MPE Calculation

RF feature(Mode)	Frequency range (MHz)			Tune-up Max power(dBm)	ANT Gain (dBi)	Cable loss between transmitter and antenna(dB)	Duty Factor(dB)	Adjusted EIRP to tune-up max(dBm)	Maximum power density (mW/cm^2)	Requirement (mW/cm^2)
LTE Band 7	2 500.00	~	2 570.00	23.00	3.22	9.04	NA	17.18	0.010 4	1.000 0
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Note1: Please refer to the tune-up porcedure for tune-up max.

Note2: EIRP(Adjusted EIRP to Tune- up Max) = Tune-up power(dBm) + Antenna gain(dBi) + Cable loss(dB) + Duty factor(dB)

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)

= 17.180 / (4 X 20^2 X π)

= 0.010 mW/cm^2

- Note

S= Maximum power density(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)	Averaging 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