



MDE_BOSCH_1202_FCC_MPE

FCC ID YBN-NG20HMI
IC ID: 9595A-NG20HMI

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: 20.7 dBm (0.1174 W)

Prediction distance **R**: 20 cm
Prediction frequency: 2461 MHz

MPE limit **S**: 1 mW/cm²

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

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
0.0234 mW/cm ²	1.0 mW/cm ²	Pass

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

Yours sincerely



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