

MPE Calculation

$$S = \frac{EIRP}{4R^2\pi}$$

S = Maximum power density (mW/cm2)
P = Power input to the antenna (mW)
G = Numeric power gain of the antenna
R = Distance to the center of the radiation of the antenna
EIRP = Equivalent Isotropic Radiated Power(mW) (=P*G)

Frequency range (MHz)			Electric Field strength (V/m)	Magnetic field strength (A/m)	Power Density (mW/cm2)	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	30

Model Name : TSC-443P

FCC ID : 2AZK3-TSC-443P

Separation distance (R) : 20.0 cm

Modulation	Frequency (MHz)	Measured Maximum Average power	Tune-up tolerance	Max. Power with tune-up tolerance (P)		Antenna Gain (G)		Power Density (S)	Limit of Power Density (S)	Result
		(dBm)	(dB)	(dBm)	(mW)	(dBi)	(numeric)	(mW/cm2)	(mW/cm2)	
802.11b	2412	15.67	± 1.00	16.67	46.45	-1.32	0.74	0.0068	1.00	PASS
	2437	15.65		16.65	46.24	-1.32	0.74	0.0068	1.00	PASS
	2462	15.86		16.86	48.53	-1.32	0.74	0.0071	1.00	PASS
802.11b	2412	14.15	± 1.00	15.15	32.73	1.00	1.26	0.0082	1.00	PASS
	2437	14.11		15.11	32.43	1.00	1.26	0.0081	1.00	PASS
	2462	14.35		15.35	34.28	1.00	1.26	0.0086	1.00	PASS
802.11b	2412	14.08	± 1.00	15.08	32.21	1.00	1.26	0.0081	1.00	PASS
	2437	14.06		15.06	32.06	1.00	1.26	0.0080	1.00	PASS
	2462	14.21		15.21	33.19	1.00	1.26	0.0083	1.00	PASS

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