

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)	24.010
Max Peak output Power at antenna input terminal (mW)	251.189
Prediction distance (cm)	20.000
Prediction frequency (MHz)	848.310
Antenna Gain(typical) (dBi)	0.000
Antenna Gain(numeric)	1.000
Power density at prediction frequency (mW/cm ²)	0.050
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	0.566

2-2. PCS BAND

Max Peak output Power at antenna input terminal (dBm)	24.010
Max Peak output Power at antenna input terminal (mW)	251.189
Prediction distance (cm)	20.000
Prediction frequency (MHz)	1908.750
Antenna Gain(typical) (dBi)	-3.000
Antenna Gain(numeric)	0.501
Power density at prediction frequency (mW/cm ²)	0.025
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.000

3. RESULTS

The power density level at 20 cm is 0.050 mW/cm², which is below the uncontrolled exposure limit of 0.550 mW/cm² at 848.31 MHz for Cellular band. The power density level at 20 cm is 0.025 mW/cm², which is below the uncontrolled exposure limit of 1 mW/cm² at 1908.75 MHz for PCS band.