Geometrical Optimization of Helical Flow in Grooved Micromixers

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Supplementary Information: Figure S2

Figure S2 displays η versus the groove number (seen in figure S1, with groove 1 at the upstream end of the section) for two SGMs with $d/h = 0.25$ and $d/h = 0.5$, corresponding to SGMs with $a/w = 0.4$, $b/w = 0.1$, and $h/w = 0.4$. The transverse flow magnitude η reaches 95% of its maximum value within w axial lengths from the start of the groove structures. The SGMs within this study had grooved structures extending a minimum of $7w$ axial lengths, typically around 1.2 mm. The drastic increase of η with increasing d/h values is evident within figure S2. The values of η reported in this study are η_{max}, shown by the dotted line.
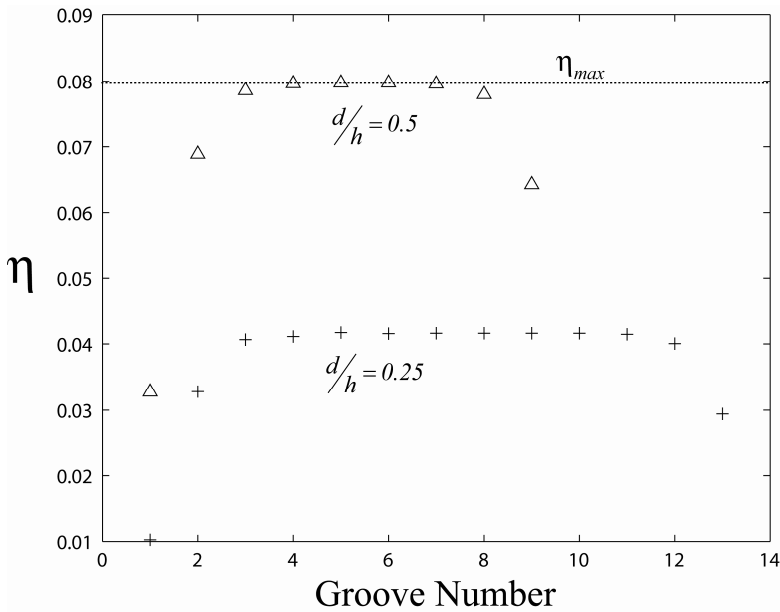

Figure S2. η vs. the groove number for two different SGMs.