RF Exposure Evaluation Declaration

Product Name	:	ADSL2+ 4-port Wireless Router
Model No.	:	DSL-2750U, DSL-2750B
FCC ID	:	KA2DSL-2750U

Applicant :	D-link Corporation
Address .	NO. 289. Sinhu 3rd RD., Neihu District, Taipei City 114,
•	Taiwan

Date of Receipt	:	Dec. 10, 2010
Issued Date	:	Dec. 22, 2010
Report No.	:	10CS018R-RF-US
Report Version	:	V1.0

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

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

QuieTek

Test Report Certification

Issued Date : Dec. 22, 2010 Report No. : 10CS018R-RF-US



Product Name	:	ADSL2+ 4-port Wireless Router		
Applicant	:	D-link Corporation		
Address	:	NO. 289. Sinhu 3rd RD., Neihu District, Taipei City 114,		
		Taiwan		
Manufacturer	:	D-link Corporation		
Address	:	NO. 289. Sinhu 3rd RD., Neihu District, Taipei City 114,		
		Taiwan		
Model No.	:	DSL-2750U, DSL-2750B		
FCC ID	:	KA2DSL-2750U		
EUT Voltage	:	DC 12V, 1A		
Trade Name	:	D-Link		
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	:	Marlinchen		
5		(Engineering Supervisor: Marlin Chen)		
Approved By	:	Green Cas		
		(Engineering Manager: Dream Cao)		

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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 : <u>http://www.quietek.com/tw/ctg/cts/accreditations.htm</u> The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : <u>http://www.quietek.com/</u>

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

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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 : <u>service@quietek.com</u>



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: <u>service@quietek.com</u>







Testing Laborator 0914

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)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Average Time (Minutes)	
(A) Limits for C	(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: $Pd = (Pout^{*}G)/(4^{*}pi^{*}r^{2})$

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.

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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°_{\circ} RH.

1.3. Test Result of RF Exposure Evaluation

Product	:	ADSL2+ 4-port Wireless Router	
Test Item	:	RF Exposure Evaluation	
Test Site	:	AC-6	

Antenna Gain:

Antenna Gain: The maximum Gain measured in fully anechoic chamber is 2dBi.

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(20MHz)	2412 - 2462 MHz	185.7804	0.058577
802.11n(40MHz)	2422 - 2452 MHz	127.6439	0.040247