



RF Exposure Evaluation

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

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

Where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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 ²)	Limit (mW/cm ²)
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.