

RF exposure information

FCC ID: 2AFW2B024

1. Introduction:

The EUT is designed to be used in portable exposure conditions.

This product integrates a transmitter operated in 2406MHz~2476MHz frequency band.

2. Output power considerations:

Worst case output power transmitter ($E_{\max}$): 91.41 dB μ V/m@3m at 2476MHz

$$P_t = (E \cdot d) / (30 \times g_t) = 0.0037W = 5.68dBm$$

P_t =transmitter output power in watts;

g_t =numeric gain of the transmitting antenna (unitless) = 1;

E =electric field strength in V/m = $(10^{(91.41/20)})/1000000 = 0.037$ V/m

d =measurement distance in meters (m) = 3 m

3. Compliance criteria:

According to 447498 D01 General RF Exposure Guidance v05 The 1-g and 10-g SAR test exclusion thresholds for 100 MHz to 6 GHz at test separation distances ≤ 50 mm are determined by:

$[(\text{max. power of channel, including tune-up tolerance, mW})/(\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0$ for 1-g SAR and ≤ 7.5 for 10-g extremity SAR, where

$f(\text{GHz})$ is the RF channel transmit frequency in GHz

Power and distance are rounded to the nearest mW and mm before calculation

Calculate:

$$(5.68/5) \cdot (2.476)^{0.5} = 1.79 < 3 \text{ for 1g SAR}$$

Then SAR evaluation is not required.