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Report No.: 1607RSU00502  
Report Version: V02  
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## RF Exposure Evaluation Declaration

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**FCC ID:** 2AG7C304010001

**APPLICANT:** Hangzhou PPStrong Technology Co., Ltd

**Application Type:** Certification

**Product:** Speed

**Model No.:** 040000

**FCC Classification:** Digital Transmission System (DTS)

Reviewed By  
Manager :

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( Robin Wu )

Approved By  
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( Marlin Chen )



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standards through the calibration of the equipment and evaluated measurement uncertainty herein.

The test report shall not be reproduced except in full without the written approval of MRT Technology (Suzhou) Co., Ltd.

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## Revision History

Report No.	Version	Description	Issue Date	Note
1607RSU00502	Rev. 01	Initial report	08-13-2016	Invalid
1607RSU00502	Rev. 02	Revised the model number	08-19-2016	Valid

## 1. PRODUCT INFORMATION

Product Name	Speed
Model No.	040000
WLAN Specification	
Frequency Range	802.11b/g/n-HT20: 2412 ~ 2462 MHz 802.11n-HT40: 2422 ~ 2452 MHz
Maximum Peak Output Power	802.11b: 12.39dBm 802.11g: 16.69dBm 802.11n-HT20: 17.21dBm 802.11n-HT40: 17.25dBm
Type of Modulation	802.11b: DSSS 802.11g/n: OFDM
Antenna Gain	2.4dBi
Components	
Adapter	M/N: GDP12AH-1201000-UL INPUT: 100-240V ~ 50/60Hz, 0.45A OUTPUT: 12Vdc, 1.0A

## 2. RF Exposure Evaluation

### 2.1. Limits

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environment impact of human exposure to radio frequency (RF) radiation as specified in 1.1307(b)

#### LIMITS FOR MAXIMUM PERMISSIBLE EXPOSURE (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm <sup>2</sup> )	Average Time (Minutes)
(A) Limits for Occupational/ Control Exposures				
300-1500	--	--	f/300	6
1500-100,000	--	--	5	6
(B) Limits for General Population/ Uncontrolled Exposures				
300-1500	--	--	f/1500	6
1500-100,000	--	--	1	30

f= Frequency in MHz

Calculation Formula:  $P_d = (P_{out} \cdot G) / (4 \cdot \pi \cdot r^2)$

Where

$P_d$  = power density in mW/cm<sup>2</sup>

$P_{out}$  = output power to antenna in mW

$G$  = gain of antenna in linear scale

$\pi$  = 3.1416

$r$  = distance between observation point and center of the radiator in cm

$P_d$  is the limit of MPE, 1mW/cm<sup>2</sup>. If we know the maximum gain of the antenna and the total power input to the antenna, through the calculation, we will know the distance  $r$  where the MPE limit is reached.

## 2.2. Test Result of RF Exposure Evaluation

Product	Speed
Test Item	RF Exposure Evaluation

Antenna Gain: Refer to Clause 1 of antenna description.

Test Mode	Frequency Band (MHz)	Maximum Average Output Power (dBm)	Power Density at R = 20 cm (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
802.11b/g/n	2412 ~ 2462	10.13	0.0036	1

### CONCLUSION:

The Max Power Density at R (20 cm) =  $0.0036 \text{ mW/cm}^2 < 1 \text{ mW/cm}^2$ .

So the EUT complies with the requirement.

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