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Report No：TSC-98-08-IN-03 (SAR) **Date of Issue：Oct. 08, 2009**

Testing Laboratory
0263

SAR Test Report

Device Under Test : MiniNote Computer

Model No. : Luffy Plus S200i

Applicant :. Lebro Industrial Co.,Ltd.

This Test report applied to the tested sample only.
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Report No：TSC-98-08-IN-03 (SAR)

Applicant：Lebro Industrial Co.,Ltd.
TEL.：886-22517 2316 #28
Addr.：11F-1,No.185 Sung Chiang Road,Taipei,Taiwan 10485

Device Under Test：MiniNote Computer
Trade name：Lebro Industrial Co.,Ltd.
Model No.：Luffy Plus S200i
Manufacturer：Winward Industrial Ltd.

Applied Date：Aug. 25, 2009	**Date of Sample Arrived**：Aug. 25, 2009

Date of Finished：Sep. 22, 2009

Applied standard：IEEE 1528 2003, 47 CFR §2.1093, OET 65 Supplement C 01-01

Cited Document：KDB 447498, 450824, 616217, 248227 FCC DA02-1438

Test Equipment：Refer to page 22

Test Environment： 24℃, 45-51 ％ R.H.

Test results：IEEE 1528 2003 Complied
SAR 1g = 0.397 W/kg (Maximum), Refer to page 24

Approved by	Reviewed by	Test Engineer
Ko Ming Hong	Chia-cheng Chang	Shin-yen Du
Ko Ming-Hong	Chia-cheng Chang	Shin-yen Du

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1. General Information

1.1 EUT Description

Product Name	MiniNote Computer
Trade Name	Lebro Industrial Co.,Ltd.
Model No.	Luffy Plus S200i
Operation Frequency	2412-2462MHz
FCC ID	XSOS200I
Antenna Type	INTERNAL
Device Category	Portable
Battery	11.1V/2200mAh P/N:51-220-301072
WLAN Module	Realtek RTL8187SE
RF Exposure Environment	Uncontrolled
Output Power (Conducted)	802.11 b 20.34 dBm(max), 18.60(av) 802.11 g 21.33 dBm(max), 14.52(av)

1.2 Test Environment

Ambient conditions in the laboratory:

Items	**Required**	**Actual**
Temperature (°C)	24	See first page
Humidity (%RH)	50	See first page

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2. SAR Measurement System

2.1 ALSAS-10U System Description

ALSAS-10-U is fully compliant with the technical and scientific requirements of IEEE 1528, IEC 62209, EN50361,CENELEC, ARIB, ACA, and the Federal Communications Commission. The system comprises of a six axes articulated robot which utilizes a dedicated controller. ALSAS-10U uses the latest methodologies and FDTD modeling to provide a platform which is repeatable with minimum uncertainty.

2.1.1 Applications

Predefined measurement procedures compliant with the guidelines of CENELEC, IEEE, IEC, FCC, etc are utilized during the assessment for the device. Automatic detection for all SAR maximum are embedded within the core architecture for the system, ensuring that peak locations used for centering the zoom scan are within a 1mm resolution and a 0.05mm repeatable position. System operation range currently available up-to 6 GHz in simulated tissue.

2.1.2 Area Scans

Area scans are defined prior to the measurement process being executed with a user defined variable spacing between each measurement point (integral) allowing low uncertainty measurements to be conducted. Scans defined for FCC applications utilize a 10mm² step integral, with 1mm interpolation used to locate the peak SAR area used for zoom scan assessments.

Where the system identifies multiple SAR peaks (which are within 25% of peak value) the system will provide the user with the option of assessing each peak location individually for zoom scan averaging.

2.1.3 Zoom Scan (Cube Scan Averaging)

The averaging zoom scan volume utilized in the ALSAS-10U software is in the shape of a cube and the side dimension of a 1 g or 10 g mass is dependent on the density of the liquid representing the simulated tissue. A density of 1000 kg/m³ is used to represent the head and body tissue density and not the phantom liquid density, in order to be consistent with the definition of the liquid dielectric properties, i.e. the side length of the 1 g cube is 10mm, with the side length of the 10 g cube 21,5mm.

When the cube intersects with the surface of the phantom, it is oriented so that 3 vertices touch the surface of the shell or the center of a face is tangent to the surface. The face of the cube closest to the surface is modified in order to conform to the tangent surface.

The zoom scan integer steps can be user defined so as to reduce uncertainty, but normal practice for typical test applications (including FCC) utilize a physical step of 7x7x7 (5mmx5mmx5mm) providing a volume of 30mm in the X & Y axis, and 30mm in the Z axis.

2.1.4 ALSAS-10U Interpolation and Extrapolation Uncertainty

The overall uncertainty for the methodology and algorithms the used during the SAR calculation was evaluated using the data from IEEE 1528 based on the example f3 algorithm:

$$f_3(x,y,z) = A\frac{a^2}{\frac{a^2}{4}+x'^2+y'^2}\cdot\left(e^{-\frac{2z}{a}}+\frac{a^2}{2(a+2z)^2}\right)$$

2.2 Isotropic E-Field Probe

The isotropic E-Field probe has been fully calibrated and assessed for isotropicity, and boundary effect within a controlled environment. Depending on the frequency for which the probe is calibrated the method utilized for calibration will change. A number of methods is used for calibrating probes, and these are outlined in the table below:

Calibration Frequency	Air Calibration	Tissue Calibration
2450MHz	TEM Cell	Temperature

The E-Field probe utilizes a triangular sensor arrangement as detailed in the diagram below:

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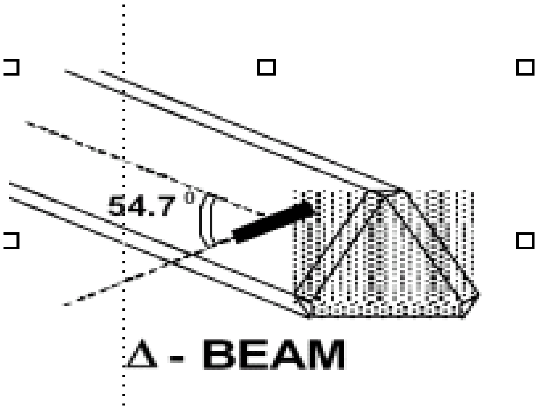

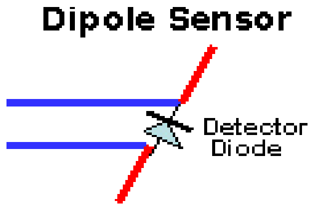

SAR is assessed with a calibrated probe which moves at a default height of 5mm from the center of the diode, which is mounted to the sensor, to the phantom surface (in the Z Axis). The 5mm offset height has been selected so as to minimize any resultant boundary effect due to the probe being in close proximity to the phantom surface.

