



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

**FCC ID: QISAP6610DN-AGN**

**Project No.** : 1204C048A  
**Equipment** : Outdoor Wireless LAN Access Point  
**Model** : AP6610DN-AGN-US  
**Applicant** : Huawei Technologies Co.,Ltd.  
**Address** : Bantian, Longgang District, Shenzhen China

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

***Neutron Engineering Inc.***

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### 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

Ant.	Brand name	Model Name	Antenna Type	Function	Gain (dBi)
1	 LARSEN ANTENNAS	W5030	N Male	TX/RX	6.4
2	 LARSEN ANTENNAS	W5030	N Male	TX/RX	6.4

This EUT supports MIMO 2T2R, all transmit signals are completely uncorrelated, then, Directional gain =  $G_{ANT}$ , that is Directional gain=6.4; So, the out power limit is  $30-6.4+6=29.6$ ; and power density limit is  $8-6.4+6=7.6$

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



## TEST RESULTS

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AG N-US
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH52/CH56/CH64-Band 2 A Mode		

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
6.4	4.3652	20.91	123.3105	0.10713969	1	Complies
6.4	4.3652	21.21	132.1296	0.11480224	1	Complies
<b>6.4</b>	<b>4.3652</b>	<b>21.40</b>	<b>138.0384</b>	<b>0.11993622</b>	<b>1</b>	<b>Complies</b>

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6610DN-AG N-US
Temperature:	25 °C	Relative Humidity:	60 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	CH100/CH116/CH140 Band 3 A Mode		

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
<b>6.4</b>	<b>4.3652</b>	<b>22.34</b>	<b>171.3957</b>	<b>0.14891909</b>	<b>1</b>	<b>Complies</b>
6.4	4.3652	22.24	167.4943	0.14552928	1	Complies
6.4	4.3652	19.66	92.4698	0.08034343	1	Complies