FCC§15.319(i)&2.1091-RF RADIATION EXPOSURE Limit

According to FCC §15.319(i) and §1.1307(b)(1), systems operating under the provisions of this section Shall be operated in a manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

Limits for Maximum Permissible Exposure (MPE) (§1.1310, §2.1091)

Frequency Range(MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm2)	Averaging Time (minute)
Limits for General Population/Uncontrolled Exposure				
0.3-1.34	614	1.63	*(100)	30
1.34-30	842/f	2.19/f	*(180/f\2\)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

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

MPE Calculation

Predication of MPE limit at a given distance

$$S=PG/4\pi R^2$$

Where: S=power density (in appropriate units, e.g.mW/cm^2
P=power input to the antenna (in appropriate units, e.g., mW);
G=power gain of the antenna in the direction of interest relative to an isotropic radiator
R=distance to the center of radiation of the antenna (appropriate units, e.g., cm);

Frequency (MHz)	Antenna Gain		Conducted		Evaluation Distance (cm)	Power Density (mW/cm^2)	MPE Limit (mW/cm^2)
	(dBi)	(numeric)	(dBm)	(mW)			
1921.536	0.16	1.04	17.68	58.61	20	0.0121	1
1924.992	0.16	1.04	17.52	56.49	20	0.0117	1
1928.448	0.16	1.04	17.40	54.95	20	0.0113	1

The Maximum permissible exposure (MPE) for the general population is 1 mW/cm^2 .
The power density at 20cm does not exceed the 1 mW/cm^2 limit.