RF Exposure Evaluation Declaration

Product Name	:	Wireless LAN access Point
Model No.	:	H3C WA2620X-AGNP, BJNGA-FB0001
FCC ID	:	O9C-WA2620XAGNP

Applicant	:	Hewlett Packard Corporation
Address	:	350 Campus Drive, Marlborough, MA United States

Date of Receipt	:	16/03/2011
Issued Date	:	21/04/2011
Report No.	:	116S012R-RF-US
Report Version	:	V2.0

This report was based on Quietek report No: 113S025R

Test Report Certification

Issued Date : 21/04/2011
Report No. : 116S012R-RF-US

Product Name	:	Wireless LAN access Point
Applicant	:	Hewlett Packard Corporation
Address	:	350 Campus Drive, Marlborough, MA United States
Manufacturer	:	Hewlett Packard Corporation
Address	:	350 Campus Drive, Marlborough, MA United States
Model No.	:	H3C WA2620X-AGNP, BJNGA-FB0001
FCC ID	:	O9C-WA2620XAGNP
IC	:	2299L-WA2620XAGN
EUT Voltage	:	48Vdc, 0.5A (POE Input)
Brand Name	:	H3C, HP
Applicable Standard	:	FCC OET 65
Test Result	:	Complied
Performed Location	:	Suzhou EMC Laboratory
		No.99 Hongye Rd., Suzhou Industrial Park Loufeng
		Hi-Tech Development Zone., Suzhou, China
		TEL: +86-512-6251-5088 / FAX: +86-512-6251-5098
		FCC Registration Number: 800392

Documented By : Alice Ni
(Engineering ADM: Alice Ni)

Reviewed By : Jame Yuan
(Senior Engineer: Jame Yuan)

Approved By : Marlin Chen
(Engineering Supervisor: Marlin Chen)

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 : http://www.quietek.com/tw/ctg/cts/accreditations.htm
The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/
If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory :
No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

NVLAP Lab Code : 200347-0

Testing Laboratory 1313

LinKou Testing Laboratory :
No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen, Lin-Kou Shiang, Taipei, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

NVLAP Lab Code: 200533-0

Testing Laboratory 0914

Suzhou (China) Testing Laboratory :
No. 99 Hongye Rd., Suzhou Industrial Park Loufeng Hi-Tech Development Zone., Suzhou,China.
TEL : +86-512-6251-5088 / FAX : +86-512-6251-5098 E-Mail : service@quietek.com

NVLAP Lab Code : 200743-0

Testing Laboratory 1596

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)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (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℃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 12dBi o for 2.4G and 11dBi for 5G.

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	99.54	0.313856
802.11a/n	5260~5320	10.00	0.025046
802.11a/n	5745~5825	83.37	0.208800

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.