

## Prediction of MPE limit at a given distance

Applicant: Giatec Scientific Inc.

Model: 900144

FCC ID: 2AYDI-SBGM13P

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: _	2440 MHz
Maximum measured conducted peak output power: _	<u>19.60</u> dBm
Cable and/or jumper loss: _	<u>0.0</u> dB
Maximum peak power at antenna input terminal:	<u>19.60</u> dBm
Tx On time: _	<u>100.000</u> ms
Tx period time: _	<u>100.000</u> ms
	<u>100</u> %
Maximum calculated average power at antenna input terminal:	91.201 mW
Single Antenna gain (typical):	2.1 dBi
Number of antennae:	1
Total system gain (typical):	2.1 dBi
MPE limit for uncontrolled exposure at prediction frequency:	1 mW/cm <sup>2</sup>
	2
	10 W/m <sup>2</sup>
Minimum calculated prediction distance for compliance:	
·	<u>3</u> cm
Minimum calculated prediction distance for compliance:	<u>3</u> cm
Typical (declared) distance:	3 cm 20 cm
·	3 cm 20 cm 0.029426 mW/cm²
Typical (declared) distance:	3 cm 20 cm
Typical (declared) distance:  Average power density at prediction frequency:	3 cm 20 cm  0.029426 mW/cm² 0.29426 W/m²
Typical (declared) distance:	3 cm 20 cm  0.029426 mW/cm² 0.29426 W/m²  15.31270 dB