

MPE Calculations : (Bluetooth)

- Frequency range : 902.75 MHz ~ 927.25 MHz
- Measured RF output power : 29.61 dBm
- Target Power & Tolerance : 29.00 dBm ± 1 dB ( Max. 30 dBm & Min. 28 dBm )
- Maximum antenna peak gain : 1.76 dBi
  
- **Maximum output power for the calculation : 30.00 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.

|                                                                                                                         |                                                                                                                                |
|-------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------|
| <div><div>▪ <b>EIRP</b> = P + G</div><div>= 30.00 dBm + 1.76 dBi</div><div>= <b>31.76 dBm = 1499.685 mW</b></div></div> | <div><div>- <b>Note</b></div><div>P = Power input to the antenna(dBm)</div><div>G = Power gain of the antenna(dBi)</div></div> |
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- Power density at the specific separation

|                                                                                                                                                                               |                                                                                                                                                                                                                                |
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| <div><div>▪ <b>S</b> = EIRP / ( 4 R<sup>2</sup> π )</div><div>= <b>1499.685</b> / ( 4 X 20<sup>2</sup> X π )</div><div>= <u><b>0.298353</b></u> mW/cm<sup>2</sup></div></div> | <div><div>- <b>Note</b></div><div>S = Maximum power dencity(mW/cm<sup>2</sup>)</div><div>EIRP = Equivalent Isotropic Radiated Power(mW)</div><div>R = Distance to the center of the radiation of the antenna(20cm)</div></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/cm<sup>2</sup>.