



Maximum Permissible Exposure

FCC ID	HLZ-AMP220
Model No.	AMP220
RF Specification	2.4G: 802.11b/g/n Bluetooth: V4.2 LE

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

Pd = power density in mW/cm²

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 ²)	Limit (mW/cm ²)
WLAN	2412~2462	24.10	257	2.76	20	0.0965	1
BT	2402~2480	-0.355	0.9215	0	20	0.0002	1



Simultaneous Calculation:

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

Where

CPD = Calculation power density

LPD = Limit of power density

$$\text{WIFI} + \text{BT} = 0.0965 + 0.0002 = 0.00967 \text{ mW/cm}^2$$

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