

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 (LTE 20MHz)

Max Average output Power at antenna input terminal	37.000	dBm
Max Average output Power at antenna input terminal	5011.872	mW
Prediction distance	30.000	cm
Prediction frequency	2496.00	MHz
Antenna Gain(typical)	3.000	dBi
Antenna Gain(numeric)	1.99526	-
Power density at prediction frequency(S)	0.884194	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	1.0000	mW/cm ²

3. RESULTS

The power density level at 30 cm is 0.884194 mW/cm², which is below the uncontrolled exposure limit of 1.0 mW/cm² at LTE 20MHz

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