



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

**FCC ID: QISAP5010DNAGN**

**Issued Date** : Nov. 16, 2012  
**Project No.** : 1209C079A  
**Equipment** : Wireless LAN Access Point  
**Model** : AP5010DN-AGN  
**Applicant** : Huawei Technologies Co.,Ltd.  
**Address** : Bantian, Longgang District, Shenzhen China

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

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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

Antenna Specification:

Table for Filed Antenna

**The product has 2 group antenna: Amphenol-SAA and Nippon Antenna(Shanghai)**

Ant.	Brand	Model Name	Antenna Type / Connector	function	Gain (dBi)
1	Amphenol-SAA	N/A	Integral	TX/RX	5.3
2	Amphenol-SAA	N/A	Integral	TX/RX	5.5

Ant.	Brand	Model Name	Antenna Type / Connector	function	Gain (dBi)
1 (Short)	Nippon Antenna (Shanghai)	N/A	Integral	TX/RX	5.79
2 (Long)	Nippon Antenna (Shanghai)	N/A	Integral	TX/RX	5.51

Note: This EUT supports MIMO, all transmit signals are completely uncorrelated, then, **Direction gain = G<sub>ANT</sub>**, that is Directional gain=5.79.

Operating Mode TX Mode	1TX	2TX
	802.11a	V (ANT2 )
802.11n(20MHz)	V (ANT2 )	V (ANT1& ANT2 )
802.11n(40MHz)	V (ANT2 )	V (ANT1& ANT2 )



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EUT:	Wireless LAN Access Point	Model Name :	AP5010DN-AGN
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 4/TX - For 2TX Total		

Antenna Gain (dBi)	Antenna Gain (numeric)	Peak Output Power (dBm)	Peak Output Power (mW)	Power Density (S) (mW/cm <sup>2</sup> )	Limit of Power Density (S) (mW/cm <sup>2</sup> )	Test Result
5.79	3.7931	22.68	185.3532	0.13994274	1	Complies
5.79	3.7931	22.56	180.3018	0.13612891	1	Complies
<b>5.79</b>	<b>3.7931</b>	<b>22.84</b>	<b>192.3092</b>	<b>0.14519457</b>	<b>1</b>	<b>Complies</b>