1. Determine Current Limit of traces (destructively) in air, and laminated conditions to determing if there is a difference.
2. For uniformity tests, laminate each trace set of different types to separate pieces of Al/carbon. eg, two 1.5mm squiggles on a separate piece, 3 1mm max-pack on different piece.
3. Contrary to above statement, put all four equivelant radiation lenngth traces on one laminate (both 1mm, longitudinal and lateral squiggles with approximate 5m pitch)
4. Make one laminated sample with all squiggly traces on it determine 1.) currents necessary for uniform surface temp, 2) temp distribution with constant current in each trace.

.75mm Constant width Current limit test

1mm Constant width Current limit test

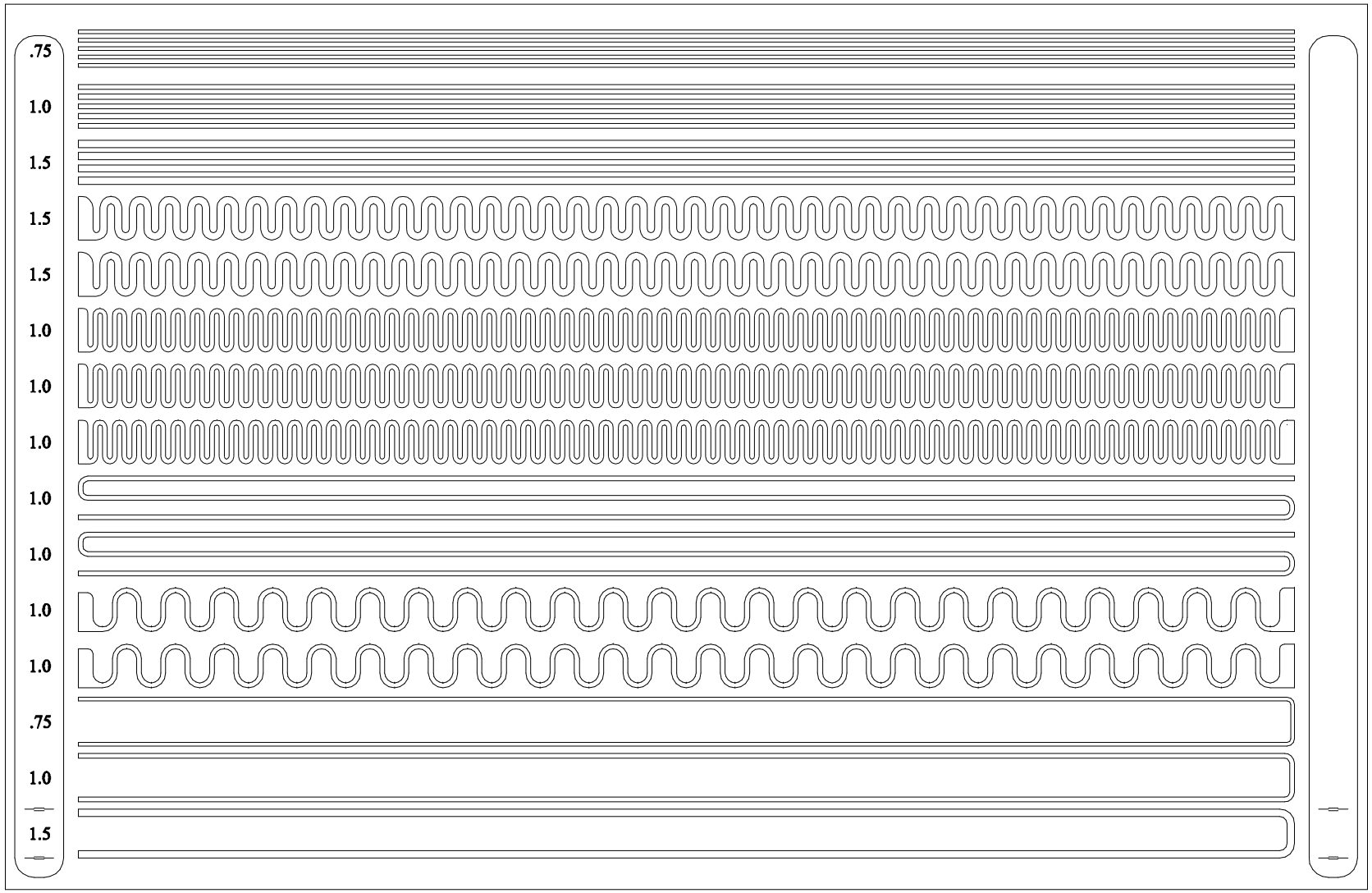
1.5mm Constant width Current limit test

1.5mmwid heater with average packing for a given trace width. Laminate to Graphite or Aluminum, look at heat distribution with IR Camera

1mm trace, maximum density. As above, laminate to Al/Carbon, look at temp uniformity of sample, Try running sample with middle heater off, look at uniformity.
Determine Current limit.

These two are meant to have the advertised radiation length (correct amount of Al/cm^2) I would like a comparison of uniformity to the above two types, and to each other (Lateral vs Longitudinal squiggles) Also investigate current limits.

These bottom three samples are meant to test the current carrying capacity of the traces. They have been sized to line up with the edges of hte existing traces to be extra harsh in the introduction of etching errors as they will pick up the pre-existing ones in addition to any new ones. These should yield an idea of yield/trace length/width. If edge quality is low, .75 will go at a lower value than predicted, and hopefully, a relation can be found to quantify quality by going to higher widths.




Targets on bottom line align to edges of 10mm trace. Bottom three traces in above art are 10mm wide. Traces above are 9mm wide to give new etched edges. Top three rows of single trace sets of constant width may have edges that lie at the edge of an existing 10mm trace. Leave 8mm traces on Backside