RF EXPOSURE REPORT

REPORT NO.:	SA110219C05D
MODEL NO.:	MR24
FCC ID:	UDX-60014010
RECEIVED:	Feb. 02, 2013
TESTED:	Feb. 08 ~ Apr. 13, 2013
ISSUED:	Apr. 15, 2013

APPLICANT:	Cisco Systems
ADDRESS:	660 Alabama St, 4th floor, San Francisco, CA 94110

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.

TABLE OF CONTENTS

RELEASE CONTROL RECORD

ISSUE NO.	REASON FOR CHANGE	DATE ISSUED
SA110219C05D	Original release	Apr. 15, 2013

1. CERTIFICATION

PRODUCT:	Wireless 802.11 abgn AP
MODEL:	MR24
BRAND:	Meraki
APPLICANT:	Cisco Systems
TESTED:	Feb. 08 ~ Apr. 13, 2013
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: MR24) 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 :** Apr. 15, 2013

Pettie Chen / Senior Specialist

APPROVED BY : _____ , **DATE :** Apr. 15, 2013

Ken Liu / Senior 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

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 25cm 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)	MODULATION MODE	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
2412-2462	802.11b	25.78	9.77	25	0.457	1
	802.11g	25.97	9.77	25	0.477	1
	802.11n (20MHz)	29.07	5	25	0.325	1
	802.11n (40MHz)	26.87	5	25	0.196	1
5180-5240	802.11a	11.61	10.77	25	0.022	1
	802.11n (20MHz)	16.76	6	25	0.024	1
	802.11n (40MHz)	16.54	6	25	0.023	1
5745-5825	802.11a	24.66	10.77	25	0.445	1
	802.11n (20MHz)	25.55	6	25	0.182	1
	802.11n (40MHz)	26.06	6	25	0.205	1

2.4GHz:
802.11b/g: Directional gain = 5dBi + 10log(3/1) = 9.77dBi
5.0GHz:
802.11a: Directional gain =6dBi + 10log(3/1)=10.77dBi

CONCULSION:

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

CPD1 / LPD1 + CPD2 / LPD2 + ……etc. < 1

CPD = Calculation power density

LPD = Limit of power density

WLAN 2.4G + WLAN 5.0G = 0.477 + 0.445 = 0.922

Therefore, the maximum calculation of this situation is 0.922, which is less than the "1" limit.