

MPE Calculations(WLAN: 802.11b)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 12.67 dBm
- Max Target Power : 13.00 dBm
- Maximum antenna peak gain : 2.40 dBi
- **Maximum output power for the calculation 13.00 dBm**

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

The MPE calculation for this exposure is shown below.

<ul style="list-style-type: none"> ▪ EIRP = P + G = 13.00 dBm + 2.40 dBi = 15.40 dBm = 34.674 mW 	<ul style="list-style-type: none"> - Note P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)
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- Power density at the specific separation

<ul style="list-style-type: none"> ▪ S = $EIRP / (4 R^2 \pi)$ = 34.674 / (4 X 20² X π) = 0.006899 mW/cm² 	<ul style="list-style-type: none"> - Note S = Maximum power density(mW/cm²) EIRP = Equivalent Isotropic Radiated Power(mW) R = Distance to the center of the radiation of the antenna(20cm)
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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/cm².

MPE Calculations(WLAN: 802.11g)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 10.14 dBm
- Max Target Power : 12.00 dBm
- Maximum antenna peak gain : 2.40 dBi
- **Maximum output power for the calculatio 12.00 dBm**

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

The MPE calculation for this exposure is shown below.

<div>▪ EIRP = P + G</div> <div>= 12.00 dBm + 2.40 dBi</div> <div>= 14.40 dBm = 27.543 mW</div>	<div>- Note</div> <div>P = Power input to the antenna(dBm)</div> <div>G = Power gain of the antenna(dBi)</div>
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- **Power density at the specific separation**

<div>▪ S = EIRP / (4 R² π)</div> <div>= 27.543 / (4 X 20² X π)</div> <div>= <u>0.005480</u> mW/cm²</div>	<div>- Note</div> <div>S = Maximum power dencity(mW/cm²)</div> <div>EIRP = Equivalent Isotropic Radiated Power(mW)</div> <div>R = Distance to the center of the radiation of the antenna(20cm)</div>
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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/cm².

MPE Calculations(WLAN: 802.11n HT20)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 11.14 dBm
- Max Target Power : 12.00 dBm
- Maximum antenna peak gain : 2.40 dBi
- **Maximum output power for the calculatio 12.00 dBm**

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

The MPE calculation for this exposure is shown below.

<div>▪ EIRP = P + G</div> <div>= 12.00 dBm + 2.40 dBi</div> <div>= 14.40 dBm = 27.543 mW</div>	<div>- Note</div> <div>P = Power input to the antenna(dBm)</div> <div>G = Power gain of the antenna(dBi)</div>
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- **Power density at the specific separation**

<div>▪ S = EIRP / (4 R² π)</div> <div>= 27.543 / (4 X 20² X π)</div> <div>= <u>0.005480</u> mW/cm²</div>	<div>- Note</div> <div>S = Maximum power dencity(mW/cm²)</div> <div>EIRP = Equivalent Isotropic Radiated Power(mW)</div> <div>R = Distance to the center of the radiation of the antenna(20cm)</div>
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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/cm².

MPE Calculations(WLAN: 802.11n HT40)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 8.43 dBm
- Max Target Power : 9.00 dBm
- Maximum antenna peak gain : 2.40 dBi
- **Maximum output power for the calculatio 9.00 dBm**

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

The MPE calculation for this exposure is shown below.

<div>▪ EIRP = P + G</div> <div>= 9.00 dBm + 2.40 dBi</div> <div>= 11.40 dBm = 13.804 mW</div>	<div>- Note</div> <div>P = Power input to the antenna(dBm)</div> <div>G = Power gain of the antenna(dBi)</div>
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- **Power density at the specific separation**

<div>▪ S = $EIRP / (4 R^2 \pi)$</div> <div>= 13.804 / (4 X 20² X π)</div> <div>= <u>0.002747</u> mW/cm²</div>	<div>- Note</div> <div>S = Maximum power dencity(mW/cm²)</div> <div>EIRP = Equivalent Isotropic Radiated Power(mW)</div> <div>R = Distance to the center of the radiation of the antenna(20cm)</div>
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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/cm².