

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

2-1 Limit (CDMA & EVDO)

Max Peak output Power at antenna input terminal	44.09	dBm
Max Peak output Power at antenna input terminal	256.44840	mW
Prediction distance	500.0000	cm
Prediction frequency	893.250	MHz
Antenna Gain(typical)	14.800	dBi
Antenna Gain(numeric)	30.200	-
Power density at prediction frequency(S)	0.24652	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.596	mW/cm ²

2-2 Limit (WCDMA)

Max Peak output Power at antenna input terminal	44.03	dBm
Max Peak output Power at antenna input terminal	25292.980	mW
Prediction distance	500.000	cm
Prediction frequency	878.000	MHz
Antenna Gain(typical)	14.800	dBi
Antenna Gain(numeric)	30.200	-
Power density at prediction frequency(S)	0.24314	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.585	mW/cm ²

2-3 Limit (GSM &EDGE)

Max Peak output Power at antenna input terminal	44.050	dBm
Max Peak output Power at antenna input terminal	25409.727	mW
Prediction distance	500.000	cm
Prediction frequency	893.600	MHz
Antenna Gain(typical)	14.800	dBi
Antenna Gain(numeric)	30.200	-
Power density at prediction frequency(S)	0.24426	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.596	mW/cm ²

2-4 Limit (LTE 5MHz)

Max Peak output Power at antenna input terminal	44.020	dBm
Max Peak output Power at antenna input terminal	25234.808	mW
Prediction distance	500.000	cm
Prediction frequency	891.500	MHz
Antenna Gain(typical)	14.800	dBi
Antenna Gain(numeric)	30.200	-
Power density at prediction frequency(S)	0.24258	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.594	mW/cm ²

3. RESULTS

The power density level at 500 cm is 0.24652 mW/cm², which is below the uncontrolled exposure limit of 0.596 mW/cm² at CDMA& EVDO

The power density level at 500 cm is 0.24314 mW/cm², which is below the uncontrolled exposure limit of 0.585 mW/cm² at WCDMA

The power density level at 500 cm is 0.24426 mW/cm², which is below the uncontrolled exposure limit of 0.596 mW/cm² at GSM & EDGE

The power density level at 500 cm is 0.24258 mW/cm², which is below the uncontrolled exposure limit of 0.594mW/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."