

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

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

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

3. RESULTS

3-1. CDMA BAND

Max Average output Power at antenna input terminal (dBm)	25.000
Max Average output Power at antenna input terminal (mW)	316.228
Prediction distance (cm)	20.000
Prediction frequency (MHz)	817.900
Antenna Gain(Peak) (dBi)	5.120
Antenna Gain(numeric)	3.251
Power density at prediction frequency (mW/cm ²)	0.20452
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	0.545

3-2. PCS CDMA BAND

Max Average output Power at antenna input terminal (dBm)	25.000
Max Average output Power at antenna input terminal (mW)	316.228
Prediction distance (cm)	20.000
Prediction frequency (MHz)	1880.00
Antenna Gain(Peak) (dBi)	6.1200
Antenna Gain(numeric)	4.09261
Power density at prediction frequency (mW/cm ²)	0.257472
MPE limit for uncontrolled exposure at prediction frequency (mW/cm ²)	0.545