The following algorithm is an example of the function used by the system for linearization of the output from the probe when measuring complex modulation schemes.

$$V_i = U_i + U_i^2 \cdot \frac{cf}{dcp_i}$$

2.2.1 Isotropic E-Field Probe Specification

Calibration in Air	Frequency Dependent Below 2GHz Calibration in air performed in a TEM Cell Above 2GHz Calibration in air performed in waveguide
Sensitivity	0.70 μV/(V/m)² to 0.85 μV/(V/m)²
Dynamic Range	0.0005 W/kg to 100W/kg
Isotropic Response	Better than 0.2dB
Diode Compression point (DCP)	Calibration for Specific Frequency
Probe Tip Radius	< 5mm
Sensor Offset	1.56 (+/- 0.02mm)
Probe Length	290mm
Video Bandwidth	@ 500 Hz: 1dB @1.02 KHz: 3dB
Boundary Effect	Less than 2% for distance greater than 2.4mm
Spatial Resolution	Diameter less than 5mm Compliant with Standards

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2.3 Boundary Detection Unit and Probe Mounting Device

ALSAS-10U incorporates a boundary detection unit with a sensitivity of 0.05mm for detecting all types of surfaces. The robust design allows for detection during probe tilt (probe normalize) exercises, and utilizes a second stage emergency stop. The signal electronics are fed directly into the robot controller for high accuracy surface detection in lateral and axial detection modes (X, Y, & Z).
The probe is mounted directly onto the Boundary Detection unit for accurate tooling and displacement calculations controlled by the robot kinematics. The probe is connect to an isolated probe interconnect where the output stage of the probe is fed directly into the amplifier stage of the Daq-Paq

2.4 Daq-Paq (Analog to Digital Electronics)

ALSAS-10U incorporates a fully calibrated Daq-Paq (analog to digital conversion system) which has a 4 channel input stage, sent via a 2 stage auto-set amplifier module. The input signal is amplified accordingly so as to offer a dynamic range from 5μV to 800mV. Integration of the fields measured is carried out at board level utilizing a Co-Processor which then sends the measured fields down into the main computational module in digitized form via an RS232 communications port. Probe linearity and duty cycle compensation is carried out within the main Daq-Paq module.

ADC	12 Bit
Amplifier Range	20mV to 200mV and 150mV to 800mV
Field Integration	Local Co-Processor utilizing proprietary integration algorithms
Number of Input Channels	4 in total 3 dedicated and 1 spare
Communication	Packet data via RS232

2.5 Axis Articulated Robot

ALSAS-10U utilizes a six axis articulated robot, which is controlled using a Pentium based real-time movement controller. The movement kinematics engine utilizes proprietary (Thermo CRS) interpolation and extrapolation algorithms, which allow full freedom of movement for each of the six joints within the working envelope. Utilization of joint 6 allows for full probe rotation with a tolerance better than 0.05mm around the central axis.

Robot/Controller Manufacturer	Thermo CRS
Number of Axis	Six independently controlled axis
Positioning Repeatability	0.05mm
Controller Type	Single phase Pentium based C500C
Robot Reach	710mm
Communication	RS232 and LAN compatible

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2.6 ALSAS Universal Workstation

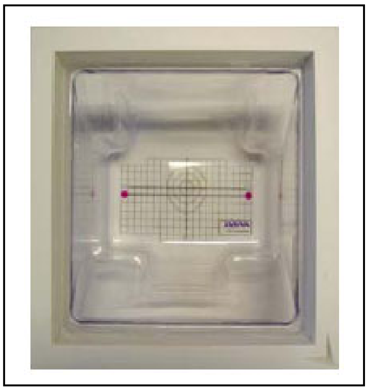
ALSAS Universal workstation allows for repeatability and fast adaptability. It allows users to do calibration, testing and measurements using different types of phantoms with one set up, which significantly speeds up the measurement process.

2.7 Phantom Types

The ALSAS-10U allows the integration of multiple phantom types. SAM Phantoms fully compliant with IEEE 1528,EN50361 Universal Phantom, and Universal Flat.

2.7.1 APREL Laboratories Universal Phantom

The Universal Phantom is used on the ALSAS-10U as a system validation phantom. The Universal Phantom has been fully validated both experimentally from 800MHz to 6GHz and numerically using XFDTD numerical software. The shell thickness is 2mm overall, with a 4mm spacer located at the NF/MB intersection providing an overall thickness of 6mm in line with the requirements of IEEE-1528.
The design allows for fast and accurate measurements, of handsets, by allowing the conservative SAR to be evaluated at on frequency for both left and right head experiments in one measurement.



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3. Tissue Simulating Liquid

3.1 The composition of the tissue simulating liquid

INGREDIENT (% Weight)	900MHz Head	1800MHz Head	2450MHz Body
Water	40.92%	52.64%	73.2
Salt	1.48%	0.36%	0.04
Sugar	56.5%	0%	0%
HEC	0.40%	0%	0%
Preventol	0.10%	0%	0%
DGBE	0%	47.0%	26.7%

3.2 Tissue Calibration Result

The dielectric parameters of the liquids were verified prior to the SAR evaluation using APREL Dielectric Probe Kit and Anritsu MS4623B Vector Network Analyzer

Head Tissue Simulant Measurement				**Sep. 22 2009**
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε_r	σ [s/m]	
		39.5	1.85	23.0
2450 MHz	Reference result ± 5% window	39.2 37.4 to 41.1	1.80 1.71 to 1.89	N/A
		39.5	1.85	23.0

Body Tissue Simulant Measurement				**Sep. 22 2009**
Frequency [MHz]	Description	Dielectric Parameters		Tissue Temp. [°C]
		ε_r	σ [s/m]	
		53.25	1.93	24.0
2450 MHz	Reference result ± 5% window	52.7 50.2 to 55.3	1.95 1.85 to2.04	N/A
		53.25	1.93	24.0

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3.3 Tissue Dielectric Parameters for Head and Body Phantoms

The head tissue dielectric parameters recommended by the IEEE SCC-34/SC-2 in P1528 have been incorporated in the following table. These head parameters are derived from planar layer models simulating the highest expected SAR for the dielectric properties and tissue thickness variations in a human head. Other head and body tissue parameters that have not been specified in P1528 are derived from the tissue dielectric parameters computed from the 4-Cole-Cole equations described in Reference [12] and extrapolated according to the head parameters specified in P1528.

