



**Neutron Engineering Inc.**

# **FCC RF EXPOSURE REPORT**

**FCC ID: QISAP6510DN-AGN**

**Project No.** : 1204C047B  
**Equipment** : Outdoor Wireless LAN Access Point  
**Model** : AP6510DN-AGN-US  
**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:

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

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	Model Name	Antenna Type / Connector	function	Gain (dBi)
					5.2GHz
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, **Direction gain = G<sub>ANT</sub>**, that is Directional gain=6.4; So, the out power limit is 24-6.4+6=23.6; and power density limit is 11-6.4+6=10.6

Operating Mode TX Mode	1TX	2TX
	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 :	AP6510DN-AG N-US
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 2/TX A Mode/CH52, CH56, CH64		

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	20.01	100.2305	0.087086	1	Complies
6.4	4.3652	19.66	92.4698	0.080343	1	Complies
<b>6.4</b>	<b>4.3652</b>	<b>21.05</b>	<b>127.3503</b>	<b>0.110650</b>	<b>1</b>	<b>Complies</b>

EUT:	Outdoor Wireless LAN Access Point	Model Name :	AP6510DN-AG N-US
Temperature:	25 °C	Relative Humidity:	58 %
Pressure:	1012 hPa	Test Voltage :	AC 120V/60Hz
Test Mode :	Band 3/TX A Mode/CH100, CH116, CH140		

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	20.86	121.8990	0.105913	1	Complies
6.4	4.3652	19.65	92.2571	0.080159	1	Complies
<b>6.4</b>	<b>4.3652</b>	<b>21.25</b>	<b>133.3521</b>	<b>0.115864</b>	<b>1</b>	<b>Complies</b>