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**Prediction of MPE limit at a given distance**

Mini-Repeater DEKO 2489 fccid: OIWCCSR24891W70

with 2 dBi Omni-directional Antenna (DownLink)

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

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

where:

P = power input to the antenna

S = power density

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 antenna input terminal: 24.10 (dBm)

Maximum peak output power at antenna input terminal: 257.0395783 (mW)

Antenna gain(typical): 2 (dBi)

Maximum antenna gain: 1.584893192 (numeric)

Prediction distance: 20 (cm)

Prediction frequency: 860 (MHz)

MPE limit for uncontrolled exposure at prediction frequency:  
0.573333333 (mW/cm<sup>2</sup>)

Power density at prediction frequency: 0.081046 (mW/cm<sup>2</sup>)

Maximum allowable antenna gain: 10.49677048 (dBi)

Margin of Compliance: 8.496770475 (dB)