

ENGINEERING STATEMENT

The engineering data contained herein have been prepared on behalf of RADIANT LIFE MINISTRIES, INC., licensee of full-power digital television station KONC(TV), Channel 7 in Alexandria, Minnesota, in support of its Application for Modification of License LMS-0000219812, to specify a new make and model of the transmitting antenna. No change in site location, effective radiated power, antenna azimuth pattern/orientation or antenna height is proposed herein.

The new antenna is an Alive ATC-BCE26SC-V2-7 directional elliptically polarized slotted cylinder with the same horizontal azimuth pattern as the authorized KONC(TV) antenna. Elevation and azimuth pattern data are included as Exhibit B.

A revised power density calculation is provided in Exhibit C.

Since no change in the authorized KONC(TV) coverage contours is proposed herein, the facility continues to place a city-grade 43 dBu contour over the entirety of Alexandria, Minnesota, and no interference study is provided.

I declare under penalty of perjury that the foregoing statements and the attached exhibits are true and correct to the best of my knowledge and belief.

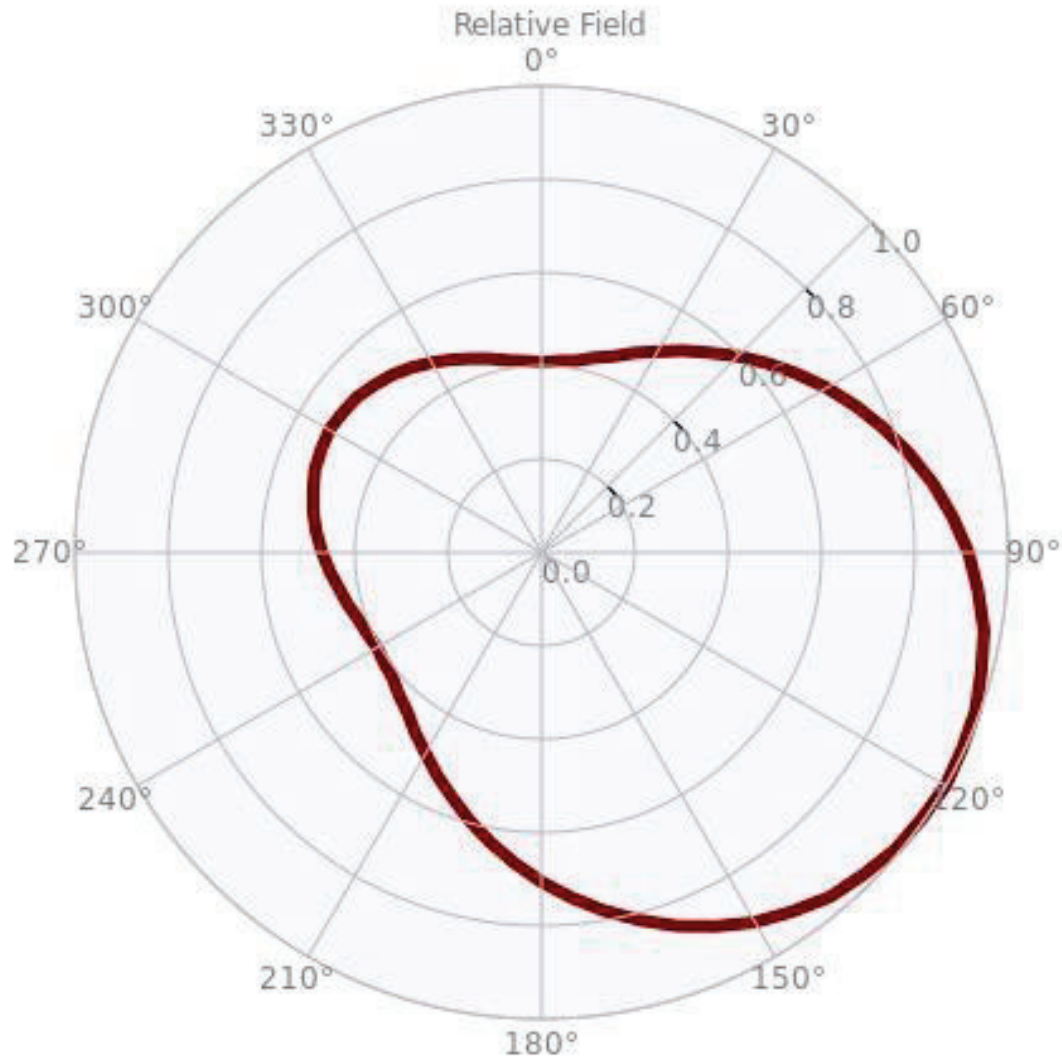
A handwritten signature in blue ink, appearing to read 'K. T. Fisher', with a stylized flourish at the end.

