RF EXPOSURE

Applicable Standards:

§1.1310 and §2.1093

According to 1.1307(b)(1), systems operating under the provisions of this section shall be operated in Manner that ensures that the public is not exposed to radio frequency energy level in excess of the Commission's guidelines.

According to 1.1310 and 2.1091 RF exposure is calculated . Limits for Maximum Pemissible Exposure (MPE)

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(B) Limits for General Population/Uncontrolled Exposure				
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 - 1500	--.	--.	f/1500	30
1500 - 100,000	--	--	1.0	30

Test Data:

S=PG/4∏R2

Where: S= Power density

P= Power input to antenna

G=Power gain of the antenna in the direction of interest relative to an isotropic radiator

R=Distance to the center of raidation of the antenna

Maximum peak output power at antenna input terminal : 32.42 (dBm) =**1.745(W)**

Prediction distance 20 (cm)

Prediction frequency :850 (MHz)

Antenna Gain: 1.0 dBi

Power density at predication frequency at 20cm :0.437(mW/cm2)

MPE Limit for uncontrolled exposure at prediction frequency : 850/1500=**0.567(mW/cm2)**