

# RF Exposure Evaluation Declaration

Product Name : Wireless LAN Access Point  
Model No. : H3C WA2612-AGN, WL-607  
FCC ID : O9C-WL607

Applicant : 3COM Corporation

Address : 350 Campus Drive, Marlborough, MA 01752-3064,USA

Date of Receipt : 2009/07/16

Issued Date : 2009/08/17

Report No. : 097S086R-RF-US

Report Version : V3.0

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 CNLA, NVLAP, NIST or any agency of the Government.

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## Test Report Certification

Issued Date : 2009/08/17

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 Applicant : 3COM Corporation  
 Address : 350 Campus Drive, Marlborough, MA 01752-3064,USA  
 Manufacturer : 3COM Corporation  
 Address : 350 Campus Drive, Marlborough, MA 01752-3064,USA  
 Model No. : H3C WA2612-AGN, WL-607  
 FCC ID : O9C-WL607  
 EUT Voltage : 48Vdc, 180mA (PoE Input)  
 Trade Name : H3C, 3COM  
 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

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 ( Marlin Chen )

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 ( Gene Chang )

## 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 by the following accreditation Bodies in compliance with ISO 17025, EN 45001 and Guide 25:

<b>Taiwan R.O.C.</b>	<b>: BSMI, DGT, CNLA</b>
<b>Germany</b>	<b>: TUV Rheinland</b>
<b>Norway</b>	<b>: Nemko, DNV</b>
<b>USA</b>	<b>: FCC, NVLAP</b>
<b>Japan</b>	<b>: VCCI</b>

The related certificate for our laboratories about the test site and management system can be downloaded from Quietek Corporation's Web Site : <http://tw.quietek.com/modules/myalbum/>  
 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 :

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 TEL : +86-512-6251-5088 / FAX : 86-512-6251-5098 E-Mail : service@quietek.com



**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/cm <sup>2</sup> )	Average Time (Minutes)
<b>(A) Limits for Occupational/ Control Exposures</b>				
300-1500	--	--	F/300	6
1500-100,000	--	--	5	6
<b>(B) Limits for General Population/ Uncontrolled Exposures</b>				
300-1500	--	--	F/1500	6
1500-100,000	--	--	1	30

F= Frequency in MHz

**Friis Formula**

Friis transmission formula:  $Pd = (Pout \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

Pd = power density in mW/cm<sup>2</sup>

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 is the limit of MPE, 1 mW/cm<sup>2</sup>. 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 or 3.98 in linear scale for 2.4G and 5.1dBi or 3.24 in linear scale for 5.2G.

### 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/cm <sup>2</sup> )
802.11b/g/n	2412~2462	722.77	0.5724
802.11a/n	5180~5240	48.75	0.0314
802.11a/n	5745~5825	770.90	0.6106

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/cm<sup>2</sup>.