RF EXPOSURE STATEMENT

1. LIMITS

According to §1.1310 and §2.1091 RF exposure is calculated.

(B) Limits for General Population/Uncontrolled Exposures

Frequency range (MHz)	Electric field Strength (V/m)	Magnetic field Strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)
0.3 - 1.34…………………………………	614	1.63	*(100)	30
1.34 - 30…………………………………	824/f	2.19/f	*(180/ f²)	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

2. MAXIMUM PERMISSIBLE EXPOSURE Prediction

Prediction of MPE limit at a given distance

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

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 radiation of the antenna

2-1 Limit (iDEN)

Max Peak output Power at antenna input terminal	37.04	dBm
Max Peak output Power at antenna input terminal	5058.247	mW
Prediction distance	200.000	cm
Prediction frequency	940.988	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.50435	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.627	mW/cm^2

2-2 Limit (FSK)

Max Peak output Power at antenna input terminal	37.040	dBm
Max Peak output Power at antenna input terminal	5058.247	mW
Prediction distance	200.000	cm
Prediction frequency	929.013	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.50435	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.619	mW/cm^2

3. RESULTS

 The power density level at 200 cm is 0.50435mW/cm², which is below the uncontrolled exposure limit of 0.627 mW/cm² at iDEN

 The power density level at 200 cm is 0.50435 mW/cm², which is below the uncontrolled exposure limit of 0.627 mW/cm² at FSK

 Note: ""RF exposure will be addressed at time of installation and the use of higher gain antennas may require larger separation distances."