

1. BLE RF exposure compliance evaluation

The product belongs to **standalone portable device** base the FCC rule part 2.1091&2.1093. The transmission frequencies of the device are between 100 MHz and 6 GHz. The worst case test separation distance is **5mm**.

The Max Conducted Output Power and SAR Test Exclusion Threshold (mW) are listed below:

Transmit frequency (GHz)	Max Conducted Output Power (mW)	SAR Test Exclusion Threshold (mW)
2.402	0.824	9.7
2.440	0.862	9.6
2.480	0.755	9.5

The SAR Test Exclusion Threshold is calculated from:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR

- $f(\text{GHz})$ is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation¹⁷
- The result is rounded to one decimal place for comparison

The MPE ratio of each antenna is determined at the minimum test separation distance required by the operating configurations and exposure conditions of the host device, according to the ratio of field strengths or power density to the MPE limit at the test frequency.

MPE ratio: $0.862/9.6 = 0.089$

2. WIFI module's MPE ratio:

WIFI: $0.014/1 = 0.014$

3. Sum of the MPE ratio for all simultaneously transmitting antennas:

$0.089+0.014 = 0.103 < 1.0$

According to SAR Exclusion Threshold in KDB 447498 (D01) General RF Exposure Guidance v05, the SAR report is not required.