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# RF EXPOSURE REPORT

**REPORT NO.:** SA120301C28

**MODEL NO.:** TL-WR2543ND

**FCC ID:** TE7WR2543N

**RECEIVED:** Mar. 1, 2012

**TESTED:** Jul. 25 ~ Aug. 1, 2012

**ISSUED:** Aug. 30, 2012

**APPLICANT:** TP-LINK TECHNOLOGIES CO., LTD.

**ADDRESS:** Building 24 (floors 1,3,4,5) and 28 (floors1-4)  
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**ISSUED BY:** Bureau Veritas Consumer Products Services  
(H.K.) Ltd., Taoyuan Branch

**LAB ADDRESS:** No. 47, 14th Ling, Chia Pau Vil., Lin Kou Dist.,  
New Taipei City, Taiwan, R.O.C.

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## RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120301C28	Original release	Aug. 30, 2012



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## 1. CERTIFICATION

**PRODUCT:** 450Mbps Dual-Band Wireless N Gigabit Router  
**MODEL NO.:** TL-WR2543ND  
**BRAND NAME:** TP-LINK  
**APPLICANT:** TP-LINK TECHNOLOGIES CO., LTD.  
**TESTED:** Jul. 25 ~ Aug. 1, 2012  
**TEST ITEM:** MASS-PRODUCTION  
**STANDARDS:** FCC Part 2 (Section 2.1091)  
FCC OET Bulletin 65, Supplement C (01-01)  
IEEE C95.1

The above equipment (model no.: TL-WR2543ND) 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 : Celia Chen , DATE : Aug. 30, 2012  
( Celia Chen / Senior Specialist )

APPROVED BY : Ken Liu , DATE : Aug. 30, 2012  
( Ken Liu / Manager )

## 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)
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

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = 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. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
2412-2462	29.1	2	20	0.2563	1.00
5180-5240	11.6	3	20	0.0057	1.00
5745-5825	27.3	3	20	0.2132	1.00

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