

FCC RF EXPOSURE REPORT

FCC ID: WS2-WG1400-00

Project No. : 1510110
Equipment : Wireless module
Model : WG1400-00
Applicant : Jorjin Technologies Inc.
**Address : 17F, No.239, Sec.1, Datong Rd., Xizhi Dist. New
Taipei City Taiwan**
**According: : FCC Guidelines for Human Exposure IEEE
C95.1**

BTL Inc.

B1, No. 37, Lane 365, YangGuang St., NeiHu District 114, Taipei, Taiwan

TEL : (0769) 8318-3000 FAX : (0769) 8319-6000

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

Group 1

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	WIESON	N/A	Dipole	I-PEX	2.45

Group 2

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	 Unictron Technologies Corp.	H2B1BE1A1B0200	PCB	I-PEX	3.73

Group 3

Ant.	Brand	Model Name	Antenna Type	Connector	Gain (dBi)
1	N/A	N/A	Printed	N/A	-6.78

Note: There are three kinds of antennas, one dipole antenna, one PCB antenna and one printed antenna, but operating in a mode where only one transmit/receive chain is used.

TEST RESULTS

EUT :	Wireless module	Model Name :	WG1400-00
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
3.73	2.3605	17.75	59.5662	0.02798661	1	Complies
3.73	2.3605	18.02	63.3870	0.02978176	1	Complies
3.73	2.3605	17.52	56.4937	0.02654302	1	Complies

EUT :	Wireless module	Model Name :	WG1400-00
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
3.73	2.3605	20.12	102.8016	0.04830036	1	Complies
3.73	2.3605	20.68	116.9499	0.05494781	1	Complies
3.73	2.3605	20.29	106.9055	0.05022852	1	Complies

EUT :	Wireless module	Model Name :	WG1400-00
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
3.73	2.3605	20.11	102.5652	0.04818927	1	Complies
3.73	2.3605	20.41	109.9006	0.05163574	1	Complies
3.73	2.3605	20.17	103.9920	0.04885965	1	Complies

Note: the calculated distance is 20 cm.