

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 contains an 802.15.4 Zigbee transceiver. The device would normally be considered a mobile transmitter per 47 CFR 2.1091 because it is designed to be used in other than fixed locations and to generally be used in such a way that a separation distance of at least 20 centimeters is normally maintained between the transmitter's radiating structure(s) and the body of the user or nearby persons. However there is nothing to prevent a user from placing the device within 20 cm of the user's torso. In that case, it would be considered a portable device per 47 CFR 2.1093.

The antenna is a permanently affixed monopole copper trace F-antenna with 2.0 dBi of gain. The maximum peak conducted output power is 2.13 mW.

The maximum peak radiated power is 3.7 mW eirp for FCC ID: Y38TE6010. The transmit frequency is 2405 to 2480MHz, therefore the EUT does not require 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: Y38TE6010, is compliant with the requirements of FCC 15.247(i).