

Radio Frequency Exposure

The following is a worksheet that is used to test the proposed antenna to assure that it meets federal regulations for Radio Frequency Radiation occupational exposure. Please note that if your tower also contains transmitters from broadcasting or other radio services, that may increase your exposure.

Effective Radiation Center Height		
1	Enter the proposed radiation center above ground	29 m
2	Is antenna supporting structure located on the roof of a building?	YES
3	Building height measured from base of antenna	5 m
4	Subtract Line 3 from Line 1	24 m
5	Subtract the value of 2.0 from Line 4	22 m
Total Effective Radiated Power		
6	Effective Radiated Power in the Horizontal Plane	0.100 kW
7	Effective Radiated Power in the Vertical Plane	0.100 kW
8	Total radiated ERP	0.200 kW
Percentage of FCC RF Limit(s) for Maximum Permissible Exposure		
9	Multiply line 8 by 33.41	6.682
10	Multiply the value of Line 5 by itself	484.000
11	Divide Line 9 by Line 10	0.01381
12	Multiply Line 11 by 100	1.381 %
Determination of compliance with Controlled/Occupational Limit		
13	Does Line 12 exceed 100%?	NO
Determination of compliance with Uncontrolled/General Population Limit		
14	Does Line 12 exceed 20%?	NO
This site should comply with the FCC's Uncontrollable/General Population RF Exposure Limits for Ground Level Exposure. - No further study required.		