

# RF Exposure Calculation

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user.

The MPE calculation for this exposure is shown below.

## Power density at the specific separation

$S = P G / ( 4 R^2 \pi )$	<b>- Note</b> S = Maximum power density(mW/cm <sup>2</sup> ) P = Power input to the antenna(mW) G = Numeric power gain of the antenna R = Distance to the center of the radiation of the antenna(20cm)
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Mode	802.11b	802.11g	802.11n(HT20)	802.11n(HT40)
Target power (P)	15.00 dBm	10.50 dBm	9.50 dBm	8.00 dBm
Max Tolerance	+ 1.50 dB	+ 1.50 dB	+ 1.50 dB	+ 1.50 dB
Max Target power (P)	16.50 dBm 44.669 mW	12.00 dBm 15.849 mW	11.00 dBm 12.590 mW	9.50 dBm 8.913 mW
Antenna gain (G)	2.95 dBi 1.973 numeric	2.95 dBi 1.973 numeric	2.95 dBi 1.973 numeric	2.95 dBi 1.973 numeric
Calculated Power density (S)	<b>0.018 mW/cm<sup>2</sup></b>	<b>0.007 mW/cm<sup>2</sup></b>	<b>0.005 mW/cm<sup>2</sup></b>	<b>0.004 mW/cm<sup>2</sup></b>

## Conclusion : The exposure condition of this device is compliant with FCC rules.

The maximum permissible exposure(MPE) of the general population/Uncontrolled for this device is 1.0 mW/cm<sup>2</sup>.  
 The power desity at 20cm does not exceed the 1.0mW/cm<sup>2</sup>.