Target Frequency	Head		Body	
(MHz)	ε_r	σ (S/m)	ε_r	σ (S/m)
150	52.3	0.76	61.9	0.80
300	45.3	0.87	58.2	0.92
450	43.5	0.87	56.7	0.94
835	41.5	0.90	55.2	0.97
900	41.5	0.97	55.0	1.05
915	41.5	0.98	55.0	1.06
1450	40.5	1.20	54.0	1.30
1610	40.3	1.29	53.8	1.40
1800 – 2000	40.0	1.40	53.3	1.52
2450	39.2	1.80	52.7	1.95
3000	38.5	2.40	52.0	2.73
5800	35.3	5.27	48.2	6.00

(ε_r = relative permittivity, σ = conductivity and ρ = 1000 kg/m^3)

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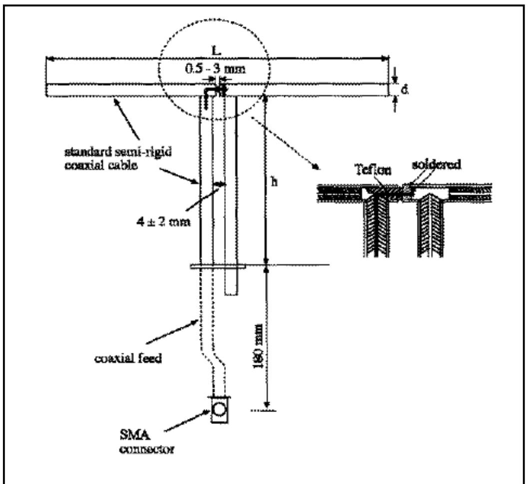
4. SAR Measurement Procedure

4.1 SAR System Validation

4.1.1 Validation Dipoles



The dipoles used is based on the IEEE-1528 standard, and is complied with mechanical and electrical specifications in line with the requirements of both IEEE and FCC Supplement C. the table below provides details for the mechanical and electrical specifications for the dipoles.

Frequency	L (mm)	h (mm)
2450MHz	51.5	30.4

4.1.2 Validation Result

SAR Test Report

```
Report Date         : 22-Sep-2009
By Operator         : 123
Measurement Date    : 22-Sep-2009
Starting Time       : 22-Sep-2009  10:56:44 AM
End Time            : 22-Sep-2009  11:20:24 AM
Scanning Time       : 1420 secs

Product Data
Device Name         : dipole
Serial No.          : 2450
Type                : Dipole
Model               : ISL
Frequency           : 2450.00 MHz
Max. Transmit Pwr   : 1 W
Drift Time          : 0 min(s)
Length              : 2 mm
Width               : 52 mm
Depth               : 2 mm
Antenna Type        : Internal
Orientation         : Touch
Power Drift-Start   : 59.445 W/kg
Power Drift-Finish: 60.671 W/kg
Power Drift (%)     : 2.062
Picture             :

Phantom Data
Name               : APREL-Uni
```

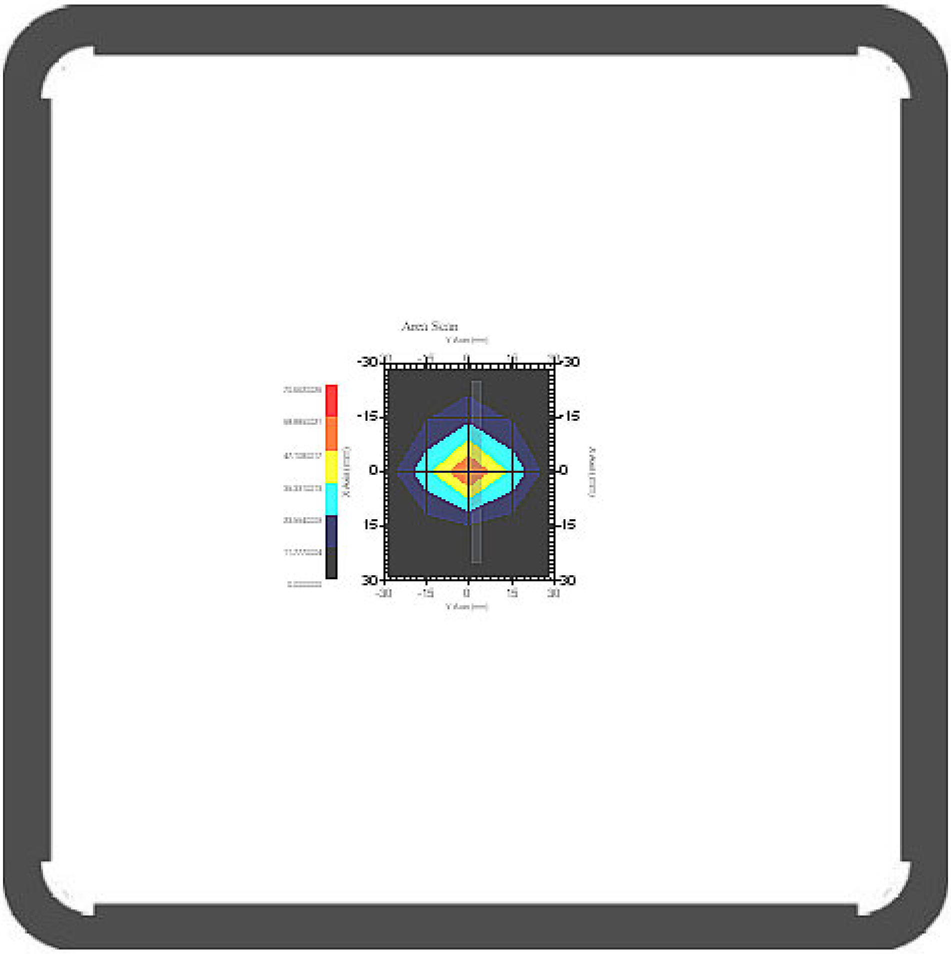
```
Type               : Uni-Phantom
Size (mm)          : 280 x 280 x 200
Serial No.         : User Define
Location           : Center
Description        : Uni_Phantom

Tissue Data
Type               : HEAD
Serial No.         : 2450
Frequency          : 2450.00 MHz
Last Calib. Date   : 22-Sep-2009
Temperature        : 23.00 °C
Ambient Temp.      : 24.00 °C
Humidity           : 45.00 RH%
Epsilon            : 39.50 F/m
Sigma              : 1.85 S/m
Density            : 1000.00 kg/cu. m

Probe Data
Name               : Probe 257 - CHTL
Model              : E020
Type               : E-Field Triangle
Serial No.         : 257
Last Calib. Date   : 12-Dec-2008
Frequency          : 2450.00 MHz
Duty Cycle Factor: 1
Conversion Factor: 5
Probe Sensitivity: 1.20  1.20  1.20   µV/(V/m)²
Compression Point: 95.00 mV
Offset             : 1.56 mm

Measurement Data
Crest Factor       : 1
Scan Type          : Complete
Tissue Temp.       : 23.00 °C
Ambient Temp.      : 24.00 °C
Set-up Date        : 22-Sep-2009
Set-up Time        : 9/22/2009
Area Scan          : 5x5x1 : Measurement x=15mm, y=15mm, z=4mm
Zoom Scan          : 7x7x7 : Measurement x=5mm, y=5mm, z=5mm

Other Data
DUT Position       : Touch
Separation         : 0
Channel            : Mid - 2450
```



```
1 gram SAR value    : 53.597 W/kg
10 gram SAR value   : 23.778 W/kg
Area Scan Peak SAR  : 59.172 W/kg
Zoom Scan Peak SAR  : 105.920 W/kg
```

