

## RF Exposure

This device has been evaluated for simultaneous emissions and found to be under the FCC limit.

The limit for FCC is stated in  $\text{mW}/\text{cm}^2$ . The limit is  $1 \text{ mW}/\text{cm}^2$  for the frequency range of 2.4 GHz to 2.4835 GHz.

**BLE EIRP = -14.29dBm + 5.3dBi - 0 = -8.99 dBm = 0.00012618275346Watts**

**WiFi EIRP = 23.03dBm + 2.8dBi - 0 = 25.83 dBm = 0.38282474332 Watts**

The power density from an isotropic source at distance  $r = 20\text{cm}$  is defined:

$$\text{PD} = P / (4 * \text{Pi} * r^2)$$

Where P is the total power in watts and r is the distance in meters

### BLE transmitter

PD $\text{W}/\text{m}^2$	Peak power Watts	Constant	Pi	Distance meters
0.00025103	0.000126183	4	3.141593	0.2

PD $\text{mW}/\text{cm}^2$
0.000025103

### WiFi transmitter

PD $\text{W}/\text{m}^2$	Peak power Watts	Constant	Pi	Distance meters
0.761605628	0.38282474332	4	3.141593	0.2

PD $\text{mW}/\text{cm}^2$
0.076160563

### US MPE Assessment

Power Reported is:	<input checked="" type="checkbox"/> Peak <input type="checkbox"/> Average						
Limit Used is:	<input checked="" type="checkbox"/> General Population <input type="checkbox"/> Occupational Exposure						
Operating Band MHz	Power dBm	Ant Type/Gain dBi	EIRP dBm	Distance cm	MPE $\text{mW}/\text{cm}^2$	Limit $\text{mW}/\text{cm}^2$	S/Limit
2400-2483.5 MHz	-14.29	5.3	-8.99	20	0.000025103	1	0.000025103
2400-2483.5 MHz	23.03	2.8	25.83	20	0.076160563	1	0.076160563
					Aggregate:		0.076185666