

# FCC Part 2 section 2.1091

<b>(ii) Limits for General Population/Uncontrolled Exposure</b>				
Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm <sup>2</sup> )	Averaging time (minutes)
0.3-1.34	614	1.63	*(100)	<30
1.34-30	824/f	2.19/f	*(180/f <sup>2</sup> )	<30
30-300	27.5	0.073	0.2	<30
300-1,500			f/1500	<30
1,500-100,000			1	<30

f = frequency in MHz. \* = Plane-wave equivalent power density.

The EUT will only be used with a separation of 20 centimeters or greater between the antenna and the body of the user.

$$S = \text{EIRP} / (4 R^2 \pi)$$

- Note

S= Maximum power density(mW/cm<sup>2</sup>)

EIRP= Equivalent Isotropic Radiated Power(mW)

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

## Maximum Permissible Exposure Calculation

Operation Mode	Evaluation Frequency (MHz)	MAX Output Power (dBm)	Antenna Gain (dBi)	MAX. EIRP (dBm)	MAX. EIRP (mW)	Distance (cm)	Power Density (mW/cm <sup>2</sup> )	Limit (mW/cm <sup>2</sup> )	Result
2.4G DTS (FPC Ant.)	2406~2478	8.37	4.80	13.17	20.75	20	0.004	1	Pass

### Conclusion of Simultaneous Transmitter

#### Not Support

The formula of calculated the MPE is  $CPD1 / LPD 1 + CPD2 / LPD 2 + \dots < 1$

CPD = Calculation power density / LPD = Limit of power density

Result : #REF! + = #REF! < 1

### Conclusion

**maximum calculations of above situations are less than the “1” limit.**