RF EXPOSURE REPORT

REPORT NO.: SA111118C23

MODEL NO.: TL-MR3020

FCC ID: TE7MR3020

RECEIVED: Nov. 18, 2011

TESTED: Dec. 12 ~ Dec. 22, 2011

ISSUED: Dec. 27, 2011

APPLICANT: TP-LINK TECHNOLOGIES CO., LTD.

ADDRESS: Building 24 (floors 1,3,4,5) and 28 (floors1-4) Central Science and Technology Park, Shennan Rd, Nanshan, Shenzhen, China

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)

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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TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
Original release	NA	Dec. 27, 2011

1. CERTIFICATION

PRODUCT:	Portable 3G/3.75G Wireless N Router
MODEL:	TL-MR3020
BRAND:	TP-LINK
APPLICANT:	TP-LINK TECHNOLOGIES CO., LTD.
TESTED:	Dec. 12 ~ Dec. 22, 2011
TEST SAMPLE:	Mass production
STANDARDS:	**FCC Part 2 (Section 2.1091)**
	FCC OET Bulletin 65, Supplement C (01-01)
	IEEE C95.1

The above equipment (Model: TL-MR3020) 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 : Andrea Hsia / Specialist , DATE : Dec. 27, 2011

APPROVED BY : Gary Chang / Technical Manager , DATE : Dec. 27, 2011

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

Pd = (Pout*G) / (4*pi*r2)

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

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

MODULATION MODE	FREQUENCY (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
802.11b	2412	17.6	0	20	0.012	1
	2437	17.4	0	20	0.011	1
	2462	17.3	0	20	0.011	1
802.11g	2412	21.5	0	20	0.028	1
	2437	23.6	0	20	0.046	1
	2462	21.6	0	20	0.029	1
802.11n (20MHz)	2412	21.6	0	20	0.029	1
	2437	23.6	0	20	0.046	1
	2462	21.5	0	20	0.028	1
802.11n (40MHz)	2422	21.2	0	20	0.026	1
	2437	22.1	0	20	0.032	1
	2452	21.2	0	20	0.026	1