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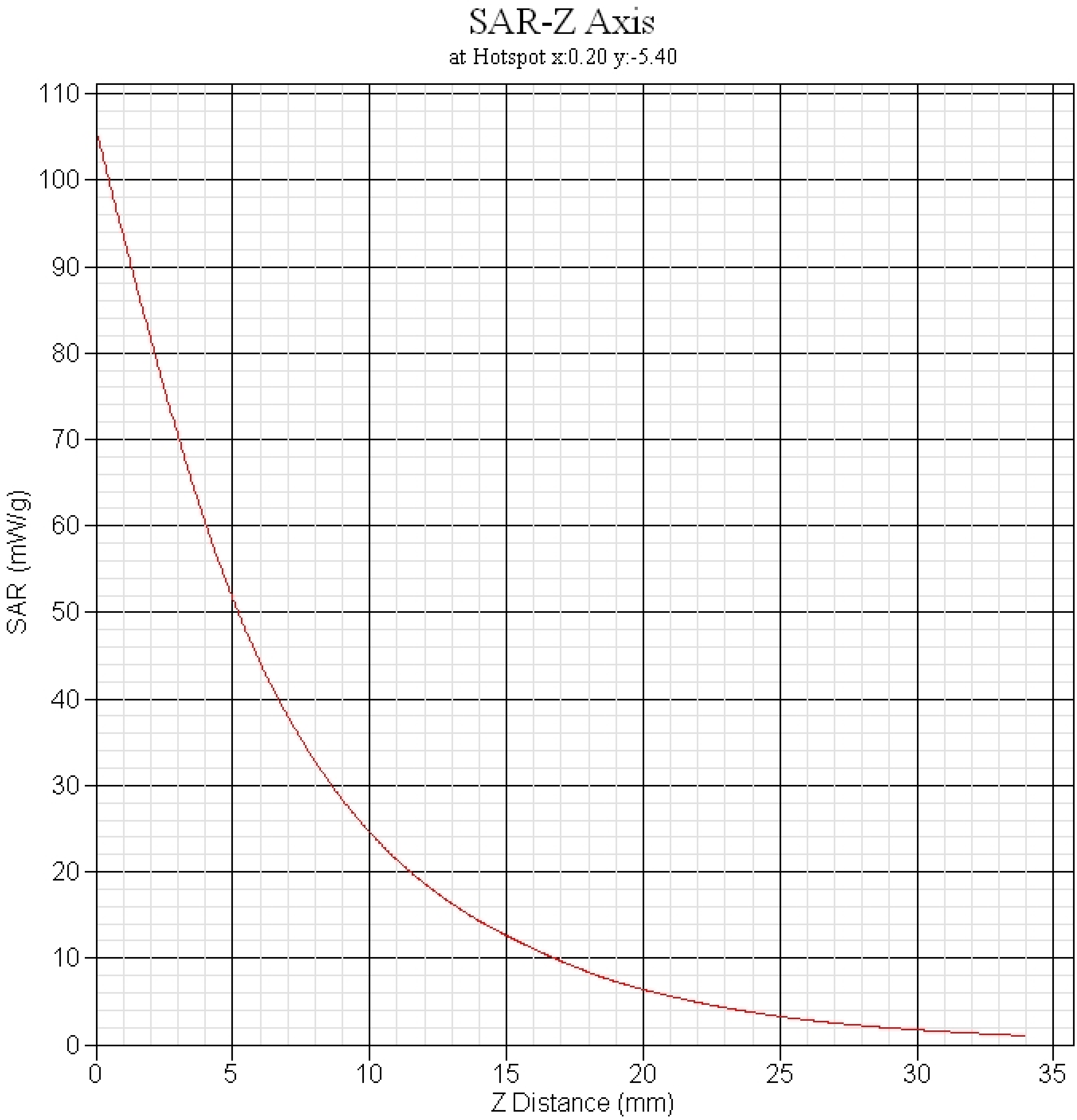
Exposure Assessment Measurement Uncertainty

