

Equation from page 18

$$S = \frac{PG}{4\pi R^2}$$

$$R = \sqrt{\frac{PG}{4\pi S}}$$

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 center of radiation of the antenna

Choose

↓

Occupational/Controlled -(BTS)

General Population/Uncontrolled -(CPE)

ENTER

↓

Tx Frequency: (MHz)

Maximum Peak Power at Antenna Input Terminal: (dBm)

Antenna gain (typical): (dBi)

S= 1.00 (mW/cm²)
P= 251.19 (mW)
G= 4.47 (numeric)

NOTE: The actual power density levels will be lower than predicted due to a 50% Time Division Duplex operation of the transmitter. This source-based time averaging has not been taken into account in this prediction.

R = 9.45 (cm)

NOTE: The following warning must appear in the installation manual.

CAUTION:

This device is a radio frequency transmitter. It is required to comply with FCC RF exposure requirements for mobile transmitting devices. A minimum separation distance of 20.00 cm or more must be maintained between the antenna and all persons during device operations to ensure compliance with the FCC's rules for Radio Frequency Exposure. If this minimum distance cannot be maintained, exposure to RF levels that exceed the FCC's limits may result.