



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

## **FCC ID: KA2IR651B1**

**Project No.** : 1303C083  
**Equipment** : Wireless router  
**Model** : DIR-651  
**Applicant** : D-LINK Corporation  
**Address** : No.289, Sinhu 3rd Rd., Neihu District Taipei City  
114, Taiwan, R.O.C  
**According:** : FCC Guidelines for Human Exposure IEEE C95.05.1

***Neutron Engineering Inc.***

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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 Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	Airgain)	N2430GNS	Integral Antenna	N/A	2.5	
2	Airgain)	N2430GNS	Integral Antenna	N/A	2.5	



## TEST RESULTS

EUT:	Wireless router	Model Name :	DIR-651
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1012 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.5	1.7783	16.53	44.9780	0.01592027	1	Complies
2.5	1.7783	16.64	46.1318	0.01632865	1	Complies
2.5	1.7783	16.78	47.6431	0.01686360	1	Complies

EUT:	Wireless router	Model Name :	DIR-651
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1012 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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.5	1.7783	23.68	233.3458	0.08259436	1	Complies
2.5	1.7783	23.62	230.1442	0.08146112	1	Complies
2.5	1.7783	21.66	146.5548	0.05187408	1	Complies



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EUT:	Wireless router	Model Name :	DIR-651
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N20MHz MODE CH01/CH06/CH11		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.5	1.7783	23.33	215.2782	0.07619919	1	Complies
2.5	1.7783	23.45	221.3095	0.07833401	1	Complies
2.5	1.7783	23.46	221.8196	0.07851459	1	Complies

EUT:	Wireless router	Model Name :	DIR-651
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	TX N40MHz MODE CH03/CH06/CH09		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
2.5	1.7783	23.84	242.1029	0.08569399	1	Complies
2.5	1.7783	24.12	258.2260	0.09140088	1	Complies
2.5	1.7783	23.93	247.1724	0.08748838	1	Complies

Note: the calculation distance is 20cm.