



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

## **FCC ID: 2AANL-WL811**

**Project No. : 1310C016**  
**Equipment : WIFI Module**  
**Model : WL811**  
**Applicant : Long Ben(Dong Guan)Elec. Tech. Co., Ltd.**  
**Address : No.19, Jian She Road, Shi Ma Village, Tang Xia  
Town, Dong Guan, China**

**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:

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

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	N/A	N/A	Printed	N/A	1.61	



**TEST RESULTS**

EUT:	WIFI Module	Model Name :	WL811
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
1.61	1.4488	19.63	91.8333	0.02648197	1	Complies
1.61	1.4488	19.81	95.7194	0.02760262	1	Complies
1.61	1.4488	19.53	89.7429	0.02587917	1	Complies

EUT:	WIFI Module	Model Name :	WL811
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 <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
1.61	1.4488	24.16	260.6154	0.07515370	1	Complies
1.61	1.4488	24.00	251.1886	0.07243532	1	Complies
1.61	1.4488	24.29	268.5344	0.07743733	1	Complies



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EUT:	WIFI Module	Model Name :	WL811
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 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
1.61	1.4488	23.86	243.2204	0.07013751	1	Complies
1.61	1.4488	24.04	253.5129	0.07310555	1	Complies
1.61	1.4488	23.79	239.3316	0.06901609	1	Complies

EUT:	WIFI Module	Model Name :	WL811
Temperature:	24 °C	Relative Humidity:	60 %
Pressure:	1016 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
1.61	1.4488	22.04	159.9558	0.04612649	1	Complies
1.61	1.4488	22.01	158.8547	0.04580895	1	Complies
1.61	1.4488	22.48	177.0109	0.05104467	1	Complies

Note: the calculation distance is 20cm.