MPE Calculation : Bluetooth LE

RF function or Mode	Frequency range (MHz)		Max. Target Power (dBm)	ANT Gain (dBi)	Maximum EIRP (dBm)	Maximum EIRP (mW)	Maximum power density (mW/cm^2)	Requriment (mW/cm^2)
BLE(Antenna 1)	2402.00	~ 2480.00	-2.50	2.69	0.19	1.045	0.0003	1.000
BLE(Antenna 2)	2402.00	~ 2480.00	-2.50	2.83	0.33	1.079	0.0003	1.000
		~						
		~						
		~						
		~						
		~						
		~						

Note: Please refer to the operation description for Max tune-up power.

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 sample calculation for this exposure is shown below.

- **S =**   EIRP / (4 R^2 π)   **- Note**

  =   1.045 / (4 X 20^2 X π)   S= Maximum power density(mW/cm^2)

  =   0.0003 mW/cm^2 EIRP= Equivalent Isotropic Radiated Power(mW)

                  R= Distance to the center of the radiation of the antenna(20cm)

- **Limits for Maximum Permissible Exposure (MPE)**

Frequency range (MHz)		Electric Field strength (V/m)	Magnetic field strength (A/m)	Power Density (mW/cm^2)	Averageing time (minutes)
0.3	~ 1.34	614	1.63	*100	30
1.34	~ 30	824/f	2.19 / f	*180 / f^2	30
30	~ 300	27.5	0.073	0.2	30
300	~ 1,500			f / 1500	30
1,500	~ 100,000			1.0	30

Conclusion : The exposure condition of this device is compliant with FCC