



December 7, 2017

**Spurious Emission and Occupied Bandwidth Measurements for
K228EV, K262BT and K274AF
Montrose CO**

K228EV (93.5 MHz), K262BT (100.1 MHz) and K274AF (102.3 MHz) as tested were each operating using a BW Broadcast TX300 V2 transmitter at 300 watts transmitter power output (TPO) with normal stereo modulation. The three transmitters were connected to a SIRA model 113015024 combiner feeding a three-bay antenna.

Measurements were taken with all three transmitters operating simultaneously in normal operating configuration. The sample was taken at the output connection of the combiner with a sample tee.

An Anritsu MS2711D spectrum analyzer was used to perform all measurements.

Occupied bandwidth was measured at 93.5, 100.1 and 102.3 MHz. All three signal were found to be within the mask detailed in 47 CFR 73.317(b) and (c).

The RF spectrum was examined for spurious emissions with particular attention given to possible mixing products caused by co-located FM broadcast transmitters. All detectable spurious emissions were attenuated more than $43 + 10\log(\text{TPO})$ dB as specified in 47 CFR 73.317(d), or in this case -67.8 dBc for the 300 watt TPO.

Harmonic energy was measured for each signal up to the 9th harmonic. Only the second harmonic of each transmitter was detectable, at -78 dBc for K228EV, -73 dBc for K262BT, and -78 dBc for K272AF. All three were below the -67.8 dBc threshold mentioned above.

In summary, K228EV, K262BT and K274AF were found to be within compliance of FCC regulations for spurious emissions and occupied bandwidth.

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