



Neutron Engineering Inc.

FCC RF EXPOSURE REPORT

FCC ID: 2AB9W-3F21X

Project No. : 1404171
Equipment : 3D Printer
Model : da Vinci 2.1 Duo Plus
Applicant : XYZprinting, Inc.
**Address : 10F., No.99, Sec. 5, Nanjing E. Rd., Songshan
Dist., Taipei City 10571, Taiwan (R.O.C.)**

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

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)
1	WIESON	GY136HT0131A-001	PIFA	IPEX	2.73
2	INPAQ	WA-M-LA-02-042	PIFA	IPEX	3.77



TEST RESULTS

EUT:	3D Printer	Model Name :	da Vinci 2.1 Duo Plus
Temperature:	26 °C	Relative Humidity:	46 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	IEEE 802.11b/2412 MHz, 2437 MHz, 2462 MHz		

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
3.77	2.3823	13.69	23.3884	0.01109048	1	Complies
3.77	2.3823	13.63	23.0675	0.01093831	1	Complies
3.77	2.3823	13.17	20.7491	0.00983899	1	Complies

EUT:	3D Printer	Model Name :	da Vinci 2.1 Duo Plus
Temperature:	26 °C	Relative Humidity:	46 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	IEEE 802.11g/2412 MHz, 2437 MHz, 2462 MHz		

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
3.77	2.3823	19.24	83.9460	0.03980617	1	Complies
3.77	2.3823	18.64	73.1139	0.03466972	1	Complies
3.77	2.3823	18.65	73.2825	0.03474964	1	Complies



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EUT:	3D Printer	Model Name :	da Vinci 2.1 Duo Plus
Temperature:	26 °C	Relative Humidity:	46 %
Test Voltage :	AC 120V/60Hz		
Test Mode :	IEEE 802.11n (20 MHz)/2412 MHz, 2437 MHz, 2462 MHz		

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
3.77	2.3823	18.76	75.1623	0.03564104	1	Complies
3.77	2.3823	18.34	68.2339	0.03235567	1	Complies
3.77	2.3823	17.81	60.3949	0.02863851	1	Complies

The calculated distance is 20 cm