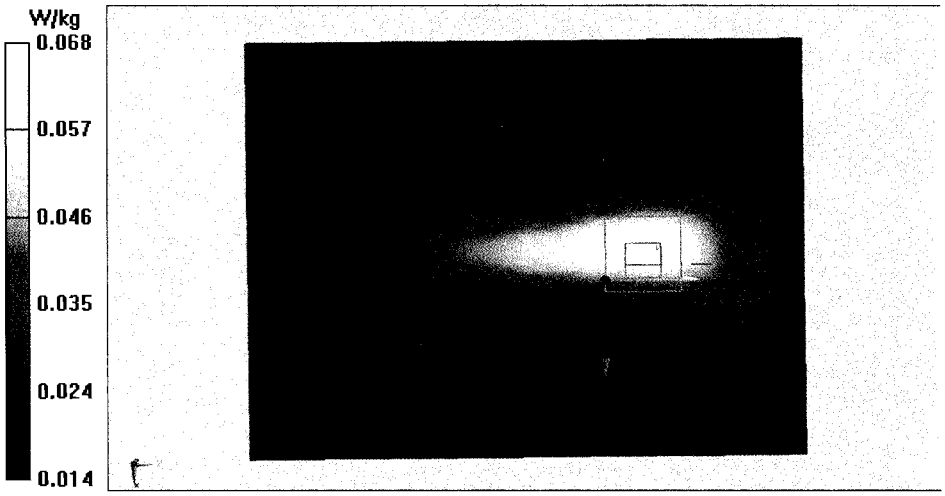
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.285 V/m; Power Drift = 0.05 dB

Peak SAR (extrapolated) = 0.154 W/kg

SAR(1 g) = 0.069 W/kg; SAR(10 g) = 0.040 W/kg

Maximum value of SAR (measured) = 0.0742 W/kg



Test Plots 7: Bottom side, CH1, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH1-Bottom(2412MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2412 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2412 MHz; σ = 1.923 S/m; ε_r = 51.846; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH1-Bottom/Area Scan (81x91x1): Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.241 W/kg

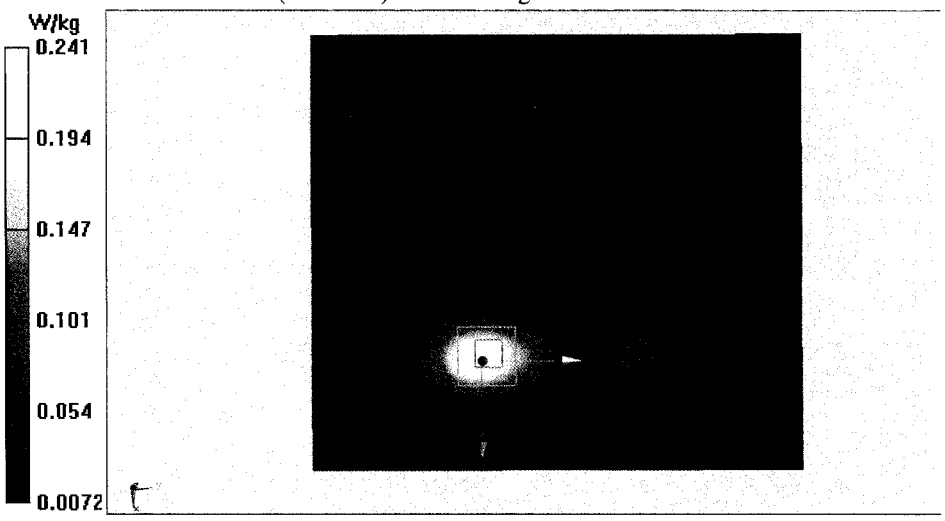
Configuration/802.11b_CH1-Bottom/Zoom Scan (7x7x7)/Cube 0: Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.23 V/m; Power Drift = -0.06 dB

Peak SAR (extrapolated) = 0.515 W/kg

SAR(1 g) = 0.231 W/kg; SAR(10 g) = 0.116 W/kg

Maximum value of SAR (measured) = 0.255 W/kg



Test Plots 8: Bottom side, CH6, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH6-Bottom(2437MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2437 MHz;Communication System PAR: 0 dB;Medium parameters used (interpolated): f = 2437 MHz; σ = 1.981 S/m; ε_r = 52.174; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH6(2437MHz)-Bottom/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.284 W/kg

