The cabinet channel cross-section geometry is 4 in wide x 5 in deep as in the standard TABAQ designs, the folded geometry has two different types of corners depending on whether or not it is along the longer 5 in edge (1.27x expansion) or the shorter 4 in edge (1.41x expansion) directions. For a 16 in tall TABAQ folded with 6 turns we have the following dimensions following MJK's notation:

$A0 = 4$ in x 5 in $= 20$ in$^2 = 129$ cm^2

From Closed End to Driver:

Section Length	Initial Area	Final Area	
L0 = 12.0 in	A0	A0	
L1 = 2.0 in	A0	1.41xA0	Turn 1
L2 = 2.0 in	1.41xA0	A0	
L3 = 2.0 in	A0	1.41xA0	Turn 2
L4 = 2.0 in	1.41xA0	A0	
L5 = 3.0 in	A0	A0	Driver location

From Driver to Open End:

Section Length	Initial Area	Final Area	
L0 = 5.0 in	A0	A0	
L1 = 2.0 in	A0	1.28xA0	Turn 3
L2 = 2.5 in	1.28xA0	A0	
L3 = 2.5 in	A0	1.28xA0	Turn 4
L4 = 2.0 in	1.28xA0	A0	
L5 = 8.0 in	A0	A0	
L6 = 2.0 in	A0	1.41xA0	Turn 5
L7 = 2.0 in	1.41xA0	A0	
L8 = 2.0 in	A0	1.41xA0	Turn 6
L9 = 12.0 in	A0	A0	Final Section
L10 = 6.0 in	A_vent	A_vent	Vent Section (has to be 6 in long)

Total chamber length is 65 inches not including vent. Model will be used to optimize A_vent, which then determines the vent slot height given fixed slot width of 4.0 in. Stuffing is probably something that can be varied but start with first 2/3 dense like standard TABAQ design as base point.

For the driver, I plan to use the TB W3-315e: 87 db, 8 ohms, Fs = 100 Hz, Bl=3.89 Tm, Piston area = 0.0032 m^2, Le=0.3 mH, Xmax=1.25 mm, Vas=1.68 l, Qts=0.52, Qms=5.51, Qes=0.57.

Another very interesting but cheap driver is the Peerless TC9FD-18-08 ($12 ea) 3.5 in full range: 30 W rms, 83.5 db, 8 ohms, Fs = 125 Hz, Bl=3.01 Tm, Piston area = 0.00363 m^2, Le=0.05 mH, Xmax=2.55 mm, Vas=1.24 l, Qts=0.89, Qms=2.70, Qes=1.33.