

Measurements of K228FG and K272FJ
In support of Construction Permit File Numbers
BMPFT-20161205ABA and BMPFT-20161205AAZ

I, Paul S. Easter am Technical Director for Houston Christian Broadcasters, Inc. licensee of K228FG and K272FJ. I am experienced in the field of Broadcast Engineering. I held an FCC First-Class Radiotelephone license (with radar endorsement) since 1976, now a General Class Radiotelephone license. I am an active member of the Society of Broadcast Engineers and have attained the certification level of Certified Professional Broadcast Engineer (CPBE) and Certified Broadcast Networking Technologist (CBNT). My work is a matter of record with the Federal Communications Commission. I attest that the information within this report is true and factual to the best of my knowledge.

K228FG uses a Crown FM500T and K272FG uses a Crown FM200T. The combiner is a Bext FDCSD03. The antenna is a wideband Nicom BKG77-2. An Agilent 9340B analyzer was used to take these measurements. Both transmitters were set for normal power output and modulation into the antenna system. The RF was sampled at the output of the combiner. Filters were employed in the sample when needed to attenuate the carrier signals to prevent overload of the analyzer and improve dynamic range while measuring harmonics and spurious emissions. No harmonics or spurious signals above FCC standards set forth in FCC rule number 73.317 were noted. The carrier reference level used for the measurement of spurious emissions and harmonics was +8 Dbm.

M1:155.06 MHz

-89.58 dBm

Ref:-10.00 dBm

Att:10 dB

Log
10
dB/

Marker 1 is a data channel in another service.

LgAv

1V P

2S P

3S P

4S P

FC

ETrg

FFT

73.317 (d)

Start:108.000000 MHz

Stop:600.000000 MHz

#Res BW:1.000 kHz

VBW:1.000 kHz

Sweep:75.93 s

Ref:8.00 dBm

Att:30 dB

Log
10
dB/

PAvg

1V A

2S P

3S P

4S P

FC

ETng

FFT

K228FG
73.317 (b) (c)