Configuration/802.11b_CH6(2437MHz)-Bottom/Zoom Scan (7x7x7)/Cube 0:

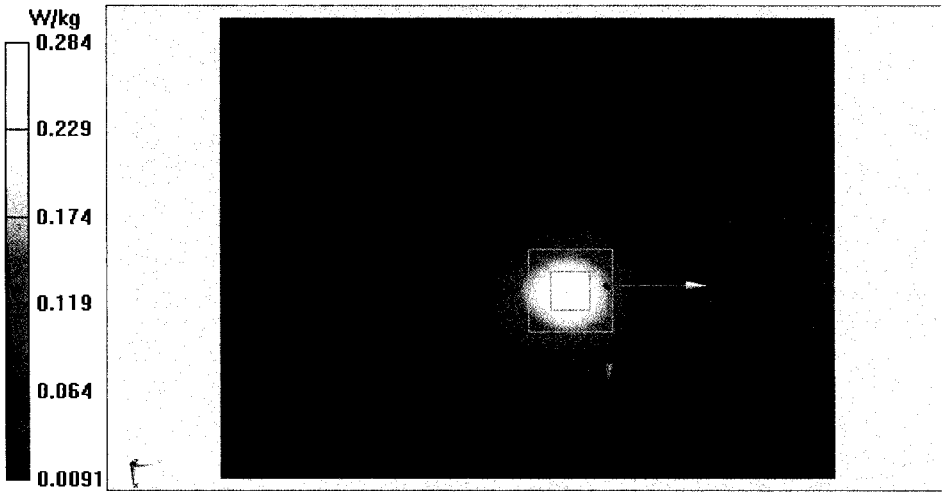
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 11.44 V/m; Power Drift = 0.06 dB

Peak SAR (extrapolated) = 0.549 W/kg

SAR(1 g) = 0.260 W/kg; SAR(10 g) = 0.127 W/kg

Maximum value of SAR (measured) = 0.291 W/kg



Test Plots 9: Bottom side, CH11, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

802.11b_CH11-Bottom(2462MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2462 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2462 MHz; σ = 2.024 S/m; ε_r = 53.281; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH11(2462MHz)-Bottom/Area Scan (61x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.183 W/kg

Configuration/802.11b_CH11(2462MHz)-Bottom/Zoom Scan (7x7x7)/Cube 0:

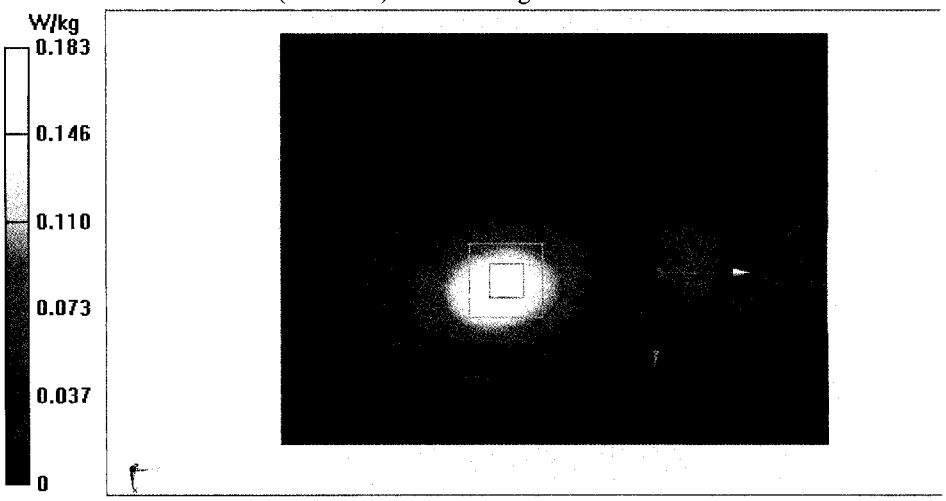
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.203 V/m; Power Drift = -0.50 dB

