



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: 2AANL-WL91

Project No. : 1307C195
Equipment : WIFI module
Model : WL91
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 Table for Filed Antenna

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)	Note
1	N/A	N/A	Printed	N/A	2.0	



TEST RESULTS

EUT:	WIFI module	Model Name :	WL91
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2.0	1.5849	17.85	60.9537	0.01922872	1	Complies
2.0	1.5849	18.42	69.5024	0.02192554	1	Complies
2.0	1.5849	18.56	71.7794	0.02264386	1	Complies

EUT:	WIFI module	Model Name :	WL91
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2.0	1.5849	18.62	72.7780	0.02295886	1	Complies
2.0	1.5849	19.12	81.6582	0.02576027	1	Complies
2.0	1.5849	19.34	85.9014	0.02709882	1	Complies



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EUT:	WIFI module	Model Name :	WL91
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2.0	1.5849	18.72	74.4732	0.02349364	1	Complies
2.0	1.5849	19.05	80.3526	0.02534839	1	Complies
2.0	1.5849	19.44	87.9023	0.02773003	1	Complies

EUT:	WIFI module	Model Name :	WL91
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 ²)	Limit of Power Density (S) (mW/cm ²)	Test Result
2.0	1.5849	18.42	69.5024	0.02192554	1	Complies
2.0	1.5849	18.71	74.3019	0.02343961	1	Complies
2.0	1.5849	18.93	78.1628	0.02465758	1	Complies

Note: the calculation distance is 20cm.