

Intertek Testing Services

For MPE evaluation of the base unit, refer to OET Bulletin 65 Supplement C (Edition 01-01). Transmitter operating at 4 W EIRP or less at 2450 MHz, generally are not expected to exceed MPE limits when nearby persons are 20 cm or more from most antennas and warning instructions may be used to ensure compliance by indicating the minimal separation distance to comply with MPE limit.

According to the warning instruction in the user manual, the base unit of this model shall be placed at least 20 cm from nearby persons and the measured EIRP is calculated as follow.

The maximum field strength (FS) was 109.7dB μ V/m at 2441.664MHz.
The distance (D) between the antenna and the equipment under test (EUT) was 3 meters.

From these data, the EIRP can be calculated by:

$$\begin{aligned} \text{EIRP} &= (\text{FS} \cdot \text{D})^2 / 30 \\ &= 28.0 \text{ mW} \end{aligned}$$

$$\begin{aligned} \text{The radiated source-based time averaged output power} \\ &= (28.0 \cdot 0.328) \text{ mW} \\ &= 9.18 \text{ mW} \end{aligned}$$

Based on the above calculation and stated warning instruction in user manual, it is concluded that the base unit shall not exceed the MPE limits. The warning instruction is on page 26 of the user manual.