Peak SAR (extrapolated) = 0.465 W/kg

SAR(1 g) = 0.217 W/kg; SAR(10 g) = 0.101 W/kg

Maximum value of SAR (measured) = 0.236 W/kg



Test Plots 10: Rear side, CH1, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

CH1-Back(2412MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2412 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2412 MHz; σ = 1.923 S/m; ε_r = 51.846; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH1(2412MHz)-Back/Area Scan (51x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.0766 W/kg

Configuration/802.11b_CH1(2412MHz)-Back/Zoom Scan (7x7x7)/Cube 0:

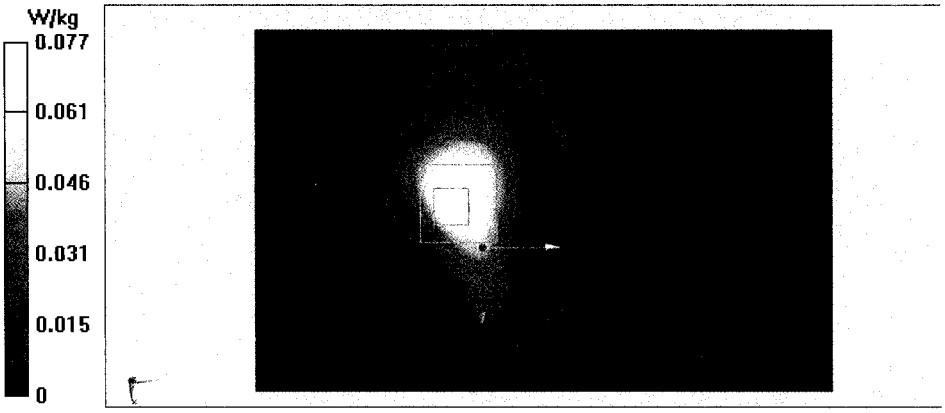
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 5.129 V/m; Power Drift = 0.11 dB

Peak SAR (extrapolated) = 0.289 W/kg

SAR(1 g) = 0.101 W/kg; SAR(10 g) = 0.040 W/kg

Maximum value of SAR (measured) = 0.114 W/kg



Test Plots 11: Rear side, CH6, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

CH6-Back(2437MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2437 MHz;Communication System PAR: 0 dB;Medium parameters used (interpolated): f = 2437 MHz; σ = 1.981 S/m; ε_r = 52.174; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH6(2437MHz)-Back/Area Scan (51x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.0732 W/kg

Configuration/802.11b_CH6(2437MHz)-Back/Zoom Scan (7x7x7)/Cube 0:

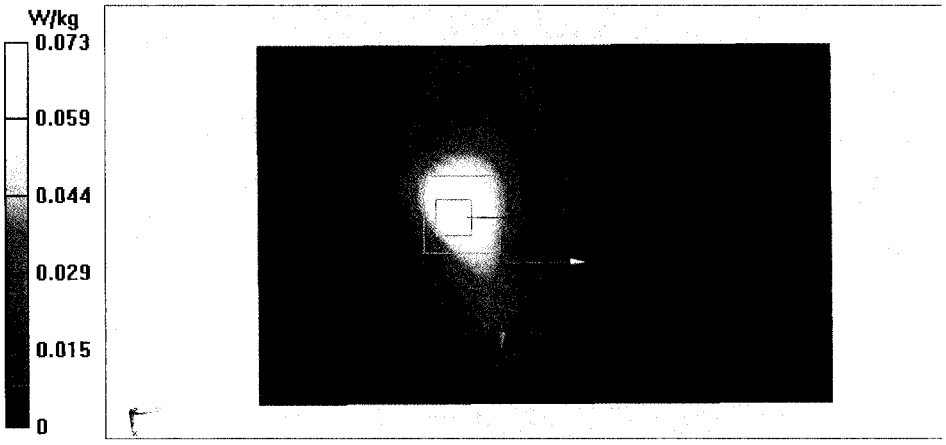
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 4.818 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.272 W/kg