Source of Uncertainty	Tolerance Value	Probability Distribution	Divisor	c_i^1 (1-g)	c_i^1 (10-g)	Standard Uncertainty (1-g) %	Standard Uncertainty (10-g) %
Measurement System							
Probe Calibration	3.5	normal	1	1	1	3.5	3.5
Axial Isotropy	3.7	rectangular	$\sqrt{3}$	$(1-cp)^{1/2}$	$(1-cp)^{1/2}$	1.5	1.5
Hemispherical Isotropy	10.9	rectangular	$\sqrt{3}$	$\sqrt{cp}$	$\sqrt{cp}$	4.4	4.4
Boundary Effect	1.0	rectangular	$\sqrt{3}$	1	1	0.6	0.6
Linearity	4.7	rectangular	$\sqrt{3}$	1	1	2.7	2.7
Detection Limit	1.0	rectangular	$\sqrt{3}$	1	1	0.6	0.6
Readout Electronics	1.0	normal	1	1	1	1.0	1.0
Response Time	0.8	rectangular	$\sqrt{3}$	1	1	0.5	0.5
Integration Time	1.7	rectangular	$\sqrt{3}$	1	1	1.0	1.0
RF Ambient Condition	3.0	rectangular	$\sqrt{3}$	1	1	1.7	1.7
Probe Positioner Mech.	0.4	rectangular	$\sqrt{3}$	1	1	0.2	0.2
Restriction							
Probe Positioning with respect to Phantom Shell	2.9	rectangular	$\sqrt{3}$	1	1	1.7	1.7
Extrapolation and Integration	3.7	rectangular	$\sqrt{3}$	1	1	2.1	2.1
Test Sample Positioning	4.0	normal	1	1	1	4.0	4.0
Device Holder Uncertainty	2.0	normal	1	1	1	2.0	2.0
Drift of Output Power	2.1	rectangular	$\sqrt{3}$	1	1	1.2	1.2
Phantom and Setup							
Phantom Uncertainty(shape & thickness tolerance)	3.4	rectangular	$\sqrt{3}$	1	1	2.0	2.0
Liquid Conductivity(target)	5.0	rectangular	$\sqrt{3}$	0.7	0.5	2.0	1.4
Liquid Conductivity(meas.)	2.8	normal	1	0.7	0.5	1.9	1.4
Liquid Permittivity(target)	5.0	rectangular	$\sqrt{3}$	0.6	0.5	1.7	1.4
Liquid Permittivity(meas.)	0.8	normal	1	0.6	0.5	0.5	0.4
Combined Uncertainty		RSS				9.5	9.3
Combined Uncertainty (coverage factor=2)		Normal(k=2)				19.0	18.5



4.2 Arrangement Assessment Setup

4.2.1 Test Positions for body-worn

Body-worn operating configurations should be tested with the belt-clips and holsters attached to the device and positioned against a flat phantom in normal use configurations. A separation distance of 1.5 cm between the back of the device and a flat phantom is recommended for testing body-worn SAR

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compliance under such circumstances. Other separation distance may be use, but not exceed 2.5 cm.

4.3 SAR Measurement Procedure

The ALSAS-10U calculates SAR using the following equation,

$$SAR = \frac{\sigma |E|^2}{\rho}$$

σ: represents the simulated tissue conductivity
ρ: represents the tissue density

The EUT is set to transmit at the required power in line with product specification, at each frequency relating to the LOW, MID, and HIGH channel settings.

Pre-scans are made on the device to establish the location for the transmitting antenna, using a large area scan in either air or tissue simulation fluid.

The EUT is placed against the Universal Phantom where the maximum area scan dimensions are larger than the physical size of the resonating antenna. When the scan size is not large enough to cover the peak SAR distribution, it is modified by either extending the area scan size in both the X and Y directions, or the device is shifted within the predefined area.

The area scan is then run to establish the peak SAR location (interpolated resolution set at $1mm^2$) which is then used to orient the center of the zoom scan. The zoom scan is then executed and the 1g and 10g averages are derived from the zoom scan volume (interpolated resolution set at $1mm^3$).

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5. SAR Exposure Limits

SAR assessments have been made in line with the requirements of IEEE-1528, FCC Supplement C, and comply with ANSI/IEEE C95.1-1992 "Uncontrolled Environments" limits. These limits apply to a location which is deemed as "Uncontrolled Environment" which can be described as a situation where the general public may be exposed to an RF source with no prior knowledge or control over their exposure.

Limits for General Population/Uncontrolled Exposure (W/kg)

Type Exposure	Uncontrolled Environment Limit
Spatial Peak SAR (1g cube tissue for brain or body)	**1.60 W/kg**
Spatial Average SAR (whole body)	**0.08 W/kg**
Spatial Peak SAR (10g for hands, feet, ankles and wrist)	**4.00 W/kg**

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6. Test Equipment List

Instrument	Manufacturer	Model No.	Calibration Due	Calibration Cycle(year)
Data Acquisition Package	Aprel	ALS-DAQ-PAQ-2	NCR	NCR
Aprel Laboratories Probe	Aprel	ALS-E020	10-Dec-2009	1
Aprel Laboratories Dipole	Aprel	ALS-D-2450-S-2	02-Feb-2010	1
Boundary Detection Sensor System	Aprel	ALS-PMDPS-2	NCR	NCR
Dielectric Probe Kit	Aprel	ALS-PR-DIEL	NCR	NCR
Universal Work Station	Aprel	ALS-UWS	NCR	NCR
Device Holder 2.0	Aprel	ALS-H-E-SET-2	NCR	NCR
Left Ear SAM Phantom	Aprel	ALS-P-SAM-L	NCR	NCR
Right Ear SAM Phantom	Aprel	ALS-P-SAM-R	NCR	NCR
Flat Phantom	Aprel	ALS-P-UP-1	NCR	NCR
Aprel Dipole Spacer	Aprel	ALS-DS-U	NCR	NCR
SAR Software	Aprel	ALSAS-10	NCR	NCR
CRS C500C Controller	Thermo	ALS-C500	NCR	NCR
CRF F3 Robot	Thermo	ALS-F3	NCR	NCR
Power Amplifier	Mini-Circuit	ZHL-42	NCR	NCR
Directional Coupler	Agilent	778D-012	NCR	NCR
Universal Radio Communication Tester	JRC	NZ-917BJ	NCR	NCR
Power meter	HP	437B	June 15 2010	1
Vector S/G	R&S	SMU200A	June 04 2010	1
Wireless Communications Test Set	Agilent	8960	May 14 2010	1
Vector Network	Anritsu	MS4623B	May 12 2010	1

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7. Measurement Uncertainty

The measurements below were using CHTTL Probe. The measurement comparison of CHTTL Probe(Aprel E-020, S/N 257) and Quietek Probe (Aprel E-020, S/N 265) was done on May 18th 2009. This measurements comparison results showed that the SAR measurement results difference between these two Probe is less than +/-5%(measurement Uncertainty source from Probe Boundary effect, Linearity and Detection limit). The system Combined Uncertainty should be less than 9.9% for 1g.

