

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

ADDRESS: 121 Theory Drive Irvine, CA 92617(USA)

ISSUED BY: Bureau Veritas Consumer Products Services

(H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory

LAB ADDRESS: No. 81-1, Lu Liao Keng, 9th Ling, Wu Lung Tsuen,

Chiung Lin Hsiang, Hsin Chu Hsien 307, Taiwan,

R.O.C.

This report should not be used by the client to claim product certification, approval, or endorsement by any government agencies.

This report is for your exclusive use. Any copying or replication of this report to or for any other person or entity, or use of our name or trademark, is permitted only with our prior written permission. This report sets forth our findings solely with respect to the test samples identified herein. The results set forth in this report are not indicative or representative of the quality or characteristics of the lot from which a test sample was taken or any similar or identical product unless specifically and expressly noted. Our report includes all of the tests requested by you and the results thereof based upon the information that you provided to us. You have 60 days from date of issuance of this report to notify us of any material error or omission caused by our negligence, provided, however, that such notice shall be in writing and shall specifically address the issue you wish to raise. A failure to raise such issue within the prescribed time shall constitute your unqualified acceptance of the completeness of this report, the tests conducted and the correctness of the report contents. Unless specific mention, the uncertainty of measurement has been explicitly taken into account to declare the compliance or non-compliance to the specification



TABLE OF CONTENTS

REL	EASE CONTROL RECORD	. 3
1.	CERTIFICATION	. 4
	RF EXPOSURE LIMIT	
3.	MPE CALCULATION FORMULA	. 5
	CLASSIFICATION	
5.	ANTENNA GAIN	. 5
	CALCULATION RESULT OF MAXIMUM CONDUCTED POWER	



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
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)	MAGNETIC FIELD STRENGTH (A/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/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	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 ²)	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 ²)	LIMIT (mW/cm²)
5180 ~ 5240	45.709	4.00	20	0.02284	1

--- END ---