

FCC ID : ZDYGN3X

Portable device

According to §15.247(e)(i) and §1.1307(b)(1), systems operating under the provisions of this section shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to KDB 447498 (2)(a)(i)

Bluetooth Mode:

Frequency Range		Center frequency (MHz)	60/f SAR Limitation (mw)
Low Frequency (MHz)	High Frequency(MHz)		
2402	2480	2402	25.0

Maximum measured transmitter power (Bluetooth Mode)

Conducted Power (mw)	Max Antenna Gain (dBi)	EIRP (mw)
0.429	0	0.429

Remark: The best case gain of the antenna is 0dBi.

0dBi logarithmic terms convert to numeric result is nearly 1

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 0.429\text{mW} \times 1 = 0.429\text{mW}$$

Wi-Fi Mode:

Frequency Range		Center frequency (MHz)	60/f SAR Limitation (mw)
Low Frequency (MHz)	High Frequency(MHz)		
2412	2462	2462	24.8

Maximum measured transmitter power (Wi-Fi Mode)

Conducted Power (mw)	Max Antenna Gain (dBi)	EIRP (mw)
11.09	0	11.09

Remark: The best case gain of the antenna is 0dBi.

0dBi logarithmic terms convert to numeric result is nearly 1

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 11.09\text{mW} \times 1 = 11.09\text{mW}$$

Both Bluetooth and Wi-Fi Mode:

Frequency Range		Center frequency (MHz)	60/f SAR Limitation (mw)
Low Frequency (MHz)	High Frequency(MHz)		
2402	2480	2462	24.8

Maximum measured transmitter power (Both Bluetooth and Wi-Fi Mode)

Conducted Power (mw)	Max Antenna Gain (dBi)	EIRP (mw)
11.38	0	11.38

Remark: The best case gain of the antenna is 0dBi.

0dBi logarithmic terms convert to numeric result is nearly 1

According to the formula. calculate the EIRP test result:

$$\text{EIRP} = P \times G = 11.38\text{mW} \times 1 = 11.38\text{mW}$$

Threshold at which no SAR required is 24.8mw.

Maximum Tx power is 11.38mw EIRP.

Conclusion: No SAR is required.

SIMULTANEOUS TRANSMISSION EVALUATION

N/A