RF EXPOSURE REPORT

REPORT NO.: SA991013C07

MODEL NO.: MR16

FCC ID: UDX-60012010

ACCORDING: FCC Guidelines for Human Exposure
IEEE C95.1

APPLICANT: Meraki Inc.

ADDRESS: 99 Rhode Island St, 2nd floor San Francisco, CA 94103

ISSUED BY: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

LAB ADDRESS: No. 47, 14th Ling, Chia Pau Tsuen, Lin Kou Hsiang, Taipei Hsien 244, 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.

1. 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

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

3. CLASSIFICATION

The antenna of this product, under normal use condition, is at least 23cm away from the body of the user. So, this device is classified as **Mobile Device**.

4. CALCULATION RESULT OF MAXIMUM CONDUCTED POWER

MODULATION MODE	FREQUENCY BAND (MHz)	MAX POWER (dBm)	ANTENNA GAIN (dBi)	DISTANCE (cm)	POWER DENSITY (mW/cm^2)	LIMIT (mW/cm^2)
802.11b	2412-2462	27.87	6	23	0.367	1
802.11g	2412-2462	28.81	6	23	0.455	1
802.11n (20MHz)	2412-2462	29.46	3	23	0.265	1
802.11n (40MHz)	2422-2452	28.06	3	23	0.192	1
802.11a	5180-5240	16.27	6	23	0.025	1
802.11n (20MHz)	5180-5240	16.46	3	23	0.013	1
802.11n (40MHz)	5190-5230	16.46	3	23	0.013	1
802.11a	5745-5825	29.46	6	23	0.529	1
802.11n (20MHz)	5745-5825	29.66	3	23	0.278	1
802.11n (40MHz)	5755-5795	29.62	3	23	0.295	1

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

1. WLAN 2.4G + WLAN 5.0G = 0.455 + 0.529 = 0.984

Therefore, the maximum calculation of this situation is 0.984, which is less than the "1" limit.