Can I produce a visual of a standing wave inside a tube using today's technology?

I predict that with an acrylic tube, amplifier, speakers, I pad, tone generator app, and styrofoam balls I can replicate a standing wave in a tube like August Kundt did in 1866. In the process calculate the speed of sound as well.

6' acrylic tube
2 speakers in boxes
amplifier
I pad
The Oscillator 1.3.3 tone generator app
Styrofoam balls
Cork Dust

>> Turn volume DOWN when changing frequencies!!

1. Turn lights on white.

2. Turn amp. on.
   volume
   power
   speaker B
   balance
   bass = +10
   treble = +10
   bass button on for 130 HZ

3. I Pad on
   open The Oscillator 1.3.3 app
   set A to 130 HZ and square wave
   set B to 390 HZ and square wave
   bass button off for 390 HZ

4. Measure between nodes
   plug # into formula v = f 2 to get speed of sound

In conclusion I proved my hypothesis, I was able to replicate a standing wave in a tube and see the resonant frequency and 3rd harmonic of the tube. Allowing me to see sound! I was also able to correctly calculate the speed of sound.

The purpose of this experiment was to see if I could see sound. After some online research I found the ***Kundt's Tube Experiment***. This would allow me to see sound and calculate its speed as well. I hypothesized that using today's technology I could replicate a standing wave like August Kundt did allowing me to see sound and calculate its speed. To accomplish this my dad and I built a ***Kundt's Tube*** with an acrylic tube, pair of speakers, amplifier, cork dust, my I pad, and The Oscillator 1.3.3 tone generator app. Our biggest problem was actually seeing a full waveform from end to end in the tube. Through trial and error, finding the right length of the tube, size and number of speakers, amp size and medium I finally accomplished a 1^{st} and 3^{rd} harmonic in the entire tube and correctly calculated the speed of sound.