



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: T58DL4305R

Project No. : 1110C092A
Equipment : ADSL2+ Modem Plus 300Mbps Wireless-N Router
Model : DL4305D; DL4305
Applicant : NETIS SYSTEMS CO., LTD
**Address : 9F,B Block, Tsinghua Information Park,
High-tech Industrial Park, Nanshan, Shenzhen,
China**

According: : FCC Guidelines for Human Exposure IEEE C92.76

Neutron Engineering Inc.

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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

Ant.	Brand name	Model Name	Antenna Type	Connector	Gain (dBi)	Gain (numeric)	Note
1	HONGLIN	RG178	Dipole	R-SMA	5.28	3.3729	TX/RX
2	HONGLIN	2.4GHz 5dBi,	Dipole	N/A	5.28	3.3729	TX/RX

Note:

The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and two receivers (2T2R).

Operating Mode TX Mode	1TX	2TX
802.11b	V (ANT1 or ANT2)	-
802.11g	V (ANT1 or ANT2)	-
802.11n(20MHz)	-	V (ANT1 & ANT2)
802.11n(40MHz)	-	V (ANT1 & ANT2)



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TEST RESULTS

EUT:	ADSL2+ Modem Plus 300Mbps Wireless-N Router	Model Name :	DL4305D
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX B MODE /CH01, CH06, CH11-ANT 1		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
17.36	54.4503	0.03655530	1	Complies
17.58	57.2796	0.03845478	1	Complies
17.70	58.8844	0.03953214	1	Complies

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Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX G MODE /CH01, CH06, CH11-ANT 1		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
19.19	82.9851	0.05571221	1	Complies
19.46	88.3080	0.05928576	1	Complies
19.54	89.9498	0.06038796	1	Complies



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EUT:	ADSL2+ Modem Plus 300Mbps Wireless-N Router	Model Name :	DL4305D
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 - ANT 1		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
14.88	30.7610	0.02065144	1	Complies
14.42	27.6694	0.01857592	1	Complies
14.60	28.8403	0.01936201	1	Complies

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Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 - ANT 2		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
14.45	27.8612	0.01870468	1	Complies
14.60	28.8403	0.01936201	1	Complies
14.24	26.5461	0.01782175	1	Complies



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Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-20M MODE /CH01, CH06, CH11 – ANT0+ ANT 1		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
17.68	58.6138	0.03935051	1	Complies
17.52	56.4937	0.03792716	1	Complies
17.43	55.3350	0.03714928	1	Complies

EUT:	ADSL2+ Modem Plus 300Mbps Wireless-N Router	Model Name :	DL4305D
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT 1		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
15.02	31.7687	0.02132801	1	Complies
14.26	26.6686	0.01790401	1	Complies
14.46	27.9254	0.01874780	1	Complies



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EUT:	ADSL2+ Modem Plus 300Mbps Wireless-N Router	Model Name :	DL4305D
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT 2		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
14.12	25.8226	0.01733606	1	Complies
14.17	26.1216	0.01753680	1	Complies
14.19	26.2422	0.01761775	1	Complies

EUT:	ADSL2+ Modem Plus 300Mbps Wireless-N Router	Model Name :	DL4305D
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N-40M MODE /CH03, CH06, CH09 - ANT 1+ANT 2		

Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
17.60	57.5440	0.03863228	1	Complies
17.23	52.8445	0.03547728	1	Complies
17.34	54.2001	0.03638735	1	Complies