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RF EXPOSURE REPORT

REPORT NO.: SA120516C16C

MODEL NO.: TL-WR843ND

FCC ID: TE7WR843ND

RECEIVED: Oct. 24, 2012

TESTED: Oct. 29, 2012

ISSUED: Jan. 10, 2013

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
SA120516C16C	Original release	Jan. 10, 2013



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1. CERTIFICATION

PRODUCT: 300Mbps Wireless AP/Client Router

BRAND NAME: TP-LINK

MODEL NO.: TL-WR843ND

TEST SAMPLE: PROTOTYPE

APPLICANT: TP-LINK TECHNOLOGIES CO., LTD.

TESTED DATE: Oct. 29, 2012

STANDARDS: FCC Part 2 (Section 2.1091)

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

IEEE C95.1

The above equipment (Model: TL-WR843ND) 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:** Jan. 10, 2013
(Elsie Hsu, Specialist)

APPROVED BY :  , **DATE:** Jan. 10, 2013
(May Chen, Deputy Manager)



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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 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

3. MPE CALCULATION FORMULA

$$Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$$

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

Transmitter Circuit	Brand	Model	Antenna Type	Antenna Gain (dBi) Without cable loss	Antenna cable loss(dB)	Antenna Net Gain (dBi)	Cable Length (mm)	Frequency range (MHz to MHz)	Connector
Chain (0)	Cortec	AN2400-92 24RS	linear vertical	5	0.7	4.3	110	2400~2500	SMA Male Reverse
Chain (1)	Cortec	AN2400-92 24RS	linear vertical	5	0.9	4.1	190	2400~2500	SMA Male Reverse



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6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
2412-2462	583.524	4.3	20	0.31246	1

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