

# 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 <sup>2</sup> )	Averaging time (minutes)
0.3 - 1.34.....	614	1.63	*(100)	30
1.34 - 30.....	824/f	2.19/f	*(180/ f <sup>2</sup> )	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

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. LTE BAND

Max Peak output Power at antenna input terminal (dBm)	23.420
Max Peak output Power at antenna input terminal (mW)	219.786
Prediction distance (cm)	20.000
Prediction frequency (MHz)	782.000
Antenna Gain(typical) (dBi)	-0.420
Antenna Gain(numeric)	0.908
Power density at prediction frequency (mW/cm <sup>2</sup> )	0.03969
MPE limit for uncontrolled exposure at prediction frequency (mW/cm <sup>2</sup> )	0.521

## 3. RESULTS

The power density level at 20 cm is 0.03969 mW/cm<sup>2</sup>, which is below the uncontrolled exposure limit of 0.521 mW/cm<sup>2</sup> at **LTE** band.