



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: T58DL4322R

Project No. : 1310C138
Equipment : 300Mbps Wireless N ADSL2+ Modem Router
Model : DL4322D; DL4322
Applicant : NETIS SYSTEMS CO., LTD
**Address : 4F&5F R&D Building, Oriental Cyberport,
High-Tech Industrial Park, Nanshan,
Shenzhen, China.**
According: : FCC Guidelines for Human Exposure IEEE C95.1



MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

$$S = \frac{PG}{4\pi^2} = \frac{EIRP}{4\pi^2}$$

where:

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the center of radiation of the antenna

Table for Filed Antenna

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)	Note
1	<i>RE link</i>	RF21S00006A	Dipole	SMA	5.08	Detachable antenna for model DL4322D
2	<i>RE link</i>	RF21S00006A	Dipole	SMA	5.08	

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)	Note
1	<i>RE link</i>	RF21C00152A	Dipole	N/A	5.05	Non-detachable antenna for model DL4322
2	<i>RE link</i>	RF21C00152A	Dipole	N/A	5.05	

Note:

(1)The EUT incorporates a MIMO function. Physically, the EUT provides two completed two transmitters and two receivers (2T2R). All transmit signals are completely uncorrelated, then, Direction gain = G_{ANT} , that is Directional gain=5.08dBi.

Operating Mode TX Mode	1TX	2TX
	802.11b	V (ANT 1 or ANT 2)
802.11g	V (ANT 1 or ANT 2)	-
802.11n(20MHz)	-	V (ANT 1 + ANT 2)
802.11n(40MHz)	-	V (ANT 1 + ANT 2)



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TEST RESULTS

EUT :	300Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4322D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.08	3.2211	17.52	56.4937	0.03622016	1	Complies
5.08	3.2211	17.98	62.8058	0.04026710	1	Complies
5.08	3.2211	17.48	55.9758	0.03588809	1	Complies

EUT :	300Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4322D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.08	3.2211	23.28	212.8139	0.13644272	1	Complies
5.08	3.2211	23.59	228.5599	0.14653804	1	Complies
5.08	3.2211	23.28	212.8139	0.13644272	1	Complies



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EUT :	300Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4322D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 /ANT 1+ANT 2		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.08	3.2211	25.31	339.6253	0.21774609	1	Complies
5.08	3.2211	25.95	393.5501	0.25231924	1	Complies
5.08	3.2211	25.71	372.3917	0.23875384	1	Complies

EUT :	300Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4322D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 /ANT 1+ANT 2		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
5.08	3.2211	24.86	306.1963	0.19631359	1	Complies
5.08	3.2211	24.90	309.0295	0.19813006	1	Complies
5.08	3.2211	25.04	319.1538	0.20462108	1	Complies

Note: The calculation distance is 20cm.