

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 -	1.0	30
100.000.....				

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 (CDMA & EVDO)

Max Peak output Power at antenna input terminal	44.10	dBm
Max Peak output Power at antenna input terminal	25703.96	mW
Prediction distance	500.00	cm
Prediction frequency	1993.75	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.410	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

2-2 Limit (WCDMA)

Max Peak output Power at antenna input terminal	44.04	dBm
Max Peak output Power at antenna input terminal	25351.29	mW
Prediction distance	500.00	cm
Prediction frequency	1932.40	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.404	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

2-3 Limit (GSM &EDGE)

Max Peak output Power at antenna input terminal	44.07	dBm
Max Peak output Power at antenna input terminal	25527.01	mW
Prediction distance	500.00	cm
Prediction frequency	1962.40	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.407	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

2-4 Limit (LTE 5MHz)

Max Peak output Power at antenna input terminal	44.17	dBm
Max Peak output Power at antenna input terminal	26121.61	mW
Prediction distance	500.00	cm
Prediction frequency	1962.50	MHz
Antenna Gain(typical)	17.00	dBi
Antenna Gain(numeric)	50.12	-
Power density at prediction frequency(S)	0.417	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.000	mW/cm ²

3. RESULTS

The power density level at 500 cm is 0.410 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at CDMA& EVDO

The power density level at 500 cm is 0.404 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at WCDMA

The power density level at 500 cm is 0.407 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at GSM & EDGE

The power density level at 500 cm is 0.417 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at LTE

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