

# **RF EXPOSURE REPORT**

- REPORT NO.: SA120426C16
- MODEL NO.: TL-WN951N
  - FCC ID: TE7WN951NV3
  - RECEIVED: Apr. 26, 2012
    - TESTED: May 14, 2012
    - **ISSUED:** May 25, 2012
- **APPLICANT:** TP-LINK TECHNOLOGIES CO., LTD.

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- **ISSUED BY:** Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
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### **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120426C16	Original release	May 25, 2012



#### 1. CERTIFICATION

PRODUCT:	300Mbps Wireless N PCI Adapter
BRAND NAME:	TP-LINK
MODEL NO.:	TL-WN951N
TEST SAMPLE:	PROTOTYPE
APPLICANT:	TP-LINK TECHNOLOGIES CO., LTD.
TESTED:	May 14, 2012
STANDARDS:	FCC Part 2 (Section 2.1091)
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: TL-WN951N) 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.

PREPARED BY	:, DATE: <u>May 25, 2012</u> (Lori Chung, Specialist)
APPROVED BY	(May Chen Deputy Manager), DATE: <u>May 25, 2012</u>



#### 2. RF EXPOSURE LIMIT

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm <sup>2</sup> )	AVERAGE TIME (minutes)		
LIMI	LIMITS FOR GENERAL POPULATION / UNCONTROLLED EXPOSURE					
300-1500			F/1500	30		
1500-100,000			1.0	30		

F = Frequency in MHz

#### 3. 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

#### 4. 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**.

#### 5. ANTENNA GAIN

The antennas provided to the EUT, please refer to the following table:

Transmitter Circuit	Brand	Model	Antenna Type	Peak Gain (dBi)	Connecter Type
Chain (0)	Cortec	AN2400-5505RS	Omni-Directional	2	RP-SMA female
Chain (1)	Cortec	AN2400-5505RS	Omni-Directional	2	RP-SMA female



#### 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
2412-2462	413.104	5.01	20	0.260	1.00

Directional gain = gain of antenna element + 10 log (# of TX antenna elements) Effective Legacy Gain (dBi)=5.01

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