

Revised R.F Exposure/Safety Calculation for 2000-CELL-PCSH

The typical distance between the E.U.T. and the general population is >20 cm.

Calculation of Maximum Permissible Exposure (MPE) Based on Section 1.1307(b)(1) Requirements

(a) FCC limit at 1960 MHz is: $1 \frac{mW}{cm^2}$

FCC limit at 881.5 MHz is: $f / 1500 = 0.587 \frac{mW}{cm^2}$

Using table 1 of Section 1.1310 limit for general population/uncontrolled exposures, the above level is an average over 30 minutes.

(b) The power density produced by the E.U.T. is

$$S = \frac{P_t G_t}{4\pi R^2}$$

P_t- Transmitted Peak Power (worst case)

G_T- Antenna Gain ,dBi

R- Distance from Transmitter

(c) Peak power density at worst case continuous transmission:

Modulation	P _t (mW)	Antenna type	G _T (dBi)	R (cm)	S _{AV} (mW/cm ²)	Spec (mW/cm ²)
W-CDMA	183.65	External	7	20	0.183	1
GSM	124.17	External	7	20	0.124	1
CDMA	136.77	External	7	20	0.136	0.587