MPE Calculations(WLAN: 802.11b)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 15.53 dBm
- Target Power & Tolerance : 15.00 dBm + 1.5 dB (Max. 16.5 dBm & Min. dBm)
- Maximum antenna peak gain : 4.35 dBi

- **Maximum output power for the calculatio 16.50 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 = 16.50 dBm + 4.35 dBi = **20.85 dBm** = **121.619 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) = **121.619** / (4 X 20^2 X π) = **0.024196** 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 : 10.38 dBm
- Target Power & Tolerance : 10.00 dBm + 1.5 dB (Max. 11.5 dBm & Min. dBm)
- Maximum antenna peak gain : 4.35 dBi

- **Maximum output power for the calculatio 11.50 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 = 11.50 dBm + 4.35 dBi = **15.85 dBm** = **38.46 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) = **38.460** / (4 X 20^2 X π) = **0.007652** 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 : 9.49 dBm
- Target Power & Tolerance : 10.00 dBm + 1.5 dB (Max. 11.5 dBm & Min. dBm)
- Maximum antenna peak gain : 4.35 dBi

- **Maximum output power for the calculatio 11.50 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 = 11.50 dBm + 4.35 dBi = **15.85 dBm** = **38.46 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) = **38.460** / (4 X 20^2 X π) = **0.007652** 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 HT40)

- Frequency range : 2422 MHz ~ 2452 MHz
- Measured RF output power : 9.02 dBm
- Target Power & Tolerance : 9.00 dBm + 1.5 dB (Max. 10.5 dBm & Min. dBm)
- Maximum antenna peak gain : 4.35 dBi

- **Maximum output power for the calculatio 10.50 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 = 10.50 dBm + 4.35 dBi = **14.85 dBm** = **30.55 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) = **30.550** / (4 X 20^2 X π) = **0.006078** 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.