

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. CDMA BAND

Max Peak output Power at antenna input terminal (dBm)	24.180
Max Peak output Power at antenna input terminal (mW)	261.818
Prediction distance (cm)	20.000
Prediction frequency (MHz)	848.310
Antenna Gain(typical) (dBi)	-2.000
Antenna Gain(numeric)	0.631
Power density at prediction frequency (mW/cm ²)	0.03286
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	0.566

2-2. PCS CDMA BAND

Max Peak output Power at antenna input terminal (dBm)	23.850
Max Peak output Power at antenna input terminal (mW)	242.661
Prediction distance (cm)	20.000
Prediction frequency (MHz)	1851.250
Antenna Gain(typical) (dBi)	-2.000
Antenna Gain(numeric)	1.81000
Power density at prediction frequency (mW/cm ²)	0.08738
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	1.00000

3. RESULTS

The power density level at 20 cm is 0.03286 mW/cm², which is below the uncontrolled exposure limit of 0.558 mW/cm² at 848.310 MHz for CDMA band. The power density level at 20 cm is 0.08738 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at 1851.25 MHz for CDMA PCS band.