

APPLICATION FOR STATION LICENSE
CUMULUS LICENSING LLC
KACL (FM) RADIO STATION
CH 254C1 - 98.7 MHZ - 100.0 KW
BISMARCK, NORTH DAKOTA
May 2006

EXHIBIT A

KACL Transmission System Calculations

Effective Radiated Power:	
Horizontal	100.0 kilowatts
Vertical	100.0 kilowatts
Antenna:	Electronics Research, Inc. FMH-10AC 10 bay full wave spaced antenna
Horizontal gain	5.556 ¹
Transmission Line: (272 feet)	Dielectric DC-475-003 4 inch air dielectric 95.9% efficiency
Transmission Line: (265 feet)	Andrew HJ11-50 4 inch air dielectric 93.4% Efficiency
ERI two stations combiner: Band pass - tee type	Insertion Loss 0.310 db ² 93.111%
Required Transmitter Power Output To Reach Effective Radiated Power:	21.58 kilowatts

Facilities Authorized:	Channel 254C1 - 98.7 MHz
Effective Radiated Power:	100.0 kilowatts (H/V)
Geographic Coordinates:	North Latitude 46° 35' 24" West Longitude 100° 47' 46"
Antenna Center of Radiation:	Above Ground 160 meters Above MSL 835 meters HAAT 255 meters
Antenna Structure Registration #:	1040570

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- 1) This is due to KACL sharing the antenna with KKCT.
 - 2) From BLH-19971017CD