

Compliance with 47 CFR 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. See § 1.1307(b)(1) of this chapter.”

The EUT is a battery operated sensor (temperature or motion) that can be mounted on the wall or ceiling. It can be considered a mobile transmitter per 47 CFR 2.1093 because it will be used greater than 20cm from the user's head or torso. The transmit frequency is 2405 to 2480 MHz. The antenna is internal to the unit and etched on the circuit board. The antenna is an inverted F pattern antenna with approximately 5.2 dBi of gain.

The maximum peak radiated output power is 2.1 mW EIRP, therefore the EUT does not require MPE estimates or routine SAR evaluation because it falls below the low power threshold of $60/f(\text{GHz})\text{mW}$. Please see this excerpt from KDB 447498D01 Mobile Portable RF Exposure v04, item 2)(a)(i):

"a device may be used in portable exposure conditions with no restrictions on host platforms when either the source-based time-averaged output power is $\leq 60/f(\text{GHz})\text{mW}$ or all measured 1-g SAR are $<0.4\text{W/kg}$."

The applicant's wireless radio, FCC ID: Z3GITA1SENA, is compliant with the requirements of FCC 15.247(i).