

RF Exposure Information for WIP2

According to FCC.15.247(i), 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 levels in excess of the Commission's guidelines.

According to FCC.1.1307(b)(1), FCC1.1310, FCC.2.1093, and TCB Exclusions List, the RF exposure is calculated.

1) RF Output Power Threshold:

Exposure Category	Low Threshold	High Threshold
General population	$(60 / f_{\text{GHz}}) \text{ mW}, d < 2.5 \text{ cm}$ $(120 / f_{\text{GHz}}) \text{ mW}, d > 2.5 \text{ cm}$	$(900 / f_{\text{GHz}}) \text{ mW}, d < 20 \text{ cm}$
Occupational	$(375 / f_{\text{GHz}}) \text{ mW}, d < 2.5 \text{ cm}$ $(900 / f_{\text{GHz}}) \text{ mW}, d > 2.5 \text{ cm}$	$(2250 / f_{\text{GHz}}) \text{ mW}, d < 20 \text{ cm}$

Output power for portable transmitters is the higher of the conducted or radiated (EIRP) source-based time-averaged output.

The f_{GHz} is mid-band frequency, d is the distance to a person's body, excluding hands, wrists, feet, and ankles.

SAR data is not requested for 15.247 devices with output power lower than the threshold.

The WIP2 is a portable device; its middle channel frequency is 2.437 GHz, so,

Threshold = $(60 / f_{\text{GHz}}) \text{ mW} = (60 / 2.437) \text{ mW} = 24.6 \text{ mW}$, i.e. **13.9 dBm**.

2) RF Output Power of WIP2:

The conducted max. peak power of WIP2 is 11.2 dBm.

The radiated RF power (EIRP) is 11.8 dBm measured by substitution method,

When the duty cycle = 100%, the average power is same as the peak power, it is the worst case.

3) Result:

The RF output power of WIP2 is lower than the threshold; the RF exposure requirement is satisfied.