

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

Equation from page 18 of OET Bulletin 65, Edition 97-01

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

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 5MHz)

Max Peak output Power at antenna input terminal	44.06	dBm
Max Peak output Power at antenna input terminal	25468.303	mW
Prediction distance	500.00	cm
Prediction frequency	737.500	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.40630	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.492	mW/cm ²

2-2 Limit (LTE 10MHz)

Max Peak output Power at antenna input terminal	44.03	dBm
Max Peak output Power at antenna input terminal	25292.98	mW
Prediction distance	500.000	cm
Prediction frequency	734.000	MHz
Antenna Gain(typical)	17.000	dBi
Antenna Gain(numeric)	50.119	-
Power density at prediction frequency(S)	0.40351	mW/cm ²
MPE limit for uncontrolled exposure at prediction frequency	0.489	mW/cm ²

3. RESULTS

The power density level at 500 cm is 0.40630 mW/cm², which is below the uncontrolled exposure limit of 0.492 mW/cm² at LTE 5MHz

The power density level at 500 cm is 0.40351mW/cm², which is below the uncontrolled exposure limit of 0.489 mW/cm² at LTE 10MHz

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