SAR(1 g) = 0.094 W/kg; SAR(10 g) = 0.037 W/kg

Maximum value of SAR (measured) = 0.106 W/kg



Test Plots 12: Rear side, CH11 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

CH11-Back(2462MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0);
Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2462 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2462 MHz;
σ = 2.024 S/m; ε_r = 53.281; ρ = 1000 kg/m^3 ;Phantom section: Flat Section
DASY5 Configuration:

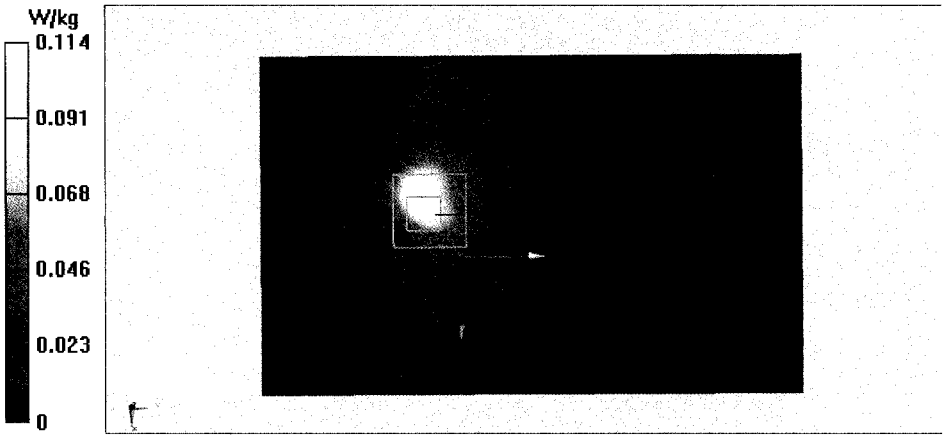
- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH11(2462MHz)-Back/Area Scan (51x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm
Maximum value of SAR (interpolated) = 0.114 W/kg

Configuration/802.11b_CH11(2462MHz)-Back/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm
Reference Value = 3.686 V/m; Power Drift = 0.02 dB
Peak SAR (extrapolated) = 0.246 W/kg
SAR(1 g) = 0.085 W/kg; SAR(10 g) = 0.034 W/kg
Maximum value of SAR (measured) = 0.101 W/kg



Test Plots 13: Bottom side, CH1, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

CH1-Bottom(2412MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2412 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2412 MHz; σ = 1.923 S/m; ε_r = 51.846; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH1(2412MHz)-Bottom/Area Scan (51x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.0664 W/kg

Configuration/802.11b_CH1(2412MHz)-Bottom/Zoom Scan (7x7x7)/Cube 0:

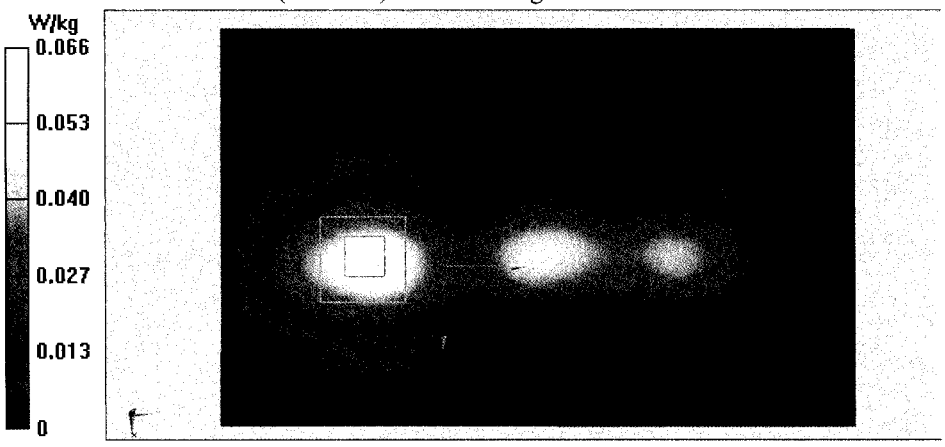
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.809 V/m; Power Drift = 0.07 dB

