MPE Calculations : (WLAN: 802.11b)

- Frequency range : 2412 MHz ~ 2462 MHz
- Measured RF output power : 15.184 dBm
- Target Power & Tolerance : 15.00 dBm ± 1 dB (Max. 16 dBm & Min. 14 dBm)
- Maximum antenna peak gain : 3.30 dBi
- **Maximum output power for the calculation : 16.00 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 = 16.00 dBm + 3.30 dBi = **19.30 dBm** = **85.114 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) = **85.114** / (4 X 20^2 X π) = **0.016933** 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 : 21.143 dBm
- Target Power & Tolerance : 21.00 dBm ± 1 dB (Max. 22 dBm & Min. 20 dBm)
- Maximum antenna peak gain : 3.30 dBi
- **Maximum output power for the calculation : 22.00 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 = 22.00 dBm + 3.30 dBi = **25.30 dBm** = **338.845 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) = **338.845** / (4 X 20^2 X π) = **0.067412** 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 : 22.744 dBm
- Target Power & Tolerance : 23.00 dBm ± 1 dB (Max. 24 dBm & Min. 22 dBm)
- Maximum antenna peak gain : 3.30 dBi
- **Maximum output power for the calculation : 24.00 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 = 24.00 dBm + 3.30 dBi = **27.30 dBm** = **537.032 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) = **537.032** / (4 X 20^2 X π) = **0.106840** 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 : 20.684 dBm
- Target Power & Tolerance : 21.00 dBm ± 1 dB (Max. 22 dBm & Min. 20 dBm)
- Maximum antenna peak gain : 3.30 dBi
- **Maximum output power for the calculation : 22.00 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 = 22.00 dBm + 3.30 dBi = **25.30 dBm** = **338.845 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) = **338.845** / (4 X 20^2 X π) = **0.067412** 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.