Source of Uncertainty	Tolerance Value	Probability Distribution	Divisor	c_i^1 (1-g)	c_i^1 (10-g)	Standard Uncertainty (1-g) %	Standard Uncertainty (10-g) %
Measurement System							
Probe Calibration	3.5	normal	1	1	1	3.5	3.5
Axial Isotropy	3.7	rectangular	$\sqrt{3}$	$(1-cp)^{1/2}$	$(1-cp)^{1/2}$	1.5	1.5
Hemispherical Isotropy	10.9	rectangular	$\sqrt{3}$	$\sqrt{cp}$	$\sqrt{cp}$	4.4	4.4
Boundary Effect	1.0	rectangular	$\sqrt{3}$	1	1	0.6	0.6
Linearity	4.7	rectangular	$\sqrt{3}$	1	1	2.7	2.7
Detection Limit	1.0	rectangular	$\sqrt{3}$	1	1	0.6	0.6
Readout Electronics	1.0	normal	1	1	1	1.0	1.0
Response Time	0.8	rectangular	$\sqrt{3}$	1	1	0.5	0.5
Integration Time	1.7	rectangular	$\sqrt{3}$	1	1	1.0	1.0
RF Ambient Condition	3.0	rectangular	$\sqrt{3}$	1	1	1.7	1.7
Probe Positioner Mech.	0.4	rectangular	$\sqrt{3}$	1	1	0.2	0.2
Restriction							
Probe Positioning with respect to Phantom Shell	2.9	rectangular	$\sqrt{3}$	1	1	1.7	1.7
Extrapolation and Integration	3.7	rectangular	$\sqrt{3}$	1	1	2.1	2.1
Test Sample Positioning	4.0	normal	1	1	1	4.0	4.0
Device Holder Uncertainty	2.0	normal	1	1	1	2.0	2.0
Drift of Output Power	1.9	rectangular	$\sqrt{3}$	1	1	1.1	1.1
Phantom and Setup							
Phantom Uncertainty(shape & thickness tolerance)	3.4	rectangular	$\sqrt{3}$	1	1	2.0	2.0
Liquid Conductivity(target)	5.0	rectangular	$\sqrt{3}$	0.7	0.5	2.0	1.4
Liquid Conductivity(meas.)	1.0	normal	1	0.7	0.5	0.7	0.5
Liquid Permittivity(target)	5.0	rectangular	$\sqrt{3}$	0.6	0.5	1.7	1.4
Liquid Permittivity(meas.)	3.1	normal	1	0.6	0.5	1.9	1.6
Combined Uncertainty		RSS				9.5	9.3
Combined Uncertainty (coverage factor=2)		Normal(k=2)				19.0	18.6

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8 SAR Test Results

Power test of Data Rate

Mode	Channel	Data Rate	Output Power	
			PK(dBm)	AV(dBm)
802.11b	6	1	20.30	18.40
		5.5	20.28	18.42
		11	20.34	18.50
802.11g	6	6	21.33	14.29
		36	21.25	14.24
		54	21.24	14.20

802.11b Power set: @11Mbps
802.11g Power set: @6Mbps

Test Position Body	Antenna Type	Frequency		Conducted Power (dBm)		**SAR** 1g (W/kg)	Power Drift %	Limit (W/kg)
		Channel	MHz	Max	Av			
802.11b_Touch	INTERNAL	1	2412	20.18	18.34	0.397	3.627	1.6
802.11b_Touch	INTERNAL	6	2437	20.34	18.50	0.359	4.430	1.6
802.11b_Touch	INTERNAL	11	2462	20.24	18.60	0.272	4.542	1.6
802.11g_Touch	INTERNAL	1	2412	21.22	14.26	0.312	-0.004	1.6
802.11g_Touch	INTERNAL	6	2437	21.33	14.29	0.240	3.768	1.6
802.11g_Touch	INTERNAL	11	2462	21.23	14.52	0.225	1.740	1.6

9.EUT Photographs

Front View 1

Front View 2

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Rear View 1

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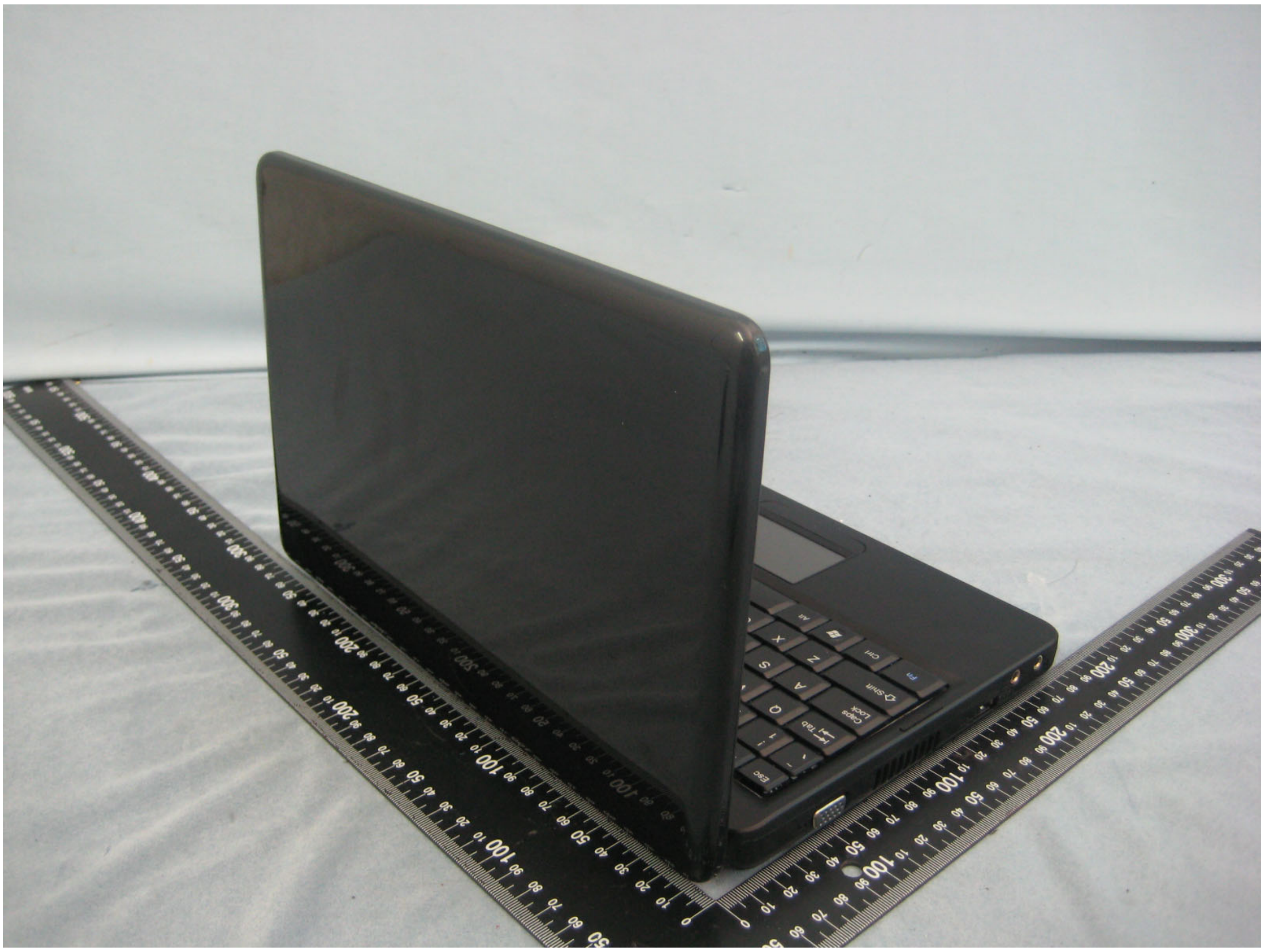

