



## RF Exposure Evaluation

<b>FCC ID</b>	2ALS8VA50EC
<b>Model</b>	AP6356SDPR
<b>WIFI Specification</b>	2.4GHz: 802.11b/g/n-20; 5GHz: 802.11a/n-20/ac-20/n-40/ac-40/ac-80
<b>WIFI Frequency Range</b>	2.4GHz: 2412 ~ 2462 MHz 5GHz: 5180~5240MHz,5260~5320MHz, 5500~5720 MHz, 5745~5825MHz
<b>BT Specification</b>	V2.1+EDR/ V4.0 LE
<b>BT Frequency Range</b>	2402~2480MHz

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)

### Calculation Formula:

$$Pd = (Pout * G) / (4 * pi * r^2)$$

Where

Pd = power density in mW/cm<sup>2</sup>

Pout = 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



**Calculation Result:**

Mode	Frequency Band (MHz)	Output Power (dBm)	Output Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )
BT	2402 ~ 2480	2.18	1.7	-3.33	20	0.0002	1
WIFI	2412 ~ 2462	18.44	69.8	-0.18	20	0.0133	1
WIFI	5180 ~ 5240	17.49	56.1	-0.03	20	0.0111	1
WIFI	5260 ~ 5320	15.98	39.6	-0.03	20	0.0078	1
WIFI	5500 ~ 5720	15.79	37.9	-0.29	20	0.0071	1
WIFI	5745 ~ 5825	15.59	36.2	-0.30	20	0.0067	1

**Simultaneous Calculation:**

$$CPD1 / LPD1 + CPD2 / LPD2 + \dots \text{etc.} < 1$$

Where

CPD = Calculation power density

LPD = Limit of power density

$$WIFI + BT = 0.0133 + 0.0002 = 0.01335 \text{ mW/cm}^2$$

**Therefore, the maximum calculations are less than the “1” limit. Complies with FCC radiation exposure requirement specified in the FCC Rule 2.1091.**