



RF EXPOSURE REPORT

REPORT NO.: SA120622C07
MODEL NO.: TL-WA801ND
FCC ID: TE7WA801NDV2
RECEIVED: Jun. 22, 2012
TESTED: Aug. 01 ~ Aug. 29, 2012
ISSUED: Sep. 10, 2012

APPLICANT: TP-LINK TECHNOLOGIES CO., LTD.

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ISSUED BY: Bureau Veritas Consumer Products Services
(H.K.) Ltd., Taoyuan Branch

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA120622C07	Original release	Sep. 10, 2012

1. CERTIFICATION

PRODUCT: 300Mbps Wireless N Access Point
MODEL NO.: TL-WA801ND
BRAND: TP-LINK
APPLICANT: TP-LINK TECHNOLOGIES CO., LTD.
TESTED: Aug. 01 ~ Aug. 29, 2012
TEST SAMPLE: PROTOTYPE
STANDARDS: **FCC Part 2 (Section 2.1091)**
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (model: TL-WA801ND) 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.

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Jemma Yang / Specialist

APPROVED BY : Gary Chang , DATE : Sep. 10, 2012
Gary Chang / Technical Manager

2. RF EXPOSURE

2.1 LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	MAGNETIC FIELD STRENGTH (A/m)	POWER DENSITY (mW/cm ²)	AVERAGE TIME (minutes)
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

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

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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/cm ²)	LIMIT (mW/cm ²)
802.11b	20.68	8.01	20	0.1472	1
802.11g	27.38	8.01	20	0.6888	1
802.11n (20MHz)	27.61	5.00	20	0.3630	1
802.11n (40MHz)	26.85	5.00	20	0.3048	1

802.11b/g: Directional gain = 5dBi + 10log(2) = 8.01dBi