

# **FCC RF EXPOSURE REPORT**

# FCC ID: VYVBW1352-PCIE

Project No. : 1906C176
Equipment : Module
Brand Name : N/A

Test Model : BW1352-PCIE

Series Model : N/A

**Applicant**: Iton Technology Corp.

Address : 7 Floor East, Building C, Shenzhen International Innovation

Center, No. 1006 Shennan Road, Futian District, Shenzhen,

China

**Manufacturer**: Iton Technology Corp.

**Address**: 7 Floor East, Building C, Shenzhen International Innovation

Center, No. 1006 Shennan Road, Futian District, Shenzhen,

China

**Factory**: Longgang branch of Iton Technology Crop.

Address : Floor2~3,east side of building A,weixinda science and

technologypark,NO.95,ainan road,longgang street,longgang

district, shenzhen

Date of Receipt : Jun. 26, 2019

**Date of Test** : Jun. 27, 2019 ~ Oct. 16, 2019

**Issued Date** : Nov. 15, 2019

Report Version : R01

Test Sample : Engineering Sample No.: DG201908301

**Standard(s)** : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part

 $2.109^{\circ}$ 

FCC Title 47 Part 2.1091, OET Bulletin 65 Supplement C

The above equipment has been tested and found compliance with the requirement of the relative standards by BTL Inc.

Prepared by: Rose Liu

Approved by: Ethan Ma

ACCREDITED

Certificate #5123.02

Add: No.3, Jinshagang 1<sup>st</sup> Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

Tel: +86-769-8318-3000 Web: www.newbtl.com



# **REPORT ISSUED HISTORY**

Report Version	Description	Issued Date
R00	Original Issue.	Nov. 12, 2019
R01	Changed the product name.	Nov. 15, 2019





## 1. MPE CALCULATION METHOD

Calculation Method of RF Safety Distance:

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

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	RoHS compliant	N/A	PCB	N/A	0
2	RoHS compliant	N/A	PCB	N/A	0

#### Note:

Antenna Gain=0 dBi. This EUT supports MIMO 2X2, any transmit signals are correlated with each other, so Directional gain= $G_{ANT}+10log(N)dBi$ , that is Directional gain=0+10log(2)dBi=3.01.



# 2. TEST RESULTS

# For WLAN 2.4GHz:

Directional Gain (dBi)		Max. Average Output Power (dBm)	Max. Average Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.01	1.9999	22.61	182.3896	0.07260	1	Complies

# For RLAN 5GHz UNII-1:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.01	1.9999	19.68	92.8966	0.03698	1	Complies

#### For 5GHz UNII-2A:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.01	1.9999	19.77	94.8418	0.03775	1	Complies

#### For 5GHz UNII-2C:

Directional Gain (dBi)	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.01	1.9999	19.82	95.9401	0.03819	1	Complies

## For 5GHz UNII-3:

Directi Gai (dB	n	Directional Gain (numeric)	Max. Output Power (dBm)	Max. Output Power (mW)	Power Density (S) (mW/cm²)	Limit of Power Density (S) (mW/cm²)	Test Result
3.0	1	1.9999	19.60	91.2011	0.03630	1	Complies

## For the max simultaneous transmission MPE:

Power Density (S) (mW/cm <sup>2</sup> )	Power Density (S) (mW/cm <sup>2</sup> )	Total	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result	
2.4GHz	5GHz		(3) (11147/6111)		
0.07260	0.03819	0.11079	1	Complies	

Note: The calculated distance is 20 cm.

Output power including tune up tolerance(tune up tolerance: 2 dBm).

# **End of Test Report**