



RF EXPOSURE REPORT

REPORT NO.: SA111124C12

MODEL NO.: TEW-751DR

FCC ID: XU8TEW751DR

RECEIVED: Nov. 14, 2011

TESTED: Nov. 14 ~ Dec. 06, 2011

ISSUED: Dec. 09, 2011

APPLICANT: TRENDNET, Inc.

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USA

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

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TEST LOCATION: No. 19, Hwa Ya 2nd Rd, Wen Hwa Tsuen, Kwei
Shan Hsiang, Taoyuan Hsien 333, Taiwan, R.O.C.

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RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	NA	Dec. 09, 2011

1. CERTIFICATION

PRODUCT: Wireless Router
MODEL: TEW-751DR
BRAND: TRENDnet
APPLICANT: TRENDNET, Inc.
TESTED: Nov. 14 ~ Dec. 06, 2011
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 2 (Section 2.1091)**
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: TEW-751DR) 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: Dec. 09, 2011
Pettie Chen / Specialist

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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

FREQUENCY BAND (MHz)	MAX CONDUCTED POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
2412-2462	25.5	2	20	0.111	1
5180-5240	16.1	2	20	0.013	1
5745-5825	24.7	2	20	0.093	1

CONCLUSION:

Both of the WLAN 2.4G & 5.0G can transmit simultaneously, the formula of calculated the MPE is:

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

$$1. \text{ WLAN 2.4G} + \text{WLAN 5.0G} = 0.111 + 0.093 = 0.204.$$

Therefore, the maximum calculation of this situation is 0.204, which is less than the "1" limit.