

RF Exposure Evaluation Report

Per 47 CFR 15.247 (b)(4), the EUT meets the requirement that it 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 (ref. CFR 1.1307, 1.130, and 2.1093. See also OET Bulletin 65, Supplement C).

The EUT is considered a mobile transmitter per 47 CFR 2.1093. The EUT will be installed and used 20 cm from the human body.

The MPE estimates are as follows:

The EUT is a mobile device. 47 CFR 2.1093 defines the maximum permissible exposure (MPE) to the body for the general population as 4W/kg as averaged over any 10 grams of tissue in the shape of a cube. This translates into a limit of 40mW for any 10 grams of tissue in the shape of a cube.

The maximum power output of the EUT is 33.1 mW. The worst-case duty factor of the transmitter is 5/6. This occurs when the following sequence is repeated:

The EUT transmits for 5 625us time slots
The EUT receives for 1 625 us time slots

The applicable duty cycle factor is 5/6.

Applying the worst-case absorption by the user as well as the duty cycle factor of 5/6 to the power output of the EUT yields an absorption value of 27.583mW (33.1mW x 5/6 = 27.583 mW). If all of the absorbed energy were distributed in 10 grams of tissue in the shape of a cube then resulting power density would still fall below the limit of 40 mW for any 10 grams of tissue in the shape of a cube.