

AWB RG211-3.8 CPE (FCC ID: V8YFW181RG38002W)

Maximum Permitted Exposure Calculation

V8YFW181RG38002W_MPE_calc

The equation for the MPE calculation is given in OET bulletin 65, page 19 as

$$S = \text{EIRP}/4\pi r^2$$

Where
S = Power density (W/m²)
EIRP = Effective Isotropically Radiated Power = P x G (W)
r = Perpendicular distance from antenna

The CPE is a mobile station as defined in 47CFR2.1091 and shall be operated with a minimum recommended safe distance of 20 cm.

Values
EIRP = 29.53 dBm = 897 mW (from SC_TR09B)
R = 20 cm

Limit
Maximum permitted value of S is given in table 1(a) – Limits for General Population / uncontrolled Exposure is 1.0 mW/ cm²

Calculation
S = 897 / (4 * 3.14159 * 20²)
S = 0.18 mW/cm²

Conclusion
The RG211-3.8 complies with the MPE requirements for General Population / uncontrolled Exposure at 20cm.