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	37.000	dBm
Max Peak output Power at antenna input terminal	5011.872	mW
Prediction distance	200.000	cm
Prediction frequency	862.750	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.49972	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.575	mW/cm^2

2-2 Limit (WCDMA)

Max Peak output Power at antenna input terminal	37.000	dBm
Max Peak output Power at antenna input terminal	5011.872	mW
Prediction distance	200.000	cm
Prediction frequency	878.000	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.49972	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	37.020	dBm
Max Peak output Power at antenna input terminal	5035.006	mW
Prediction distance	200.000	cm
Prediction frequency	862.400	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.50203	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.575	mW/cm^2

2-4 Limit (LTE 5MHz)

Max Peak output Power at antenna input terminal	37.004	dBm
Max Peak output Power at antenna input terminal	5016.491	mW
Prediction distance	200.000	cm
Prediction frequency	891.500	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.50018	mW/cm^2
MPE limit for uncontrolled exposure at prediction frequency	0.594	mW/cm^2

3. RESULTS

The power density level at 200 cm is 0.49972 mW/cm², which is below the uncontrolled exposure limit of 0.575 mW/cm² at CDMA& EVDO

The power density level at 200 cm is 0.49972 mW/cm², which is below the uncontrolled exposure limit of 0.585 mW/cm² at WCDMA

The power density level at 200 cm is 0.50203 mW/cm², which is below the uncontrolled exposure limit of 0.575 mW/cm² at GSM & EDGE

The power density level at 200 cm is 0.50018 mW/cm², which is below the uncontrolled exposure limit of 0.594 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."