Rear View 2

WLAN Module Location

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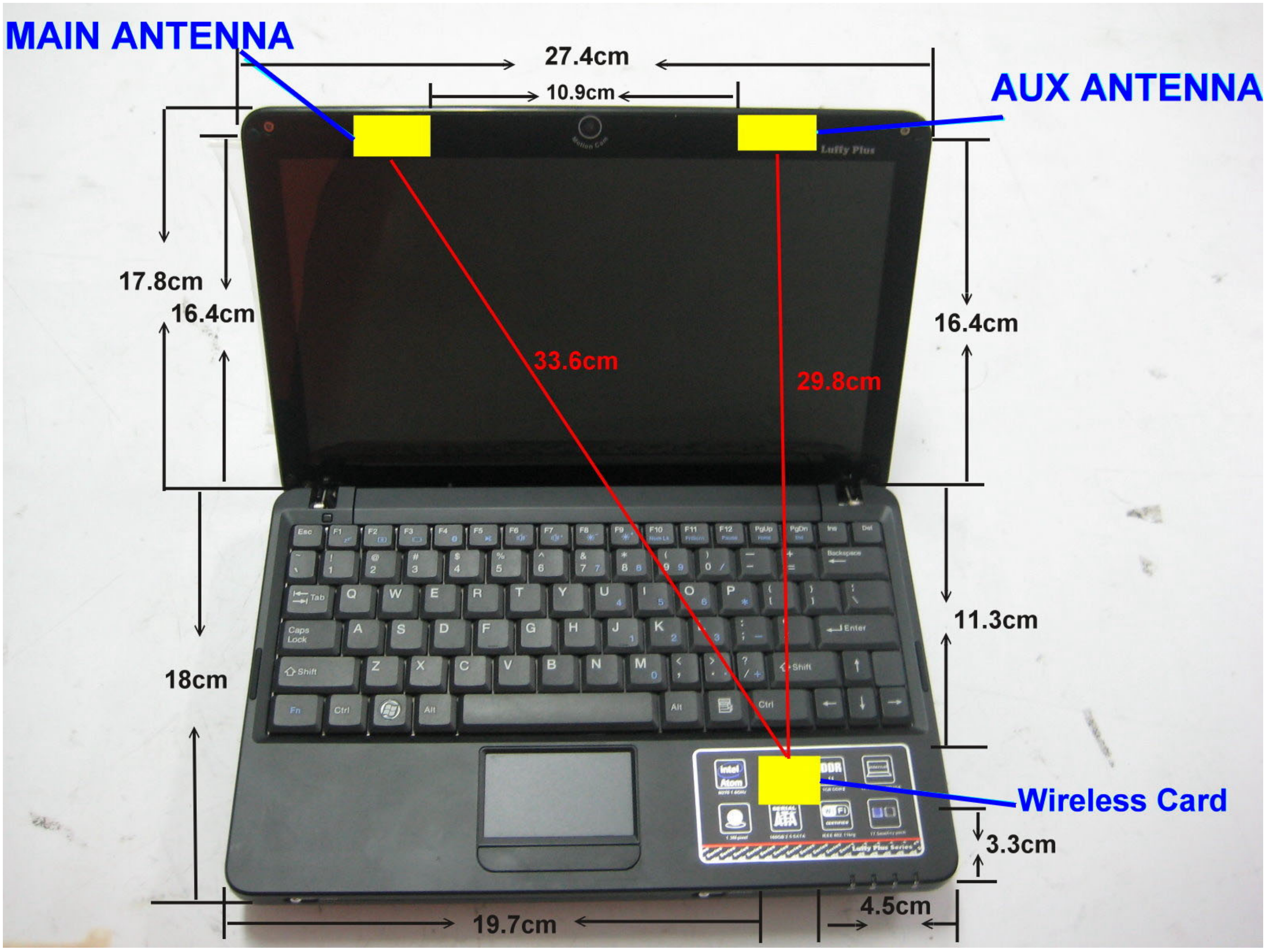
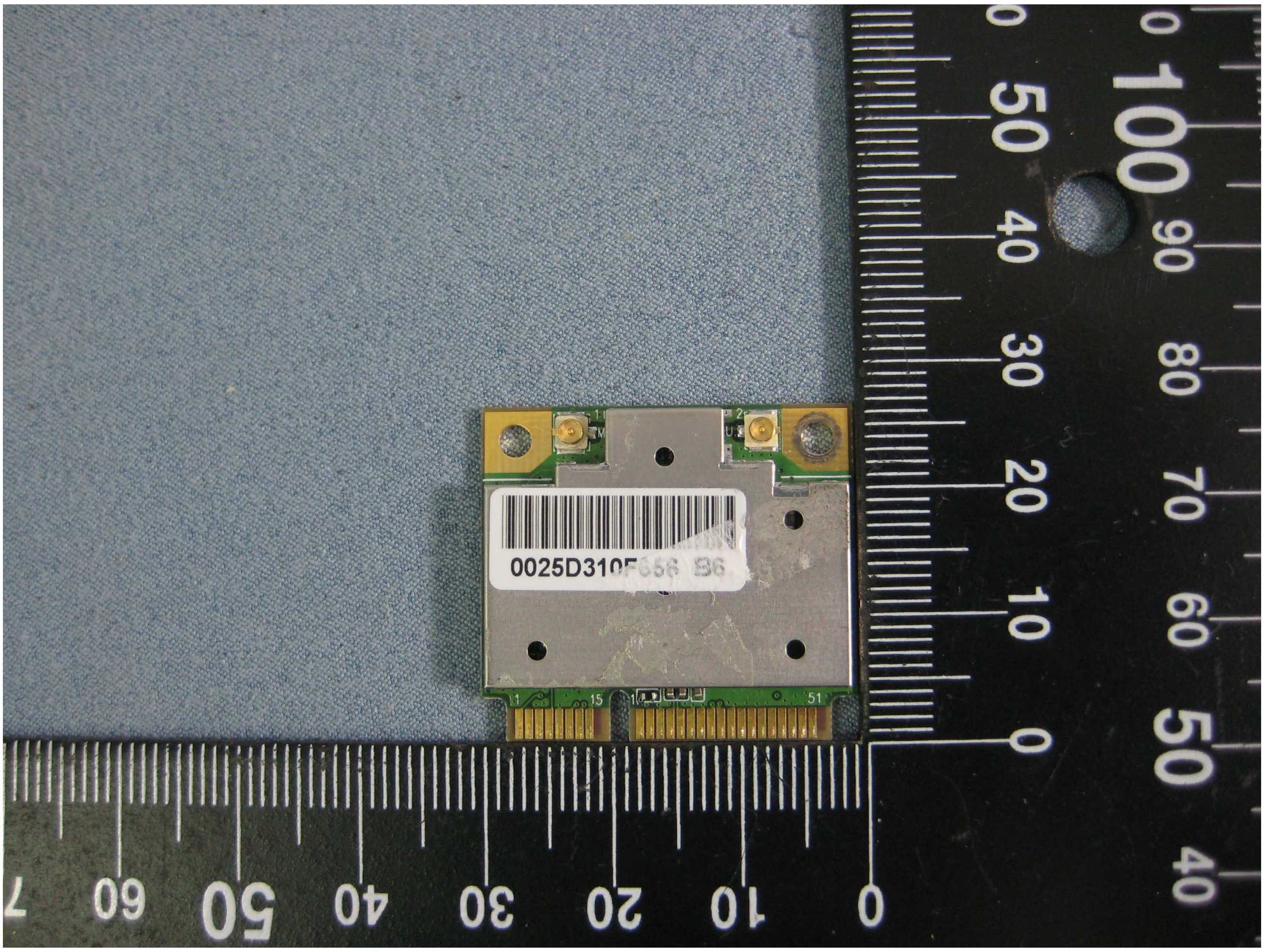
