



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: W59XWR600

Project No. : 1401C155
Equipment : Dual Band Wireless 600N Router
Model Name : XWR-600
Applicant : Luxul Wireless
Address : 14203 Minuteman Dr, Suite 201, Draper, Utah, United States
Manufacturer : Luxul Wireless
Address : 14203 Minuteman Dr, Suite 201, Draper, Utah, United States

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

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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	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	LUXUL	Q5095	Dipole	N/A	4.05	TX/RX
2	LUXUL	Q5096	Dipole	N/A	4.05	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 (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)



TEST RESULTS

EUT:	Daul Band Wireless 600N Router	Model Name :	XWR-600
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	TX B Mode		

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
4.05	2.5410	19.17	82.6038	0.04177826	1	Complies
4.05	2.5410	19.26	84.3335	0.04265308	1	Complies
4.05	2.5410	19.17	82.6038	0.04177826	1	Complies

EUT:	Daul Band Wireless 600N Router	Model Name :	XWR-600
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	TX G Mode		

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
4.05	2.5410	23.75	237.1374	0.11993622	1	Complies
4.05	2.5410	23.86	243.2204	0.12301282	1	Complies
4.05	2.5410	23.22	209.8940	0.10615742	1	Complies

EUT:	Daul Band Wireless 600N Router	Model Name :	XWR-600
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	TX N-20M Mode_Total		

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
4.05	2.5410	26.07	404.5759	0.20462108	1	Complies
4.05	2.5410	25.97	395.3666	0.19996333	1	Complies
4.05	2.5410	25.81	381.0658	0.19273047	1	Complies



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EUT:	Dual Band Wireless 600N Router	Model Name :	XWR-600
Temperature:	25 °C	Relative Humidity:	55 %
Pressure:	AC 120V/60Hz		
Test Mode :	TX N-40M Mode_Total		

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
4.05	2.5410	25.74	374.9730	0.18964892	1	Complies
4.05	2.5410	25.27	336.5116	0.17019640	1	Complies
4.05	2.5410	25.6	363.0781	0.18363285	1	Complies

Note: The calculated distance is 20cm