# RF Exposure

FCC ID: LLB2017022

The highest output power of the EUT is 0.891 W peak and the gain of the antenna is 3 dBi.

There is be firmware control duty cycle. The firmware is set to limit duty cycle a 40% duty cycle or less in any given 6-minute period. In most cases, the duty cycle is much less than 40%. For all calculations, 40% will be used as a worst-case in any given 6-minute period, as this is a worst case.

## 1.0 RF EXPOSURE PER FCC 1.1310

| MHz | Max Power dBm | Max Ant Gain dBi | Duty Cycle % | EIRP Watts | (S) GP Limit mW/cm^2 | Declared Minimum seperation Distance (cm) | EUT power Density mW/cm2 | Result |
|---|---|---|---|---|---|---|---|---|
| 450 | 29.5 | 3 | 40 | 0.711 | 0.300 | 20.0 | 0.142 | Pass |
| 460 | 29.5 | 3 | 40 | 0.711 | 0.307 | 20.0 | 0.142 | Pass |
| 470 | 29.4 | 3 | 40 | 0.695 | 0.313 | 20.0 | 0.138 | Pass |

Notes on the above table:
   a. S is the power density General Population Limit from FCC 1.1310 Table 1
   b. EIRP Power is the Peak Effective Radiated Power.
      EIRP = (Average Conducted Power + Antenna gain) * Duty Cycle.

## POWER DENSITY

Power density is given by:

$$S = EIRP / (4 * Pi * D^2)$$

Where

S = Power density in mW/cm^2
EIRP = Equivalent Isotropic Radiated Power in mW
D = Separation distance in cm

Since the calculated power density is less than the limit, this product fully meets the OET 65 requirements for the general population.