

## Prediction of MPE limit at a given distance

Invention Planet Smart Display 341567B-TRFWL Model SD2010 FCC ID: WZK-PR-1003

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 device output terminal:	2.11 dBm
Cable and Jumper loss:	0.0 dB
Maximum peak output power at antenna input terminal:	2.11 dBm
	1.625548756 mW
Single Antenna gain (typical):	7.4 dBi
Number of Antennae:	1
Total Antenna gain (typical):	7.4 dBi
	5.495408739 (numeric)
Prediction distance:	20 cm
Prediction frequency:	2402 MHz
MPE limit for uncontrolled exposure at prediction frequency:	1 mW/cm <sup>2</sup>
<b>Power density at prediction frequency:</b>	<b>0.001777 mW/cm<sup>2</sup></b>
	0.017772 W/m <sup>2</sup>
Tx On time:	1.000000 ms
Tx period time:	1.000000 ms
Average Factor:	100.000000 %
Average Power density at prediction frequency:	0.017772 W/m <sup>2</sup>
Maximum allowable antenna gain:	34.90269855 dBi
<b>Margin of Compliance:</b>	<b>27.50269855 dB</b>