

**Call letters:** WBKY(FM) .C  
**City of License:** Stoughton, WI  
**Channel:** CH240D (95.9 MHz)  
**File No:** LMS-0000200820  
**Facility ID:** 39625  
**Applicant:** MAGNUM COMMUNICATIONS, INC.

## Explanation of FM License to Cover Filing and Compliance with Special Operating Conditions or Restrictions

1. The applicant certifies coordination with other users of the site to reduce power or cease operation as necessary to protect persons having access to the site, tower or antenna from radiofrequency electromagnetic fields in excess of FCC guidelines.
2. The applicant acknowledges this is a Section 215 (short-spaced) contour protection grant as requested by the applicant.
3. The applicant certifies it has submitted the results of a complete proof-of-performance establishing the horizontal plane radiation patterns for both the horizontally and vertically polarized radiation components. This proof-of-performance has been accomplished using either the complete full size antenna, or individual bays therefrom, mounted on a supporting structure of identical dimensions and configuration as the proposed structure, including all braces, ladders, conduits, coaxial lines, and other appurtenances; or using a carefully manufactured scale model of the entire antenna, or individual bays therefrom, mounted on an equally scaled model of the proposed supporting structure, including all appurtenances. The applicant has submitted engineering exhibits herein including a description of the antenna testing facilities and equipment employed, including appropriate photographs or sketches and a description of the testing procedures, including scale factor, measurements frequency, and equipment calibration (See *Attached Antenna Proof of Performance*). **In this instance, the antenna was to be oriented at 266°T; but surveyed at 267°T. Per FCC staff, a supplemental ERI Statement has been provided indicating the one (1) degree discrepancy is acceptable and won't modify the measured DA pattern from the proof.**
4. The applicant certifies it has submitted a certification executed by a licensed surveyor showing that the FM directional antenna system has been oriented at the azimuth(s) specified in the directional antenna proof of performance. This certification includes a description of the method used by the surveyor to determine the azimuth(s) of the installed directional antenna system and the accuracy of that determination (See *Attached Surveyor's Certification*). **In this instance, the antenna was to be oriented at 266°T; but surveyed at 267°T. Per FCC staff, a supplemental ERI Statement has been provided indicating the one (1) degree discrepancy is acceptable and won't modify the measured DA pattern from the proof**
5. The applicant certifies it has submitted an affidavit that the installation of the directional antenna system was overseen by a qualified engineer. This declaration includes a certification by the engineer that the antenna was installed pursuant to the manufacturer's instructions and lists the qualifications of the certifying engineer (See *Attached Engineer's Affidavit*).
6. The applicant certifies it has submitted an exhibit demonstrating that the measured directional antenna pattern complies with the appropriate community coverage provisions of 47 C.F.R. Sections 73.315 or 73.515 (See 47 C.F.R. Section 73.316(c)(2)(ix)(B)) (See *Attached Community Coverage Showing*).
7. The applicant certifies the relative field strength of neither the measured horizontally nor vertically polarized radiation component exceeds at any azimuth the value indicated on the composite radiation pattern authorized by this construction permit. In this instance, a relative field strength of 1.0 on the composite radiation pattern herein authorized corresponds to the following effective radiated power: 2.0 kilowatts. The principal minima and their associated field strength limits as follows: 100 – 110 degrees True: 0.105 kilowatts (See *Attached Antenna Proof of Performance*).