



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: T58DL4311R2

Project No. : 1310C137
Equipment : 150Mbps Wireless N ADSL2+ Modem Router
Model : DL4311D; DL4311
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



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MPE CALCULATION METHOD:

Calculation Method of RF Safety Distance:

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

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>RF link</i>	RF21S00006A	Dipole	SMA	5.08	Detachable antenna for model DL4311D

Ant.	Brand	P/N	Antenna Type	Connector	Gain (dBi)	Note
1	<i>RF link</i>	RF21C00152A	Dipole	N/A	5.05	Non-detachable antenna for model DL4311



TEST RESULTS

EUT :	150Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4311D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B 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	17.57	57.1479	0.03663957	1	Complies
5.08	3.2211	17.51	56.3638	0.03613686	1	Complies
5.08	3.2211	17.49	56.1048	0.03597082	1	Complies

EUT :	150Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4311D
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	23.43	220.2926	0.14123761	1	Complies
5.08	3.2211	23.41	219.2805	0.14058869	1	Complies
5.08	3.2211	23.28	212.8139	0.13644272	1	Complies



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EUT :	150Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4311D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M 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	22.30	169.8244	0.10888057	1	Complies
5.08	3.2211	22.50	177.8279	0.11401195	1	Complies
5.08	3.2211	22.40	173.7801	0.11141672	1	Complies

EUT :	150Mbps Wireless N ADSL2+ Modem Router	Model Name :	DL4311D
Temperature :	24 °C	Relative Humidity :	60 %
Pressure :	1016 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09		

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	23.32	214.7830	0.13770521	1	Complies
5.08	3.2211	23.51	224.3882	0.14386342	1	Complies
5.08	3.2211	23.43	220.2926	0.14123761	1	Complies

Note: the calculation distance is 20cm.