

## 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 9 m
- 2 Is antenna supporting structure located on the roof of a building? NO
- 5 Subtract the value of 2.0 from Line 1 7 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 49.000
- 11 Divide Line 9 by Line 10 0.13637
- 12 Multiply Line 11 by 100 13.637 %

### 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.

## Tower Structure Details

Antenna Type Supporting Height

Free-standing tower 10

In the calculation of electrical degrees, the entire tower structure height will be considered.

## AM Station Details

Array Center	Distance	Elec. Degrees		Notify AM Station	
Latitude	Longitude	Required	Actual	Req'd	Actual
WKJB 710 kHz (423 m) Non-Directional (Daytime)					
18 10' 8.40"	67 9' 3.60"	423 m	2572 m 60	8.52	NO
WKJB 710 kHz (423 m) Non-Directional (Nighttime)					
18 10' 8.40"	67 9' 3.60"	423 m	2572 m 60	8.52	NO
WPRA 990 kHz (303 m) Non-Directional (Unlimited)					
18 10' 8.40"	67 9' 3.60"	303 m	2572 m 60	11.88	NO
WI2XSO 1260 kHz (238 m) Directional (Daytime)					
18 9' 18.00"	67 9' 7.20"	2381 m	3443 m 36	15.12	NO
WI2XSO 1260 kHz (238 m) Directional (Nighttime)					
18 9' 18.00"	67 9' 7.20"	2381 m	3443 m 36	15.12	NO
WORA 760 kHz (395 m) Directional (Unlimited)					
18 11' 31.20"	67 9' 28.80"	3000 m	3676 m 36	9.12	NO
NEW 1660 kHz (181 m) Non-Directional (Daytime)					
18 11' 31.20"	67 9' 32.40"	181 m	3769 m 60	19.92	NO
NEW 1660 kHz (181 m) Non-Directional (Nighttime)					
18 11' 31.20"	67 9' 32.40"	181 m	3769 m 60	19.92	NO
WTIL 1300 kHz (231 m) Non-Directional (Unlimited)					
18 10' 58.80"	67 10' 4.80"	231 m	4337 m 60	15.60	NO

Wael 600 kHz (500 m) Directional (Nighttime)

18 10' 37.20"	67 10' 15.60"	3000 m	4581 m	36	7.20	NO
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Wael 600 kHz (500 m) Directional (Daytime)

18 10' 37.20"	67 10' 15.60"	3000 m	4581 m	36	7.20	NO
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No impact to AM stations is predicted