



**BUREAU  
VERITAS**

Test Report No.: FS120625N003

# RF EXPOSURE REPORT



Applicant	TP-LINK TECHNOLOGIES CO.,LTD.
Address	Building 24 (floors 1,3,4,5) and 28 (floors 1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

Manufacturer or Supplier	TP-LINK TECHNOLOGIES CO.,LTD.
Address	Building 24 (floors 1,3,4,5) and 28 (floors 1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China
Product:	5GHz 150Mbps Indoor / Outdoor Wireless Access Point
Brand Name:	TP-LINK
Model:	TL-WA7510N
Date of tests:	Nov. 06 ~ Nov. 15, 2012

the tests have been carried out according to the requirements of the following standards:

- ☒ **FCC Part 2 (Section 2.1091)**
- ☒ **FCC OET Bulletin 65, Supplement C (01-01)**
- ☒ **IEEE C95.1**

**CONCLUSION: The submitted sample was found to COMPLY with the test requirement**

Prepared by Kent Liu Project Engineer / EMC Department	Approved by Sam Tung Manager / EMC Department
	

Date: Nov. 26, 2012

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification

**Bureau Veritas Shenzhen Co., Ltd.**  
**Dongguan Branch**

No. 34, Chenwulu Section, Guantai Rd., Houjie  
Town, Dongguan City,  
Guangdong 523942, China

Tel: +86 769 8593 5656  
Fax: +86 769 8593 1080  
Email: [customerservice\\_dg@cn.bureauveritas.com](mailto:customerservice_dg@cn.bureauveritas.com)



## **Table of Contents**

RELEASE CONTROL RECORD .....	3
1. CERTIFICATION.....	4
2. RF EXPOSURE LIMIT .....	5
3. MPE CALCULATION FORMULA.....	5
4. CLASSIFICATION .....	5
5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



**BUREAU  
VERITAS**

**Test Report No.: FS120625N003**

## **RELEASE CONTROL RECORD**

<b>ISSUE NO.</b>	<b>REASON FOR CHANGE</b>	<b>DATE ISSUED</b>
RF120625N003	Original release	Nov. 26, 2012

**Bureau Veritas Shenzhen Co., Ltd.  
Dongguan Branch**

No. 34, Chenwulu Section, Guantai Rd., Houjie  
Town, Dongguan City,  
Guangdong 523942, China

Tel: +86 769 8593 5656  
Fax: +86 769 8593 1080  
Email: [customerservice.dg@cn.bureauveritas.com](mailto:customerservice.dg@cn.bureauveritas.com)



Test Report No.: FS120625N003

## 1. CERTIFICATION

**PRODUCT:** 5GHz 150Mbps Indoor / Outdoor Wireless Access Point

**MODEL:** TL-WA7510N

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

**TESTED:** Bureau Veritas Shenzhen Co., Ltd. Dongguan Branch

**TEST SAMPLE:** ENGINEERING SAMPLE

**STANDARDS:** FCC Part 2 (Section 2.1091)

FCC OET Bulletin 65, Supplement C (01-01)

IEEE C95.1



## 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

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

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 (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm <sup>2</sup> )	LIMIT (mW/cm <sup>2</sup> )
802.11a CH 157	40.738	15	20	0.20357	1.00
802.11n 20MHz CH 165	35.645	15	20	0.22425	1.00
802.11n 40MHz CH 151	31.333	15	20	0.19712	1.00