K268DF [Facility ID 141262]
Special Operating Conditions

Condition 2:

See Spurious Emissions Study Below Starting on Page 2

Condition 3:

The KFOR(AM) base impedance did not vary more than 2% from the measurements taken before and after construction.

TPO Calculation

TPO calculation:

Bext TFC2K-2-0.75 Antenna	-0.71 dBd
320’ RFS 7/8 Foam	-1.15 dBd
Kintronic FMC 1.5 Isocoupler	-0.20 dBd
12’ RFS 7/8 Foam	-0.04 dBd
Nicom BFSD1000 diplexer	-0.80 dBd
12’ RFS ½ Foam jumper	-0.08 dbd
Total gain/loss	-2.98 dBd

Transmitter power required to achieve 0.25 kW ERP is 497 watts

TPO Rounded to 500 watts per §73.212

Spurious Emissions Study

To Demonstrate Compliance with 73.317(b) through 73.317(d) of the FCC Rules and Regulations.

K277CA 103.3 Lincoln, NE Facility ID 138615

K268DF 101.5 Lincoln, NE Facility ID 141262

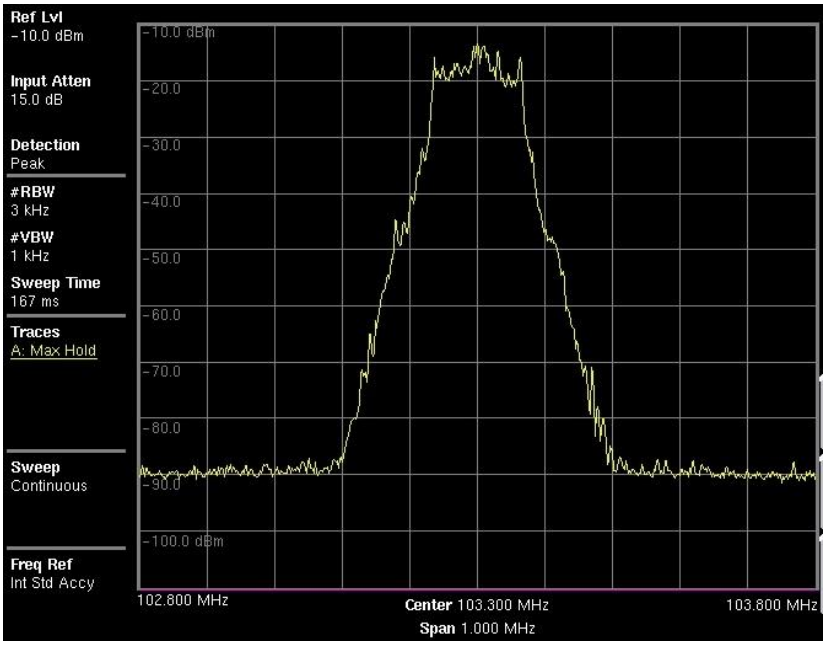
Alpha 3E Licensee LLC

Measurements were conducted on the K277CA and K268DF combined antenna system on November 17, 2023 by Greg Gade, Broadcast Engineer for the common licensee Alpha 3E Licensee LLC. Measurements were conducted using an Anritsu MS2712E spectrum analyzer s/n 0950163 using a sample obtained at the output of the combiner. Both transmitters were configured for normal operation into the shared antenna. A broad-spectrum sweep found no obvious products above the noise floor of the instrument. Special attention was given to calculated potential mixing products and harmonics as indicated in the below table. The transmitters were observed to be in compliance with section 73.317(d) of the FCC Rules that state frequencies removed from carrier by 600 kHz or more must be attenuated at least 43 + 10 Log10 (Power, in watts) dB below the unmodulated carrier, or 80 dB, whichever is the lesser attenuation. In this instance 67 dB of attenuation is required at an operating power of 250 watts.

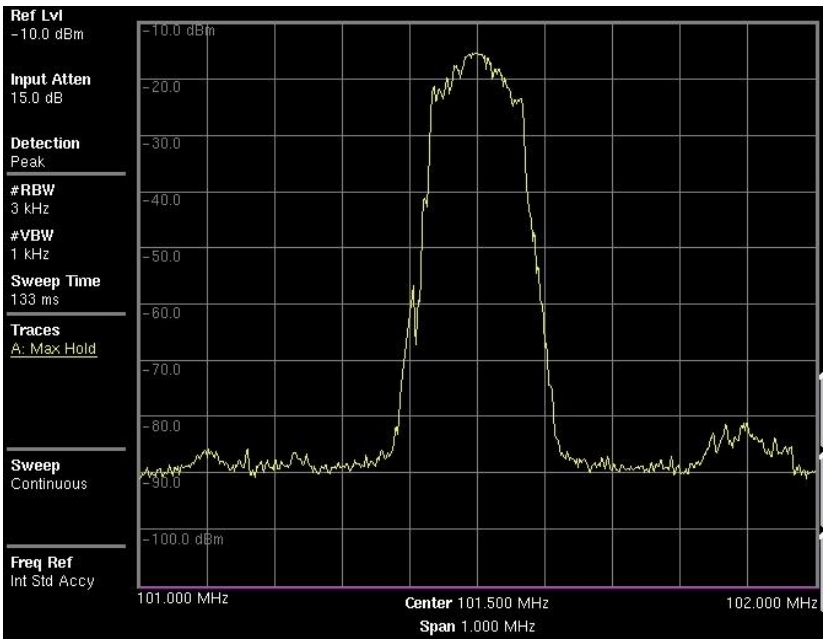
Frequency	***Measurement***		***Frequency***	***Measurement***
3.6 MHz	> -90 dBc		306.3 MHz	> -90 dBc
5.4 MHz	> -90 dBc		308.1 MHz	> -90 dBc
97.9 MHz	> -90 dBc		309.9 MHz	> -90 dBc
99.7 MHz	-79 dBc		406.0 MHz	> -90 dBc
105.1 MHz	> -90 dBc		407.8 MHz	> -90 dBc
106.9 MHz	> -90 dBc		409.6 MHz	> -90 dBc
201.2 MHz	> -90 dBc		411.4 MHz	> -90 dBc
203.0 MHz	> -90 dBc		413.2 MHz	> -90 dBc
204.8 MHz	> -90 dBc		507.5 MHz	> -90 dBc
206.6 MHz	> -90 dBc		511.1 MHz	> -90 dBc
208.4 MHz	> -90 dBc			
304.5 MHz	> -90 dBc			

Both transmitters were also observed to comply with section 73.317(b) of the FCC Rules regarding emissions appearing on frequencies removed from the carrier between 120 kHz and 240 kHz attenuated by at least 25 dB below carrier. Both are also in compliance with 73.317(c) of the FCC Rules regarding emissions appearing on frequencies removed from the carrier between 240 kHz and 600 kHz attenuated by at least 35 dB.

K277CA



K268DF



Note: The peak observed at 101.9 MHz is KOOO(FM) La Vista, NE