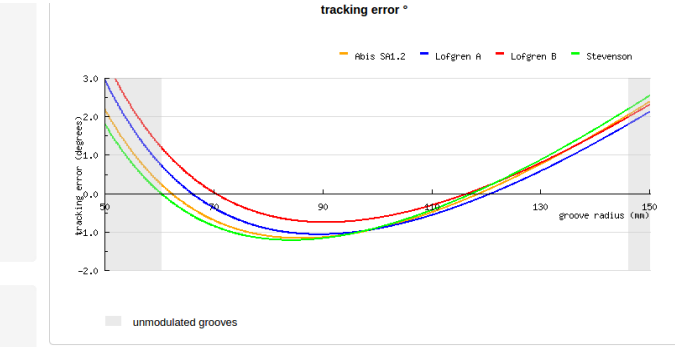
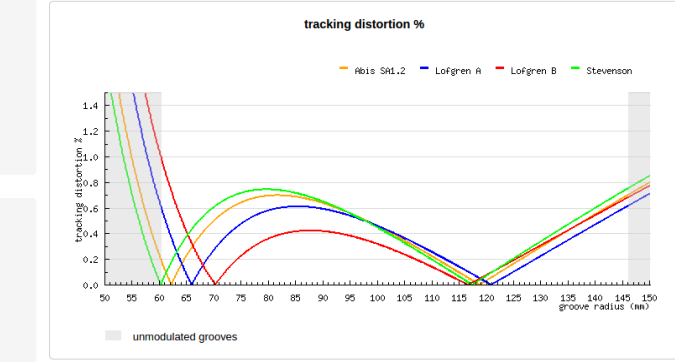
Experimenting With SA1.2 Overhang

When using the AccuTrak arc protractor, assuming that the armboard was drilled correctly, the performance of the SA1.2 will look like this (a comparison to the Stevenson and Lofgren curves):

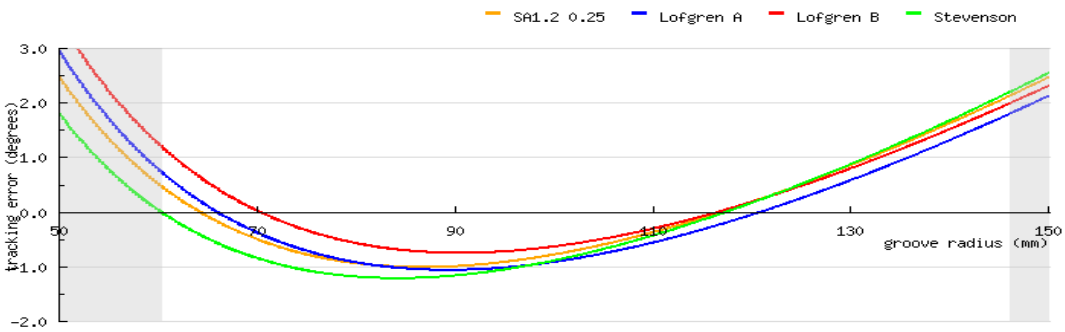


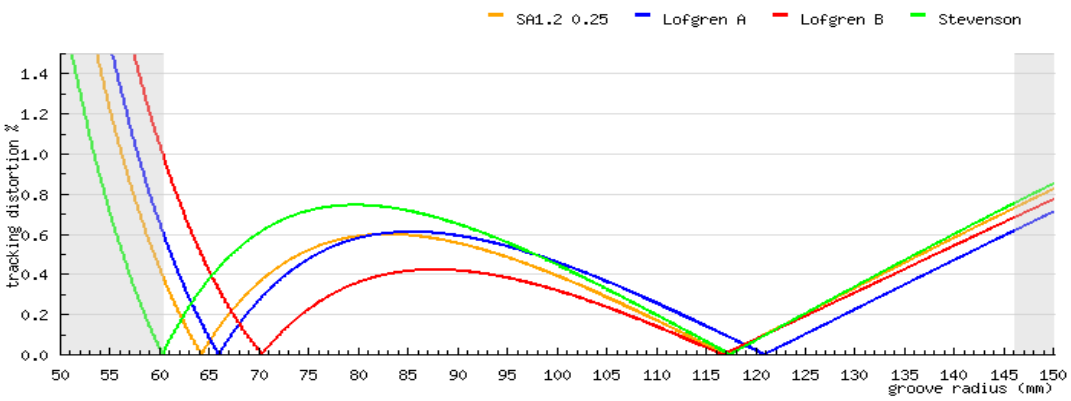


The possibility does exist to alter the geometry of the SA1.2 by simply adding and subtracting overhang.

