

K266BR 101.1 Mhz

On the afternoon of July 7, 2021, spurious emission measurements were performed for K238BO, K266BR, and KPLD-FM1 using the JDSU JD746 S/N DCA13030 and Trilithic Model VF-4 S/N 964505 filter. The three stations share a combined master antenna system fabricated by Nicom USA and a Bext Starpoint combiner.

Measurements were taken at an RF sample port on the output of the combiner with sufficient analyzer attenuation and sweep settings and show the transmitter met the requirements of 73.317 or 74.1236 as applicable. All measurements were made at each stations licensed power into the combiner as required by 74.1236(a)-(d) and 73.317(b)-(d). Measurements were referenced to the peak level of the carrier.

74.1236(c)

Emissions between 120 to 240 kHz are less than -25 dBc.

Emissions between 240 to 600 kHz are less than -35 dBc.

Emissions greater than 600 kHz are required to be -60 dBc.

Harmonic and mix frequencies of K266BR were calculated to show spurious emissions met the requirements of 74.1236. Harmonic frequencies were calculated using the fundamental frequency (a) and beat frequency (b) using the common $f=2a-b$ formula.

The required attenuation of spurious emissions of the translator as calculated by 73.317(d):

$$43 + 10 \text{ LOG } (250\text{W}) = -66.9794 \text{ dB (K266BR)}$$

Mixed frequencies of the shared antenna system were calculated. Measurements met the requirements of 73.317(d). Normal program audio was used in the measurements of 73.317(d):

85.9	Mhz	-100.86	dB
89.9	Mhz	-100.12	dB
97.1	Mhz	-91.74	dB
114.7	Mhz	-102.47	dB
106.7	Mhz	-94.55	dB
191.0	Mhz	-90.95	dB

All measurements show K266BR met the requirements of 47 CFR 74.1236, 73.317 as required in permit.



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