



RF EXPOSURE REPORT

REPORT NO.: SA121222E03A

MODEL NO.: EA6500 V2

FCC ID: Q87-EA6500V2

RECEIVED: Jan. 07, 2013

TESTED: Jan. 07, 2013

ISSUED: June 28, 2013

APPLICANT: Cisco Consumer Products LLC

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ISSUED BY: Bureau Veritas Consumer Products Services
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TABLE OF CONTENTS

RELEASE CONTROL RECORD	3
1. CERTIFICATION	4
2. RF EXPOSURE LIMIT	5
3. MPE CALCULATION FORMULA	5
4. CLASSIFICATION	5
5. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER.....	6



RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA121222E03A	Original release	June 26, 2013
SA121222E03A R1	Modified the model name.	June 28, 2013

1. CERTIFICATION

PRODUCT: Linksys Smart Wi-Fi Router AC1750
BRAND NAME: Cisco
MODEL NO.: EA6500 V2
TEST SAMPLE: ENGINEERING SAMPLE
APPLICANT: Cisco Consumer Products LLC
TESTED DATE: Jan. 07, 2013
STANDARDS: FCC Part 2 (Section 2.1091)
FCC OET Bulletin 65, Supplement C (01-01)
IEEE C95.1

The above equipment (Model: EA6500 V2) 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 : Phoenix Huang , **DATE:** June 28, 2013
(Phoenix Huang, Specialist)

APPROVED BY : May Chen , **DATE:** June 28, 2013
(May Chen, 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/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

$$P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$$

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

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. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

For 15.247(2.4GHz):

FREQUENCY- (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
2412-2462	255.092	3.15	20	0.10482	1

For 15.247(5GHz):

FREQUENCY (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
5745 ~ 5825	456.334	4.79	20	0.27353	1

For 15.407(5GHz):

FREQUENCY (MHz)	MAX POWER (mW)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/ cm ²)	LIMIT (mW/cm ²)
5180 ~ 5240	32.947	4.29	20	0.01760	1

CONCLUSION:

Both of the 2.4GHz and 5GHz WLAN can transmit simultaneously, the formula of calculated the MPE is:

$$CPD_1 / LPD_1 + CPD_2 / LPD_2 +etc. < 1$$

CPD = Calculation power density

LPD = Limit of power density

Therefore, the worst-case situation is $0.10482 / 1 + 0.27353 / 1 = 0.378$, which is less than "1". This confirmed that the device comply with FCC 1.1310 MPE limit.

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