Choose Scandinavian trust

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

Fundamental transmit (prediction) frequency:	753.5	MHz
Maximum measured conducted peak output power:	39.00	dBm
Cable and/or jumper loss:	0.0	dB
Maximum peak power at antenna input terminal:	39.00	dBm
Tx On time:	1.000	ms
Tx period time:	1.000	ms
Average factor:	100	%
Maximum calculated average power at antenna input terminal:	7943.282	mW
Single Antenna gain (typical):	26	dBi
Number of antenna ports:	2	
Total system gain (typical):	29	dBi
MPE limit for uncontrolled exposure at prediction frequency:	0.502333333	mW/cm^2
	5.023333333	W/m^2
Minimum calculated prediction distance for compliance:	1001	cm
Typical (declared) distance:	1500	cm
Average power density at prediction frequency:	**0.223685**	**mW/cm^2**
	2.23685	W/m^2
Margin of Compliance:	**3.51354**	**dB**
Maximum allowable antenna gain:	32.52384	dBi

Model: Ellipse 4G HP B13 - Band 13
Applicant: Redline Communications
Date: October 13, 2020