

Device has a cellular module with FCC ID: XPY1CGM5NNN, however there is no simultaneous transmission of BLE and cellular signals

The following calculation addresses the MPE estimation for the BLE only.

Prediction of MPE limit at a given distance

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

where: 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

Maximum peak output power at the antenna terminal: 5.74 (dBm)
Maximum peak output power at the antenna terminal: 3.749730022 (mW)
Antenna gain(typical): 6.25 (dBi)
Maximum antenna gain: 4.216965034 (numeric)
Prediction distance: 20 (cm)
Prediction frequency: 2402 (MHz)
MPE limit for uncontrolled exposure at prediction frequency: 1 (mW/cm²)

Power density at prediction frequency: **0.003146** (mW/cm²)