

RF EXPOSURE REPORT

REPORT NO.: SA140919C38

MODEL NO.: AT-WR2304N

FCC ID: RSL-WR2304N

RECEIVED: Sep. 19, 2014

TESTED: Oct. 11 ~ Nov. 05, 2014

ISSUED: Nov. 07, 2014

APPLICANT: Allied Telesis R&D Center K.K

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ISSUED BY: Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch

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TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED	
SA140919C38	Original release	Nov. 07, 2014	

Report No.: SA140919C38 3 of 6 Report Format Version 5.0.1



1. CERTIFICATION

PRODUCT: Wireless Router

MODEL NO.: AT-WR2304N

BRAND: Allied Telesis

APPLICANT: Allied Telesis R&D Center K.K

TESTED: Oct. 11 ~ Nov. 05, 2014

TEST SAMPLE: ENGINEERING SAMPLE

STANDARDS: FCC Part 2 (Section 2.1091)

KDB 447498 D03

IEEE C95.1

The above equipment (model: AT-WR2304N) has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch,** and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Polly Chien / Specialist

APPROVED BY : ________, DATE : _______, Nov. 07, 2014

Ken Liu / Senior Manager



2. RF EXPOSURE

2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)		FIELD POWER DENSITY AVER (A/m) (mW/cm²) (m						
LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE									
300-1500			F/1500	30					
1500-100,000			1.0	30					

F = Frequency in MHz

2.2 MPE CALCULATION FORMULA

 $Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm²

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. So, this device is classified as **Mobile Device**.



2.4 CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm²)	LIMIT (mW/cm²)
802.11b	22.05	2	20	0.051	1
802.11g	23.78	2	20	0.075	1
802.11n (20MHz)	24.41	5.01	20	0.174	1
802.11n (40MHz)	22.64	5.01	20	0.116	1

NOTE:

1TX

802.11b/g: Directional gain = 2dBi

2TX

802.11n: Directional gain = 2dBi + 10log(2) = 5.01dBi

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