

FCC RF EXPOSURE REPORT

FCC ID: W59XAP310

Project No. : 1501C010
**Equipment : Standard Power Wireless 300N Low Profile
Access Point**
Model : XAP-310
Applicant : Luxul Wireless
**Address : 14203 Minuteman Dr, Suite 201, Draper, United
States**

**According: : FCC Guidelines for Human Exposure IEEE
C95.1**

B T L I N C .

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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

Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain(dBi)	Note
1	LUXUL	50000963	PCB	N/A	3.81	TX/RX
2	LUXUL	50001379	PCB	N/A	3.09	TX/RX

Note:

The EUT incorporates a MIMO function. Physically, the EUT provides two completed transmitters and receivers (2T2R), all transmit signals are completely uncorrelated, then Directional gain= G_{ANT} , that is Directional gain=3.81.

TEST RESULTS

EUT :	Standard Power Wireless 300N Low Profile Access Point	Model Name :	XAP-310
Temperature :	25 °C	Relative Humidity:	55 %
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
3.81	2.4044	19.72	93.7562	0.04486941	1	Complies
3.81	2.4044	19.26	84.3335	0.04035993	1	Complies
3.81	2.4044	19.36	86.2979	0.04130003	1	Complies

EUT :	Standard Power Wireless 300N Low Profile Access Point	Model Name :	XAP-310
Temperature :	25 °C	Relative Humidity:	55 %
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
3.81	2.4044	25.12	325.0873	0.15557878	1	Complies
3.81	2.4044	25.37	344.3499	0.16479741	1	Complies
3.81	2.4044	25.38	345.1437	0.16517730	1	Complies

EUT :	Standard Power Wireless 300N Low Profile Access Point	Model Name :	XAP-310
Temperature:	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-20M MODE_ Total /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
3.81	2.4044	26.82	480.8393	0.23011788	1	Complies
3.81	2.4044	26.89	488.6524	0.23385700	1	Complies
3.81	2.4044	26.96	496.5923	0.23765687	1	Complies

EUT :	Standard Power Wireless 300N Low Profile Access Point	Model Name :	XAP-310
Temperature:	25 °C	Relative Humidity:	55 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	TX N-40M MODE_ Total /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
3.81	2.4044	26.72	469.8941	0.22487976	1	Complies
3.81	2.4044	26.86	485.2885	0.23224714	1	Complies
3.81	2.4044	26.79	477.5293	0.22853376	1	Complies

Note: the calculated distance is 20 cm.