Programmable Liquid Crystal Elastomers Prepared by Thiol-ene Photopolymerization

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Supporting Information

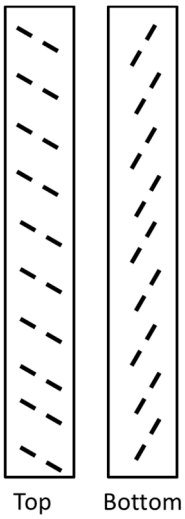

Figure S1: Schematic illustrating the hierarchical alignment of the twisted nematic orientation used to produce torsional deformation in Figure 3. The alignment at only the top and bottom surfaces is shown. Alignment in the middle of the film is a continuous interpolation from top to bottom.

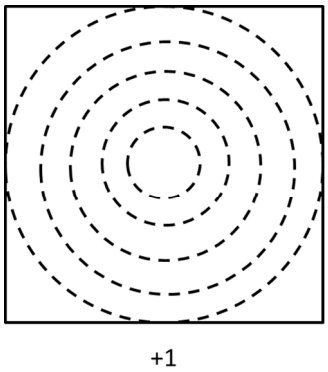

Figure S2: Schematic of the alignment of +1 defect actuating sample that morphs into a cone. The alignment is the same through the thickness of the film.

Supplemental Video: A single heating and cooling cycle for the +1 patterned sample with 0.5RM82. An IR lamp is used to heat a dark substrate (black paper) to approximately 150 °C. After the light is turned off the sample is passively cooled.