Nemko ONE WORLD ○ OUR APPROVAL

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

	Using absolute worst case	
	Port 0,1,2,3	
Maximum peak output power at device output terminal:	29.99	dBm
Cable and Jumper loss:	0	dB
Maximum peak output power at antenna input terminal:	29.99	dBm
	997.7000638	mW
Single Antenna gain (typical):	14	dBi
Number of Antennae:	4	
Total Antenna gain (typical):	20	dBi
	100	(numeric)
Prediction distance:	90	cm
Prediction frequency:	3690	MHz
MPE limit for uncontrolled exposure at prediction frequency:	1	mW/cm^2
Power density at prediction frequency:	0.980178376	mW/cm^2
	9.801783758	W/m^2
Tx On time:	1	ms
Tx period time:	1	ms
Average Factor:	100	%
Average Power density at prediction frequency:	9.801783758	W/m^2

0.980 <1.0