

Evans Associates

210 S. Main Street, Thiensville WI, 53092-1905
Phone (262) 242-6000 FAX (262) 242-6045

Engineering Exhibit

**FCC Form 302 Application for License
WSUM(FM), Madison, Wisconsin
University of Wisconsin System**

This Statement has been prepared by B. Benjamin Evans, P.E. of Evans Associates, Consulting Communications Engineers in Thiensville, Wisconsin, on behalf of the University of Wisconsin System, permittee of noncommercial FM broadcast station WSUM(FM) in Madison, Wisconsin, assigned to operate on Channel 219A (91.7 MHz). This exhibit is in support of an application to modify the license of WSUM. WSUM has replaced its directional antenna with a similar type directional antenna, except that the replacement antenna is oriented at a different azimuth. Also the ERP is being reduced from 5.6 to 4.9 KW. There is no change in the antenna height. The purpose of this exhibit is to demonstrate that WSUM is in compliance with §73.316 of the FCC Rules regarding the requirements of a directional antenna.

This engineer certifies that:

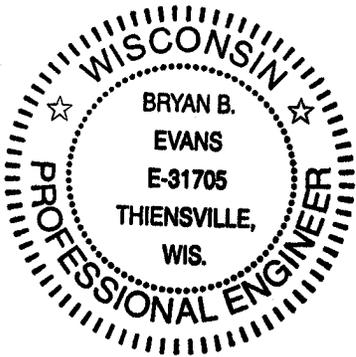
1. The WSUM antenna is side-mounted on the antenna tower in accordance with specific instructions provided by ERI, Inc. the manufacturer of the antenna;
2. The antenna tower does not include a top-mounted platform larger than the nominal cross-sectional area of the tower in the horizontal plane;
3. No other antenna of any type is mounted on the same tower level as the WSUM antenna, and no antenna of any type is mounted within the horizontal or vertical distances specified by ERI as being necessary for proper directional operation;
4. The antenna has been installed pursuant to ERI's instructions;
5. A licensed surveyor has certified that the installed antenna is properly oriented (see attachment);
6. At 4.9 KW the ERP does not exceed the authorized antenna radiation limits at any azimuth.
7. WSUM, using the measured composite pattern to calculate the projected F(50,50) 60 dBu contour, covers more than half of the city of Madison, the community of license (see attachment).

Evans Associates

210 S. Main Street, Thiensville WI, 53092-1905
Phone (262) 242-6000 FAX (262) 242-6045

- 8. The orientation of the antenna is N 12° E. The orientation shown in the ERI report is 102°. It is shown this way so that the surveyor could align the antenna by going parallel with the backside of the antenna's reflector panel, which is perpendicular to the antenna element.

The foregoing statement and included figures are true and accurate to the best of my knowledge and belief.



A handwritten signature in black ink, appearing to read "Bryan B. Evans".

B. Benjamin Evans, P.E.

October 25, 2002