## RF Exposure Evaluation Declaration

Product Name: Wireless LAN access Point

Model No. : H3C WA3610i-GN

FCC ID : 09C-WA3610i

IC : 2299L-WA3610i

Applicant: Hewlett Packard Corporation

Address: 153 Taylor street, Litterton Massachusetts United

**States** 

Date of Receipt : 01/11/2011

Issued Date : 20/12/2011

Report No. : 11BS005R-RF-US

Report Version: V1.2

This report was based on Quietek report No: 11BS004R

The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration of the equipment and evaluated measurement uncertainty herein.

This report must not be used to claim product endorsement by TAF, NVLAP, NIST or any agency of the Government.

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### **Test Report Certification**

Issued Date: 20/12/2011

Report No.: 11BS005R-RF-US

# QuieTek

**Product Name** Wireless LAN access Point Applicant **Hewlett Packard Corporation** 

153 Taylor street, Litterton Massachusetts United States Address

Manufacturer **Hewlett Packard Corporation** 

Address 153 Taylor street, Litterton Massachusetts United States

H3C WA3610i-GN Model No. FCC ID O9C-WA3610i IC 2299L-WA3610i

**EUT Voltage** 48Vdc, 0.27A (or POE input)

**Brand Name** H<sub>3</sub>C

Applicable Standard FCC OET 65

RSS-102: Issue 4, March, 2010

Test Result Complied

Performed Location Suzhou EMC Laboratory

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Hi-Tech Development Zone., Suzhou, China

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FCC Registration Number: 800392; IC Lab Code: 4075B

(Engineering ADM: Alice Ni)

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(Senior Engineer: Jame Yuan)

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(Engineering Manager: Marlin Chen)



Report No: 11BS005R-RF-US

#### **Laboratory Information**

We, **QuieTek Corporation**, are an independent EMC and safety consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted(audited or listed) by the following related bodies in compliance with ISO 17025, EN 45001 and specified testing scope:

Taiwan R.O.C. : BSMI, NCC, TAF

Germany : TUV Rheinland

Norway : Nemko, DNV

USA : FCC, NVLAP

Japan : VCCI

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site: <a href="http://www.quietek.com/tw/ctg/cts/accreditations.htm">http://www.quietek.com/tw/ctg/cts/accreditations.htm</a>
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site: <a href="http://www.quietek.com/">http://www.quietek.com/</a>

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

#### **HsinChu Testing Laboratory:**







#### **LinKou Testing Laboratory:**







#### Suzhou (China) Testing Laboratory:









#### 1. RF Exposure Evaluation

#### 1.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

	Electric	Magnetic	Power	Average		
Frequency	Field	Field		Average		
Range (MHz)	Strength	Strength	Density	Time		
	(V/m)	(A/m)	(mW/cm2)	(Minutes)		
(A) Limits for Occupational/ Control Exposures						
300-1500			F/300	6		
1500-100,000			5	6		
(B) Limits for General Population/ Uncontrolled Exposures						
300-1500			F/1500	6		
1500-100,000			1	30		

F= Frequency in MHz

Friis Formula

Friis transmission 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

Pd id the limit of MPE, 1 mW/cm2. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance r where the MPE limit is reached.



#### 1.2. Test Procedure

Software provided by client enabled the EUT to transmit and receive data at lowest, middle and highest channel individually.

The temperature and related humidity: 18°C and 78% RH.

#### 1.3. Test Result of RF Exposure Evaluation

Product	:	Wireless LAN access Point	
Test Item	:	RF Exposure Evaluation	
Test Site	:	AC-6	

#### **Antenna Gain:**

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 6dBi o for 2.4GHz.

#### **Output Power into Antenna & RF Exposure Evaluation Distance:**

Test Mode	Frequency Band (MHz)	Maximum Output Power to Antenna (mW)	Power Density at R = 20 cm (mW/cm2)
802.11b/g/n	2412~2462	313.3286	0.248159

#### Note:

The power density Pd (4th column) at a distance of 20 cm calculated from the Friis transmission formula is far below the limit of 1 mW/cm2.