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/cm^2)	Averaging 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 - 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
Equation from page 18 of OET Bulletin 65, Edition 97-01

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

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. CELLUAR BAND

Max Peak output Power at antenna input terminal (dBm)	33.100
Max Peak output Power at antenna input terminal (mW)	2041.738
Prediction distance (cm)	20.000
Prediction frequency (MHz)	836.600
Antenna Gain(typical) (dBi)	-0.760
Antenna Gain(numeric)	0.839
Power density at prediction frequency (mW/cm²)	0.341
MPE limit for uncontrolled exposure at prediction frequency (mW/cm²)	0.558

2-1. PCS BAND

Max Peak output Power at antenna input terminal (dBm)	30.08000
Max Peak output Power at antenna input terminal (mW)	1018.59139
Prediction distance (cm)	20.00000
Prediction frequency (MHz)	1850.20000
Antenna Gain(typical) (dBi)	-1.25000
Antenna Gain(numeric)	0.74989
Power density at prediction frequency (mW/cm²)	0.15196
MPE limit for uncontrolled exposure at prediction frequency (mW/cm²)	1.00000

3. RESULTS

The power density level at 20 cm is 0.341 mW/cm², which is below the uncontrolled exposure limit of 0.558 mW/cm² at 836.6 MHz for Cellular band. The power density level at 20 cm is 0.15196 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at 1850.2 MHz for PCS band.