



MDE_GNNET_1206_FCC_MPE

FCC ID BCE-PHS002W
IC ID: 2386C-PHS002W

Maximum Permissible Exposure

as specified in Table 1B of 47 CFR 1.1310 – Limits for Maximum Permissible Exposure (MPE), Limits for General Population/Uncontrolled Exposure

Frequency range (MHz)	Power density (mW/cm ²)
300 – 1,500	f/1500
1,500 – 100,000	1.0

Calculations 2.4 GHz band

The output power at antenna input terminal: 15.66 dBm

Prediction distance **R**: 20 cm
Prediction frequency: 2402 MHz
Antenna Gain: 0.60 dBi

MPE limit **S**: 1 mW/cm²

Equation OET bulletin 65, page 18, edition 97-01: $S = P * G / (4\pi R^2)$

S = power density

P = power input to the antenna

G = power gain of the antenna in the direction of interest relative to an isotropic radiator

R = distance to the centre of radiation of the antenna

Maximum Power density	Limit	Verdict
0.0084 mW/cm ²	1.0 mW/cm ²	Pass

Note. The calculation was made under the consideration of the duty cycle effect.

Yours sincerely

Patrick Lomax, Project Manager

