

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 device output terminal: 41.10 dBm MIMO operation
 Cable and Jumper loss: 0.0 dB
 Maximum peak output power at antenna input terminal: 41.10 dBm
12882.49552 mW
 Single Antenna gain (typical): 21.04 dBi (max for compliance)
 Number of Un-correlated Antennae: 1
 Total Antenna gain (typical): 21.04 dBi
127.04 (numeric)
 Prediction distance: 700 cm
 Prediction frequency: 881.5 MHz
 MPE limit for uncontrolled exposure at prediction frequency: 0.587666667 mW/cm²

Power density at prediction frequency: 0.265792 mW/cm²
2.657920 W/m²
 Tx On time: 1.000000 ms
 Tx period time: 1.000000 ms
 Average Factor: 100.000000 %
 Average Power density at prediction frequency: 2.657920 W/m²
 Maximum allowable antenna gain: 24.48537002 dBi

Margin of Compliance: 3.44589208 dB