KEVIN T. FISHER

September 6, 2023

Horizontal Azimuth Pattern

EXHIBIT B



Elevation pattern -5 to 90

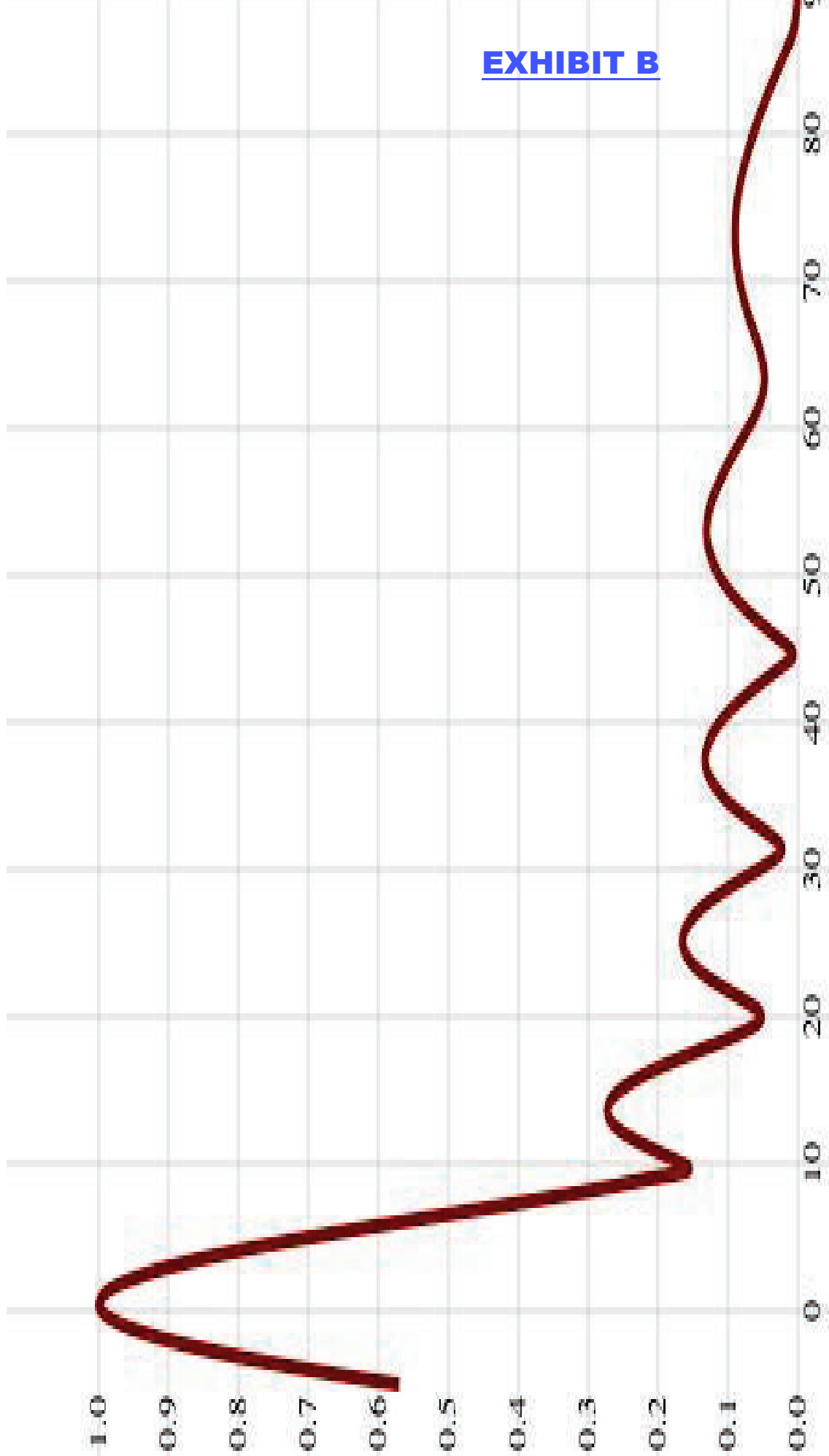


EXHIBIT B



Azimuth Pattern Tabulation, FCC

EXHIBIT B

| Angle | Field | dB |
|-------|-------|-------|
| 0° | 0.407 | -7.81 |
| 10° | 0.417 | -7.60 |
| 20° | 0.448 | -6.97 |
| 30° | 0.497 | -6.07 |
| 40° | 0.559 | -5.05 |
| 50° | 0.631 | -4.00 |
| 60° | 0.705 | -3.04 |
| 70° | 0.780 | -2.16 |
| 80° | 0.851 | -1.40 |

| Angle | Field | dB |
|-------|-------|-------|
| 90° | 0.915 | -0.77 |
| 100° | 0.963 | -0.33 |
| 110° | 0.990 | -0.09 |
| 120° | 1.000 | 0.00 |
| 130° | 0.990 | -0.09 |
| 140° | 0.963 | -0.33 |
| 150° | 0.915 | -0.77 |
| 160° | 0.852 | -1.39 |
| 170° | 0.780 | -2.16 |

| Angle | Field | dB |
|-------|-------|-------|
| 180° | 0.706 | -3.02 |
| 190° | 0.631 | -4.00 |
| 200° | 0.559 | -5.05 |
| 210° | 0.497 | -6.07 |
| 220° | 0.447 | -6.99 |
| 230° | 0.417 | -7.60 |
| 240° | 0.407 | -7.81 |
| 250° | 0.418 | -7.58 |
| 260° | 0.441 | -7.11 |

| Angle | Field | dB |
|-------|-------|-------|
| 270° | 0.470 | -6.56 |
| 280° | 0.497 | -6.07 |
| 290° | 0.517 | -5.73 |
| 300° | 0.525 | -5.60 |
| 310° | 0.517 | -5.73 |
| 320° | 0.497 | -6.07 |
| 330° | 0.470 | -6.56 |
| 340° | 0.442 | -7.09 |
| 350° | 0.418 | -7.58 |

POWER DENSITY CALCULATION

PROPOSED KONC(TV)
CHANNEL 7 – ALEXANDRIA, MINNESOTA

Since the FCC considers the possible biological effects of RF transmissions in its environmental determinations, we have studied the matter with respect to this Alexandria facility. Employing the methods set forth in *OET Bulletin No. 65* and considering a main-lobe effective radiated power of 140 kW (H) and 112 kW (V), an antenna radiation center 280 meters above ground, and the specific elevation pattern of the Alive antenna, maximum power density two meters above ground of 0.0012 mW/cm² is calculated to occur 209 meters southeast of the base of the tower. Since this is only 0.6 percent of the 0.20 mW/cm² reference for uncontrolled environments (areas with public access) surrounding a facility operating on Channel 7 (174-180 MHz), a grant of this proposal may be considered a minor environmental action with respect to public exposure to non-ionizing electromagnetic radiation.

Further, the station owner will take whatever precautionary steps are necessary, such as reducing power or leaving the air temporarily, to ensure that workers operating in the vicinity of the antenna are not exposed to excessive non-ionizing radiation.