# **Minimum Safe Distance From Antennas** Based upon FCC OET Bulletin 65 and other FCC Sources

#### **INPUT DATA**

| Frequency MHz      | 824    |
|--------------------|--------|
| Pout Watts         | 2.8180 |
| Duty Cycle Percent | 100.0% |
| Ant. Gain dBi      | 15.00  |
| Coax Loss dB       | 0.00   |

## **RESULTS OF CALCULATIONS**

| Min. Distance Inches      | 44.73   |
|---------------------------|---------|
| Min. Distance Centimeters | 113.62  |
| ERP (Watts)               | 54.3372 |
| EIRP (Watts)              | 89.1130 |

#### **REFERENCE DATA**

| Antenna Gain (non-log)    | 31.62  |
|---------------------------|--------|
| Coax loss (non-log)       | 1.00   |
| Calculated limit (mw/cm2) | 0.55   |
| FCC Limit (mw/cm2)        | f/1500 |

## NOTES:

- (1) Valid only between 300 MHz 100,000 MHz.
- (2) Calculations are sufficient for determining antenna safe distance for mobile antennas provided that calculated ERP < 1.5 watts for frequencies equal to or below 1.5 GHz, and calculated ERP < 3 watts for frequencies above 1.5 GHz.</p>
- (3) Mobile antenna distances shall be no less than 8 inches.
- (4) There are no predefined ERP and distance limitations for fixed <u>outside</u> (building) antennas (see #5).
- (5) Indoor building antenna criteria is the same as the criteria for mobile antennas (see #2 & #3).
- (6) Mobile/portable stations are limited to 2 watts EIRP peak power in the 1900 MHz band (see 24.232[c]).

| For Amplifier Model Number: | 271201   |
|-----------------------------|--|
| Frequency Band (MHz)        | 800  |
| Mobile or Building?         | Building   |
| Outside or Inside Antenna?  | Outside  |
| Antenna Type:               | Any Antenna whose overall<br>gain, including coax loss,<br>is less than 15 dBi |
| Safe Distance (inches):     | 48   |
| Signature:                  | Wheel M. Kliw  |
| Date:                       | 11/14/2008   |

## SUMMARY FOR PUBLICATION