

EXPOSURE REPORT

REPORT NO.: SA120926C25I

MODEL NO.: WAP561

FCC ID: PD5-WAP561

RECEIVED: Feb. 26, 2014

TESTED: Jan. 29 ~ Feb. 10, 2015

ISSUED: Feb. 13, 2015

APPLICANT: Delta Networks, Inc.

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ISSUED BY: Bureau Veritas Consumer Products Services
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RELEASE CONTROL RECORD

| ISSUE NO. | REASON FOR CHANGE | DATE ISSUED |
|--------------|-------------------|---------------|
| SA120926C25I | Original release | Feb. 13, 2015 |

1. CERTIFICATION

PRODUCT: Wireless AP with PoE
MODEL NO.: WAP561
BRAND: CISCO
APPLICANT: Delta Networks, Inc.
TESTED: Jan. 29 ~ Feb. 10, 2015
TEST SAMPLE: ENGINEERING SAMPLE
STANDARDS: **FCC Part 2 (Section 2.1091)**
KDB 447498 D03
IEEE C95.1

The above equipment (model: WAP561) 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.

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Maggie Wu / Specialist

APPROVED BY : Ken Liu , **DATE :** Feb. 13, 2015
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

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

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

2.3 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 24cm 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) | MAX POWER (dBm) | ANTENNA GAIN (dBi) | DISTANCE (cm) | POWER DENSITY (mW/cm ²) | LIMIT (mW/cm ²) |
|----------------------|-----------------|--------------------|---------------|-------------------------------------|-----------------------------|
| 2412-2462 | 28.08 | 9.75 | 24 | 0.838 | 1 |
| 5150-5250 | 12.59 | 10.34 | 24 | 0.027 | 1 |
| 5745-5825 | 17.79 | 10.34 | 24 | 0.090 | 1 |

NOTE:

1. Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 9.75\text{dBi}$
2. Directional gain = $10 \log[(10^{G1/20} + 10^{G2/20} + \dots + 10^{GN/20})^2/3] = 10.34\text{dBi}$

CONCLUSION:

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

$$\text{CPD1} / \text{LPD1} + \text{CPD2} / \text{LPD2} + \dots \text{etc.} < 1$$

CPD = Calculation power density

LPD = Limit of power density

$$\text{WLAN 2.4G} + \text{WLAN 5.0G} = 0.838 + 0.090 = 0.928$$

Therefore, the maximum calculation of this situation is 0.928, which is less than the “1” limit.