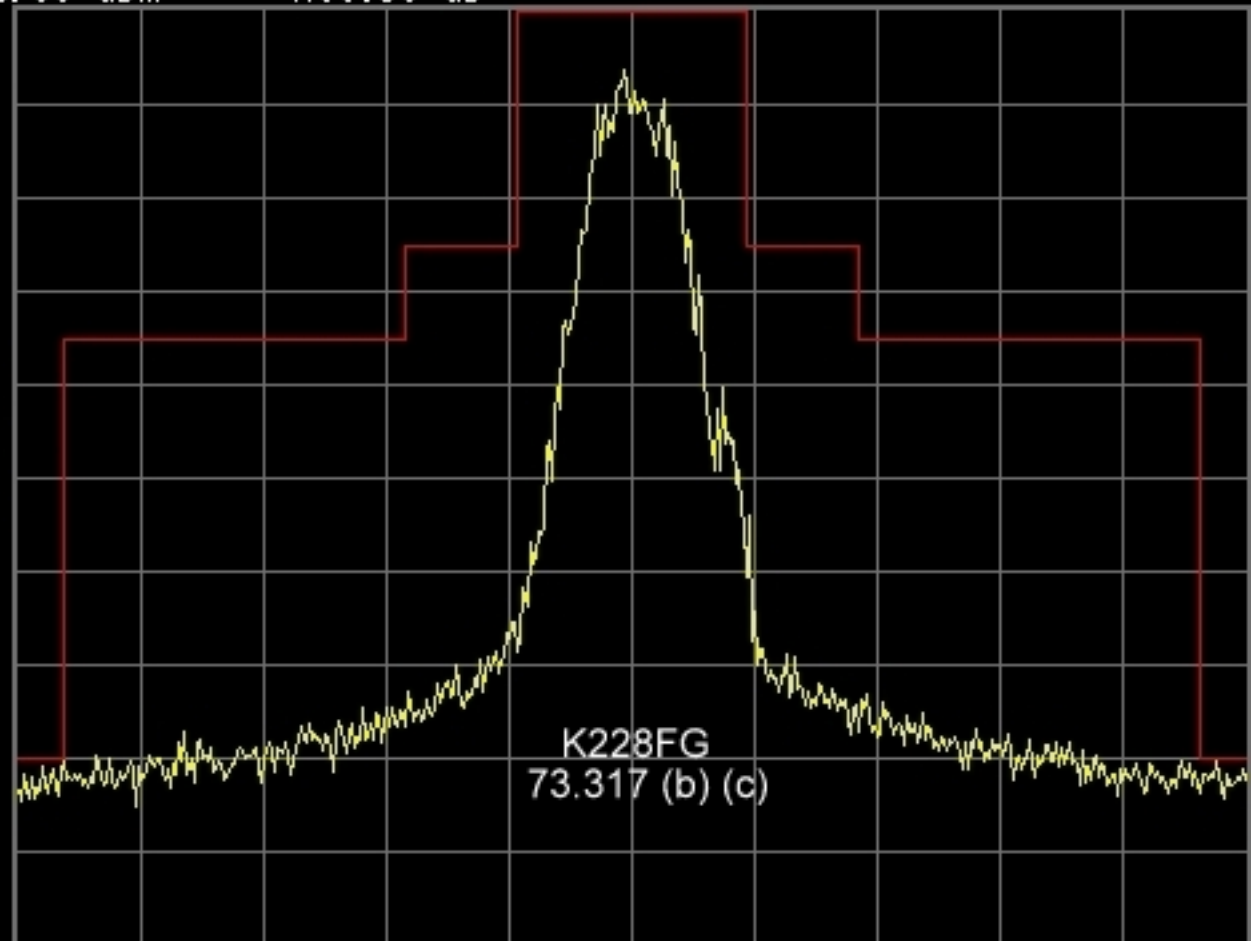
Center:93.500000 MHz

#Res BW:1.000 kHz

#VBW:3.000 kHz

Span:1.300000 MHz

Sweep:196.98 ms



Ref:8.00 dBm

Att:30 dB

Log
10
dB/

PAvg

1V A

2S P

3S P

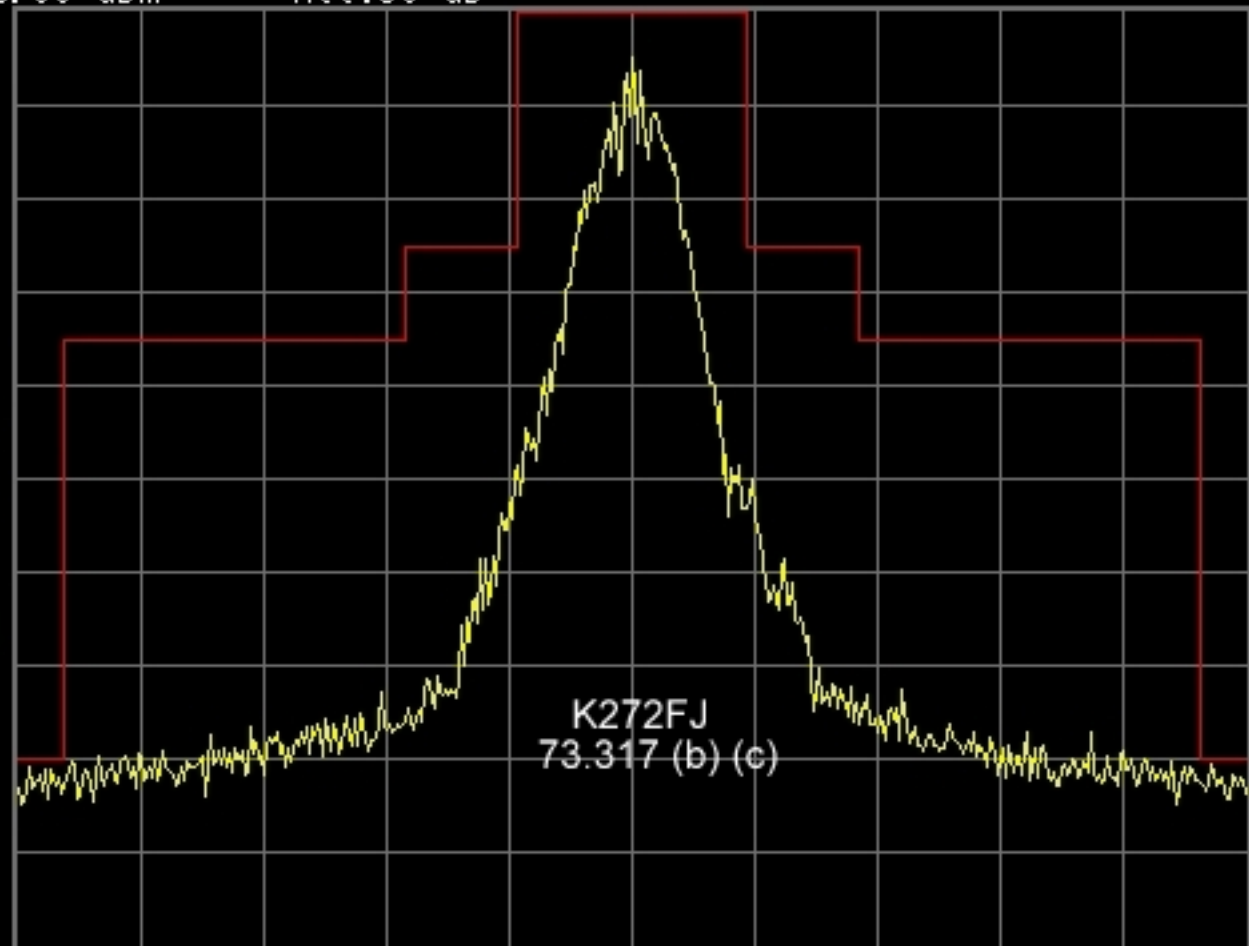
4S P

FC

PASS

ETrg

FFT



Center:102.300000 MHz

Span:1.300000 MHz

#Res BW:1.000 kHz

#VBW:3.000 kHz

Sweep:196.98 ms