

Prediction of MPE limit at a given distance: 3 meter

Equation from MILLIMETER WAVE TEST PROCEDURES

$$P_d = E^2/377$$

where

P_d is the power density measured at the measurement distance in W/m²

E is the field strength at measurement distance, in V/m

Note: although the free-space impedance in near-field is not exact 377Ω , using this assumed impedance value one can obtain an adequately accurate result.

According to test results from test report # 215809-1TRFWL, maximum peak field strength at 3 meter is 136.3 dBuV/m, less than 138.3 dBuV/m which equal to $18 \mu\text{W}/\text{cm}^2$

$$P_d < 18 \mu\text{W}/\text{cm}^2 = 0.018 \text{ mW}/\text{cm}^2 \text{ at 3 meter}$$

According to FCC Part 1.1310, Radiofrequency radiation exposure limits, the power density limit around 60 GHz is $1.0 \text{ mW}/\text{cm}^2$

Device fulfills with the requirements of FCC Part 1.1307(b), 2.1091 and 2.1093 for both fundamental emissions and unwanted emissions at 3 meter distance.