§ 15.247(i)   Maximum Permissible Exposure

RF Exposure Requirements: **§1.1307(b)(1) and §1.1307(b)(2):** 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.

RF Radiation Exposure Limit: **§1.1310:** As specified in this section, the Maximum Permissible Exposure (MPE) Limit shall be used to evaluate the environmental impact of human exposure to radiofrequency (RF) radiation as specified in Sec. 1.1307(b), except in the case of portable devices which shall be evaluated according to the provisions of Sec. 2.1093 of this chapter.

Peak Conducted Power of 3.6dBi antenna= 29.79dBm = 953mW

3.6dBi antenna gain in terms of linear value= 2.3

The limit for maximum RF exposure for 2.4GHz device is 1mW/cm^2

The formula for calculating RF exposure is given as $S = \frac{PG}{4\pi R^2}$

P=953mW, G= 2.3 & R=20cm, then S comes out to be 0.436mW/cm^2 which was under the limit specified in 1.1310