

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 calculatio 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.

▪ EIRP = P + G = 13.00 dBm + 2.40 dBi = 15.40 dBm = 34.674 mW	- 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**

▪ S = EIRP / (4 R² π) = 34.674 / (4 X 20² X π) = <u>0.006899</u> mW/cm²	- Note S = Maximum power dencity(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.

▪ EIRP = P + G = 12.00 dBm + 2.40 dBi = 14.40 dBm = 27.543 mW	- 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**

▪ S = EIRP / (4 R² π) = 27.543 / (4 X 20² X π) = <u>0.005480</u> mW/cm²	- Note S = Maximum power dencity(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: 802.11n 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.

▪ EIRP = P + G = 12.00 dBm + 2.40 dBi = 14.40 dBm = 27.543 mW	- 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**

▪ S = $EIRP / (4 R^2 \pi)$ = 27.543 / (4 X 20² X π) = <u>0.005480</u> mW/cm²	- Note S = Maximum power dencity(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: 802.11n 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.

▪ EIRP = P + G = 9.00 dBm + 2.40 dBi = 11.40 dBm = 13.804 mW	- 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**

▪ S = EIRP / (4 R² π) = 13.804 / (4 X 20² X π) = <u>0.002747</u> mW/cm²	- Note S = Maximum power dencity(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.