

# FCC RF EXPOSURE REPORT

## FCC ID: ACJ-V2CA

**Project No.** : 2009C113A  
**Equipment** : Wireless Module  
**Brand Name** : Panasonic  
**Test Model** : PIOT-V2(CA)  
**Series Model** : N/A  
**Applicant** : Panasonic Corporation of North America  
**Address** : Two Riverfront Plaza, 9th Floor, Newark, NJ 07102-5490  
**Manufacturer** : China Hualu Panasonic AVC Networks Co., Ltd.  
**Address** : No.1, Hua Road, Qixianling High Technology Zone Dalian, Liaoning 116023 China.  
**Factory** : China Hualu Panasonic AVC Networks Co., Ltd.  
**Address** : No.1, Hua Road, Qixianling High Technology Zone Dalian, Liaoning 116023 China.  
**Date of Receipt** : Sep. 21, 2020  
Feb. 24, 2021  
**Date of Test** : Sep. 22, 2020 ~ Oct. 19, 2020  
**Issued Date** : Mar. 15, 2021  
**Report Version** : R00  
**Test Sample** : Engineering Sample No.: DG2020091750  
**Standard(s)** : FCC Guidelines for Human Exposure IEEE C95.1 & FCC Part 2.1091  
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.

*Vincent Tan*

Prepared by : Vincent Tan

*Ethan Ma*

Approved by : Ethan Ma



Certificate #5123.02

Add: No.3, Jinshagang 1st 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	Compared with previous test report (BTL-FCCP-3-2009C113), added a power part (Model: TPS62823DLCR) which is used to transfer DC 5V to DC 3.3V. This change was not affect the test result, the rest are kept the same.	Mar. 15, 2021

## 1. TEST FACILITY

The test facilities used to collect the test data in this report is at the location of No.3,Jinshagang 1st Road, Shixia, Dalang Town, Dongguan, Guangdong, China.

BTL's Test Firm Registration Number for FCC: 357015

BTL's Designation Number for FCC: CN1240

## 2. 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	Panasonic	PIOT-V2(CA)	Printed	N/A	-0.71
2	Panasonic	PIOT-V2(CA)	Printed	N/A	0.31

Note:

- (1) Smart antenna system with two transmit/receive chains, but operating in a mode where only one transmit/receive chain is used.
- (2) Ant.1 refers to main antenna, Ant.2 refers to aux antenna.
- (3) Both Ant.1 and Ant.2 had been tested, but the data of Ant.2 were the worst case, so only data of Ant.2 had been recorded of the test results.
- (4) The antenna gain is provided by the manufacturer.

**3. TEST RESULTS**

Tune up tolerance(dBm)	
LE	2.4GHz
≤8.00	≤26.00

For LE:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
0.31	1.0740	8.00	6.3096	0.00135	1	Complies

For 2.4GHz:

Antenna Gain (dBi)	Antenna Gain (numeric)	Max. Peak Output Power (dBm)	Max. Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
0.31	1.0740	26.00	398.1072	0.08510	1	Complies

Note: The calculated distance is 20 cm.  
Output power including tune up tolerance.

**End of Test Report**