## Subject: Re: Western Electric 80th anniversary "300B" tube Posted by positron on Fri, 13 Aug 2021 05:10:54 GMT

View Forum Message <> Reply to Message

gofar99 wrote on Tue, 23 January 2018 15:16Perhaps, Where will they actually be made and really by whom. The original fabricating gear is probably long gone as are the original materials the tubes were made from. I have heard stuff like this before and usually it doesn't live up the promises. But then in this case I must state that I am not fond of the directly heated triode magic that some hear. I figure that highish levels of second harmonic distortion (that some say sound nice) is still distortion and to be avoided. I agree Go.

Below for general consumption. I do not wish to step on anyone's feet, but with so much confusion on other forums, I wish only to present the facts. I do not wish to change anyone's mind.

So much mis information exists concerning a variety of audio subjects. For instance, the intermodulation distortion (IMD) is roughly 3 times the harmonic distortion measurement. Attached below are data from Eimac of any tube following the 3/2 power law, and 300b distortion figures under varying condition.

One must also consider previous stages as the distortion products combine with other stages, including the output stage, to produce higher orders of distortion. For instance, 2nd of one stage will combine with 3rd of another stage to produce 6th order, 3rd will combine with 3rd to product 9th order etc etc.

The higher the order, the easier to perceive. (RCA Radiotron Designers Handbook, 26 engineers, 1960, Olson's work.)

As mentioned above, I try to present honest and factual information. Knowledge is power and helps in one's decision making.

(Caveat: I retired some 9 years ago and do not manufacture any electronic components, except the "V" interconnect cable.)

cheers pos

## File Attachments

- 1) 300b1 PO vs Distortion.jpg, downloaded 311 times
- 2) Eimac IMD Products vs Bias .jpg, downloaded 295 times