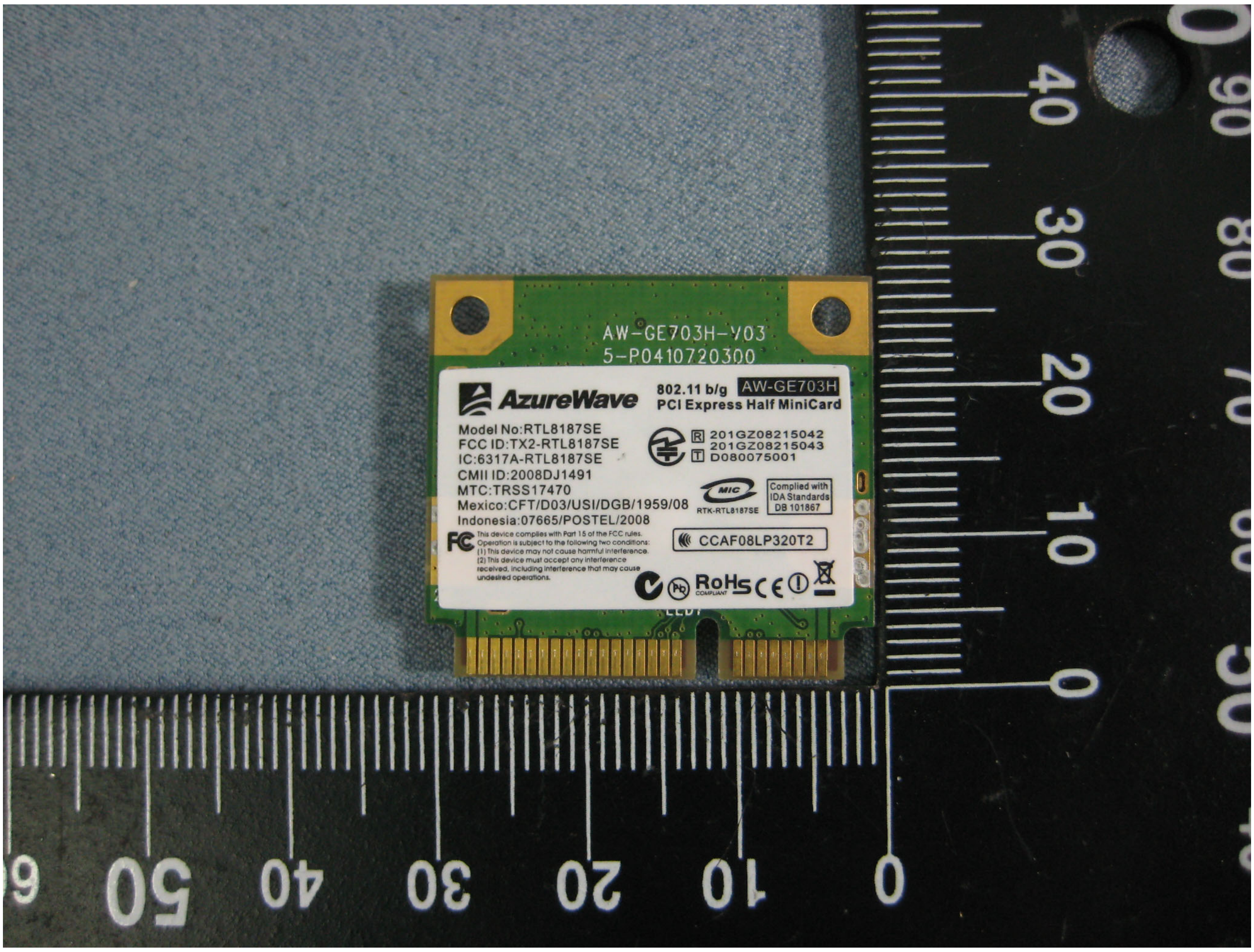


Antenna Location

Note: Ant. Main for TX and RX; Ant. AUX for RX only



Front View of WLAN1



Rear View of WLAN1