

# RF EXPOSURE REPORT

**REPORT NO.:** SA121129E05

MODEL NO.: RE2000

**FCC ID**: Q87-RE2000

**RECEIVED:** Nov. 29, 2012

**TESTED:** Dec. 12, 2012

**ISSUED:** Jan. 17, 2013

APPLICANT: Cisco Consumer Products, LLC

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**ISSUED BY:** Bureau Veritas Consumer Products Services

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R.O.C.

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# **RELEASE CONTROL RECORD**

ISSUE NO.	REASON FOR CHANGE	
SA121129E05	Original release	Jan. 17, 2013

Report No.: SA121129E05 3 of 6 Report Format Version 5.0.0



#### 1. CERTIFICATION

**PRODUCT:** Wireless-N Range Extender

**BRAND NAME:** Cisco

MODEL NO.: RE2000

TEST SAMPLE: ENGINEERING SAMPLE

APPLICANT: Cisco Consumer Products, LLC

**TESTED DATE:** Dec. 12, 2012

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

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

**IEEE C95.1** 

The above equipment (Model: RE2000) 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.

(Lori Chung, Specialist)

(May Chen, Deputy Manager)



#### 2. RF EXPOSURE LIMIT

### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

FREQUENCY RANGE (MHz)	ELECTRIC FIELD STRENGTH (V/m)	POWER DENSITY (mW/cm²)	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

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

where

Pd = power density in mW/cm<sup>2</sup>

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	Antenna Type	Antenna Gain (dBi)	Connector	Frequency range (MHz to MHz)		
Chain (0)	PIFA	4.0	NA	2400~2500		
Chain (0)		4.0		5150~5850		
Chain (1)	PIFA	2.8	NA	2400~2500		
Chain (1)		3.8	INA	5150~5850		
For 802.11b/g/a mode will fix transmission on Chain (0).						



### 6. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

## For 15.247(2.4GHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm²)	LIMIT (mW/cm²)
2412-2462	438.597	4.00	20	0.21918	1

## For 15.247(5GHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5745 ~ 5825	486.127	4.00	20	0.24293	1

#### For 15.407(5GHz):

FREQUENCY BAND (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm <sup>2</sup> )	LIMIT (mW/cm²)
5180 ~ 5240	45.709	4.00	20	0.02284	1

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