Prediction of MPE limit at a given distance

Spotwave Wireless P3YSPOTCELL0007

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 antenna input terminal:	7.00	(dBm)
Maximum peak output power at antenna input terminal:	5.011872336	(mW)
Antenna gain(typical):	3	(dBi)
Maximum antenna gain:	1.995262315	(numeric)
Prediction distance:	20	(cm)
Prediction frequency:	1900	(MHz)
MPE limit for uncontrolled exposure at prediction frequency:	1	(mW/cm^2)
Power density at prediction frequency:	0.001989	(mW/cm^2)
Maximum allowable antenna gain:	30.01269855	(dBi)

Margin of Compliance at 20cm = 27dB