

RF EXPOSURE EVALUATION

FCC ID: 2AEN7-CB001

The maximum peak RF output power is 4.38 mW (GFSK modulation). In the case of GFSK modulation the peak RF output power is virtual identical to average RF output power.

KDB 447498 D01 General RF Exposure Guidance v05r02, section 4.3.1 1) provides the following equation for proving that a device may be excluded from stand-alone SAR tests (1 gram SAR test exclusion threshold):

$$\frac{(\text{maximum power of channel including tune – up tolerance (mW)})}{(\text{minimum test separation distance (mm)})} \times \sqrt{f(\text{GHz})} \leq 3.0$$

- f (GHz) is the RF channel transmit frequency in GHz;
- Power and distance are rounded to the nearest mW and mm before calculation;
- The result is rounded to one decimal place for comparison;
- 3.0 is referred to as the numeric threshold.

Maximum RF output power of channel: 4.38 mW at 2480 MHz.

For a worst-case prediction it is assumed that this maximum RF output power may occur at 2500 MHz. For this device no specific separation distance between the radiating structure and the user is specified which implies a minimum test separation distance of less than 5 mm.

The test exclusions are applicable only when the minimum test separation distance is ≤ 50 mm and for transmission frequencies between 100 MHz and 6 GHz. When the minimum test separation distance is < 5 mm, a distance of 5 mm according to 5) in section 4.1 of KDB 447498 D01 General RF Exposure Guidance v05r02 is applied to determine SAR test exclusion.

$$\frac{(5 \text{ mW})}{(5 \text{ mm})} \times \sqrt{2.5} = 1.6 \leq 3.0$$

The device with FCC ID: 2AEN7-CB001 may be excluded from standalone SAR tests.