



中国认可
国际互认
检测
TESTING
CNAS L5313



RF Exposure Evaluation Declaration

Product Name : 450Mbps Wireless N Router

Model No. : TL-WR940N

FCC ID : TE7WR940NV4

Applicant : TP-LINK TECHNOLOGIES CO., LTD.

Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central
Science and Technology Park,Shennan Rd, Nanshan,
Shenzhen,China

Date of Receipt : Jul. 01, 2016

Test Date : Jul. 01, 2016~ Aug. 18, 2016

Issued Date : Sep. 14, 2016

Report No. : 1672003R-RF-US- P20V02

Report Version : V1.0

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF,CNAS or any agency of the government.

The test report shall not be reproduced without the written approval of Quietek Corporation.

Test Report Certification

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Manufacturer : TP-LINK TECHNOLOGIES CO., LTD.
Address : Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park,Shennan Rd, Nanshan, Shenzhen,China
Model No. : TL-WR940N
FCC ID : TE7WR940NV4
EUT Voltage : 9V/0.6A
Applicable Standard : KDB 447498 D01v06
FCC 2.1091(c)
Test Result : Complied
Performed Location : Quietek Corporation - Suzhou EMC Laboratory
No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
FCC Registration Number: 800392;

Documented By : Kathy Feng
(Adm. Specialist: Kathy Feng)
Reviewed By : Frank he
(Senior Engineer: Frank He)
Approved By : Harry Zhao
(Engineering Manager : Harry Zhao)

Laboratory Information

We, **Quietek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C.	:	BSMI, NCC, TAF
USA	:	FCC
Japan	:	VCCI
China	:	CNAS

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://www.quietek.com/english/about/certificates.aspx?bval=5>
The address and introduction of Quietek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory :

No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

Suzhou Testing Laboratory :

No.99 Hongye Rd., Suzhou Industrial Park, Suzhou, 215006, Jiangsu, China
TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com

1. RF Exposure Evaluation

1.1. Limits

According to **FCC 2.1091(c)**

Standalone MPE test exclusion considerations

- (i) They operate at frequencies of 1.5 GHz or below and their effective radiated power (ERP) is 1.5 watts or more, or
- (ii) They operate at frequencies above 1.5 GHz and their ERP is 3 watts or more.

1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

1.3. Test Result of RF Exposure Evaluation

Product	:	450Mbps Wireless N Router
Test Item	:	RF Exposure Evaluation
Test Site	:	AC-6

● Antenna Gain:

Model No.	N/A				
Antenna manufacturer	TP-LINK				
Antenna Delivery	<input type="checkbox"/>	1*TX+1*RX	<input type="checkbox"/>	2*TX+2*RX	<input checked="" type="checkbox"/> 3*TX+3*RX
Antenna technology	<input type="checkbox"/>	SISO			
	<input checked="" type="checkbox"/>	MIMO	<input type="checkbox"/>	Basic	
			<input checked="" type="checkbox"/>	CDD	
			<input type="checkbox"/>	Sectorized	
			<input type="checkbox"/>	Beam-forming	
Antenna Type	<input checked="" type="checkbox"/>	External	<input checked="" type="checkbox"/>	Dipole	
			<input type="checkbox"/>	Sectorized	
	<input type="checkbox"/>	Internal	<input type="checkbox"/>	PIFA	
			<input type="checkbox"/>	PCB	
			<input type="checkbox"/>	Ceramic Chip Antenna	
			<input type="checkbox"/>	Metal plate type F antenna	
Antenna Technology	Ant Gain (dBi)			Directional Gain (dBi)	
				For Power	For PSD
<input checked="" type="checkbox"/> CDD	Ant0:5	Ant1: 5	Ant2: 5	5	9.77

Maximum measured transmitter power:

Operation Mode	Frequency (MHz)	Pout Conducted (dBm)	Pout Conducted (mW)	Maximum Antenna Gain (dBi)	Pout EIRP (mW)
802.11b/g/n(20MHz)	2412 ~ 2462 MHz	23.025	200.68	5	634.60
802.11n(40MHz)	2422 ~ 2452 MHz	20.838	121.28	5	383.53

EIRP= PConducted+ Antenna Gain

Threshold for no MPE evaluation at 2.4GHz is 3 W

Maximum TX Power is 200.68mW Conducted and 634.6mW EIRP

Maximum TX Power is 634.6mW

Conclusion: No MPE evaluation required since maximum Transmitter Pout (both conducted and EIRP) is below FCC threshold

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