Peak SAR (extrapolated) = 0.127 W/kg

SAR(1 g) = 0.063 W/kg; SAR(10 g) = 0.030 W/kg

Maximum value of SAR (measured) = 0.0686 W/kg



Test Plots 14: Bottom side, CH6, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

CH6-Bottom(2437MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2437 MHz;Communication System PAR: 0 dB;Medium parameters used (interpolated): f = 2437 MHz; σ = 1.981 S/m; ε_r = 52.174; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: **4**mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH6(2437MHz)-Bottom/Area Scan (51x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.0610 W/kg

Configuration/802.11b_CH6(2437MHz)-Bottom/Zoom Scan (7x7x7)/Cube 0:

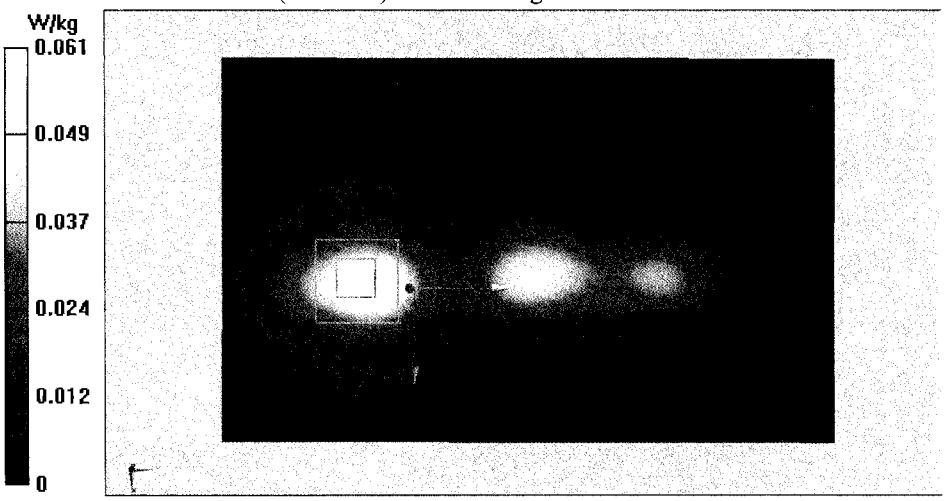
Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.491 V/m; Power Drift = -0.01 dB

Peak SAR (extrapolated) = 0.120 W/kg

SAR(1 g) = 0.059 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.0633 W/kg



Test Plots 15: Bottom side, CH11, 802.11b

Test Laboratory: Audix SAR Lab Date: 11/10/2014

CH11-Bottom(2462MHz)

DUT: Dipole 2450 MHz D2450V2; Type: D2450V2; Serial: D2450V2 - SN:xxx

Communication System: UID 0, IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps) (0); Communication System Band: ISM 2.4GHz Band (2400.0-2483.5MHz); Frequency: 2462 MHz;Communication System PAR: 0 dB;Medium parameters used: f = 2462 MHz; σ = 2.024 S/m; ε_r = 53.281; ρ = 1000 kg/m^3 ;Phantom section: Flat Section

DASY5 Configuration:

- Probe: ES3DV3 - SN3139; ConvF(4.16, 4.16, 4.16); Calibrated: 25/07/2012;
- Modulation Compensation:
- Sensor-Surface: 4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn899; Calibrated: 07/02/2014
- Phantom: ELI 4.0; Type: QDOVA001BA; Serial: 1112
- Measurement SW: DASY52, Version 52.8 (8); SEMCAD X Version 14.6.10 (7331)

Configuration/802.11b_CH11(2462MHz)-Bottom/Area Scan (51x81x1):

Interpolated grid: dx=2.000 mm, dy=2.000 mm

Maximum value of SAR (interpolated) = 0.0631 W/kg

Configuration/802.11b_CH11(2462MHz)-Bottom/Zoom Scan (7x7x7)/Cube 0:

Measurement grid: dx=5mm, dy=5mm, dz=5mm

Reference Value = 3.407 V/m; Power Drift = 0.01 dB

Peak SAR (extrapolated) = 0.122 W/kg

SAR(1 g) = 0.061 W/kg; SAR(10 g) = 0.028 W/kg

Maximum value of SAR (measured) = 0.0677 W/kg