MPE Calculations : (WLAN: 802.11b)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 14.01 dBm
- Target Power & Tolerance : 13.00 dBm ± 1.5 dB (Max. 14.5 dBm & Min. 11.5 dBm)
- Maximum antenna peak gain : 2.44 dBi
- **Maximum output power for the calculatio 14.50 dBm**

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.

▪ **EIRP** = P + G = 14.50 dBm + 2.44 dBi = **16.94 dBm** = **49.432 mW**	**- Note** P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)

- Power density at the specific separation

▪ **S** = EIRP / (4 R^2 π) = **49.432** / (4 X 20^2 X π) = **0.009835** mW/cm^2	**- Note** S = Maximum power dencity(mW/cm^2) EIRP = Equivalent Isotropic Radiated Power(mW) R = Distance to the center of the radiation of the antenna(20cm)

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^2.

MPE Calculations : (WLAN: 802.11g)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 7.32 dBm
- Target Power & Tolerance : 6.50 dBm ± 1 dB (Max. 7.5 dBm & Min. 5.5 dBm)
- Maximum antenna peak gain : 2.44 dBi
- **Maximum output power for the calculatio 7.50 dBm**

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.

▪ **EIRP** = P + G = 7.50 dBm + 2.44 dBi = **9.94 dBm** = **9.863 mW**	**- Note** P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)

- Power density at the specific separation

▪ **S** = EIRP / (4 R^2 π) = **9.863** / (4 X 20^2 X π) = **0.001963** mW/cm^2	**- Note** S = Maximum power dencity(mW/cm^2) EIRP = Equivalent Isotropic Radiated Power(mW) R = Distance to the center of the radiation of the antenna(20cm)

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^2.

MPE Calculations : (WLAN: 802.11n HT20)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 7.06 dBm
- Target Power & Tolerance : 6.50 dBm ± 1 dB (Max. 7.5 dBm & Min. 5.5 dBm)
- Maximum antenna peak gain : 2.44 dBi
- **Maximum output power for the calculatio 7.50 dBm**

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.

▪ **EIRP** = P + G = 7.50 dBm + 2.44 dBi = **9.94 dBm** = **9.863 mW**	**- Note** P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)

- Power density at the specific separation

▪ **S** = EIRP / (4 R^2 π) = **9.863** / (4 X 20^2 X π) = **0.001963** mW/cm^2	**- Note** S = Maximum power dencity(mW/cm^2) EIRP = Equivalent Isotropic Radiated Power(mW) R = Distance to the center of the radiation of the antenna(20cm)

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^2.

MPE Calculations : (5.1GHz WLAN: 802.11a)

- Frequency range : 5180 MHz ~ 5240 MHz
- Measured RF output power : 3.56 dBm
- Target Power & Tolerance : 3.00 dBm ± 1 dB (Max. 4 dBm & Min. 2 dBm)
- Maximum antenna peak gain : 3.22 dBi
- **Maximum output power for the calculatio 4.00 dBm**

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.

▪ **EIRP** = P + G = 4.00 dBm + 3.22 dBi = **7.22 dBm** = **5.273 mW**	**- Note** P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)

- Power density at the specific separation

▪ **S** = EIRP / (4 R^2 π) = **5.273** / (4 X 20^2 X π) = **0.001050** mW/cm^2	**- Note** S = Maximum power dencity(mW/cm^2) EIRP = Equivalent Isotropic Radiated Power(mW) R = Distance to the center of the radiation of the antenna(20cm)

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^2.

MPE Calculations : (5.7GHz WLAN: 802.11a)

- Frequency range : 5745 MHz ~ 5825 MHz
- Measured RF output power : 4.21 dBm
- Target Power & Tolerance : 3.50 dBm ± 1 dB (Max. 4.5 dBm & Min. 2.5 dBm)
- Maximum antenna peak gain : 4.30 dBi
- **Maximum output power for the calculatio 4.50 dBm**

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.

▪ **EIRP** = P + G = 4.50 dBm + 4.30 dBi = **8.80 dBm** = **7.586 mW**	- **Note** P = Power input to the antenna(dBm) G = Power gain of the antenna(dBi)

- Power density at the specific separation

▪ **S** = EIRP / (4 R^2 π) = **7.586** / (4 X 20^2 X π) = **0.001510** mW/cm^2	- **Note** S = Maximum power dencity(mW/cm^2) EIRP = Equivalent Isotropic Radiated Power(mW) R = Distance to the center of the radiation of the antenna(20cm)

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^2.