SA1.2 for the Non-Classical Listener

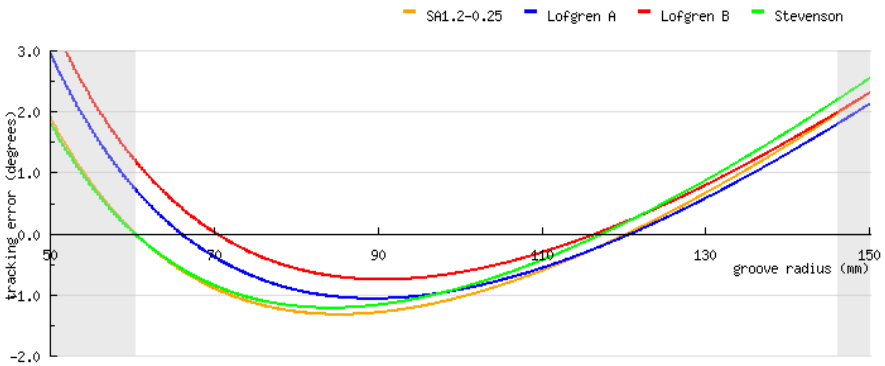
The SA1.2 geometry was chosen to be similar to the Stevenson curve, without being as preferential to the inside groove as the Stevenson. To achieve results similar to the Lofgren A curve, you can adjust the cartridge with 0.25 mm additional overhang (a very small amount to measure, of course). You'll notice in these simulations (courtesy VinylEngine.com), that the outer null point for Stevenson, Lofgren B and the SA1.2 (+0.25mm) is approximately the same, while the inner null point for the SA1.2 (+0.25mm) is approximately the same as Lofgren A. Depending on the musical preferences of the listener, the SA1.2 can be manipulated to perform better for the “average” pop/jazz record.

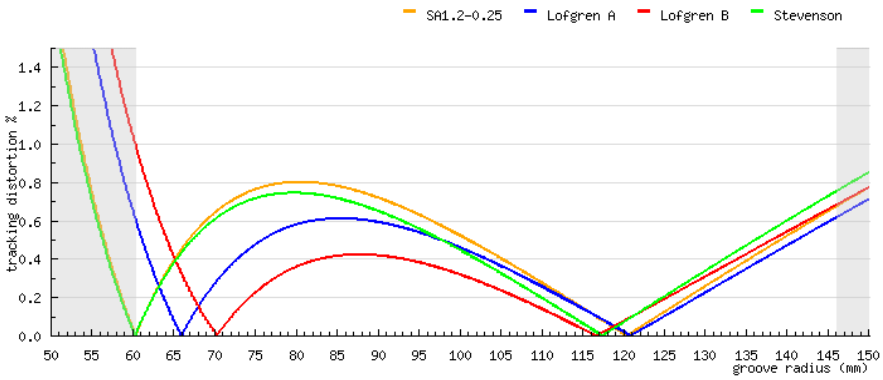




For Classical Listeners Only?

What if you “only listen to classical”? What if you have many mint Mercury Living Presence pressings, with the inner groove cut almost to the label (a specialty of mastering engineer George Piros)? A similarly small movement of -0.25mm (¼ of one mm less overhang) will minimize distortion at the end of the side, like the Stevenson curve. In this case, the outer null is the same as Lofgren A, and inner null the same as Stevenson. The penalty is 0.111% higher average distortion than Lofgren A.





The most interesting aspect of this exercise is how much ¼ mm will change the performance of a tonearm.

George Piros: