Supplementary Material:
Near-Light Photometric Stereo using Circularly Placed Point Light Sources

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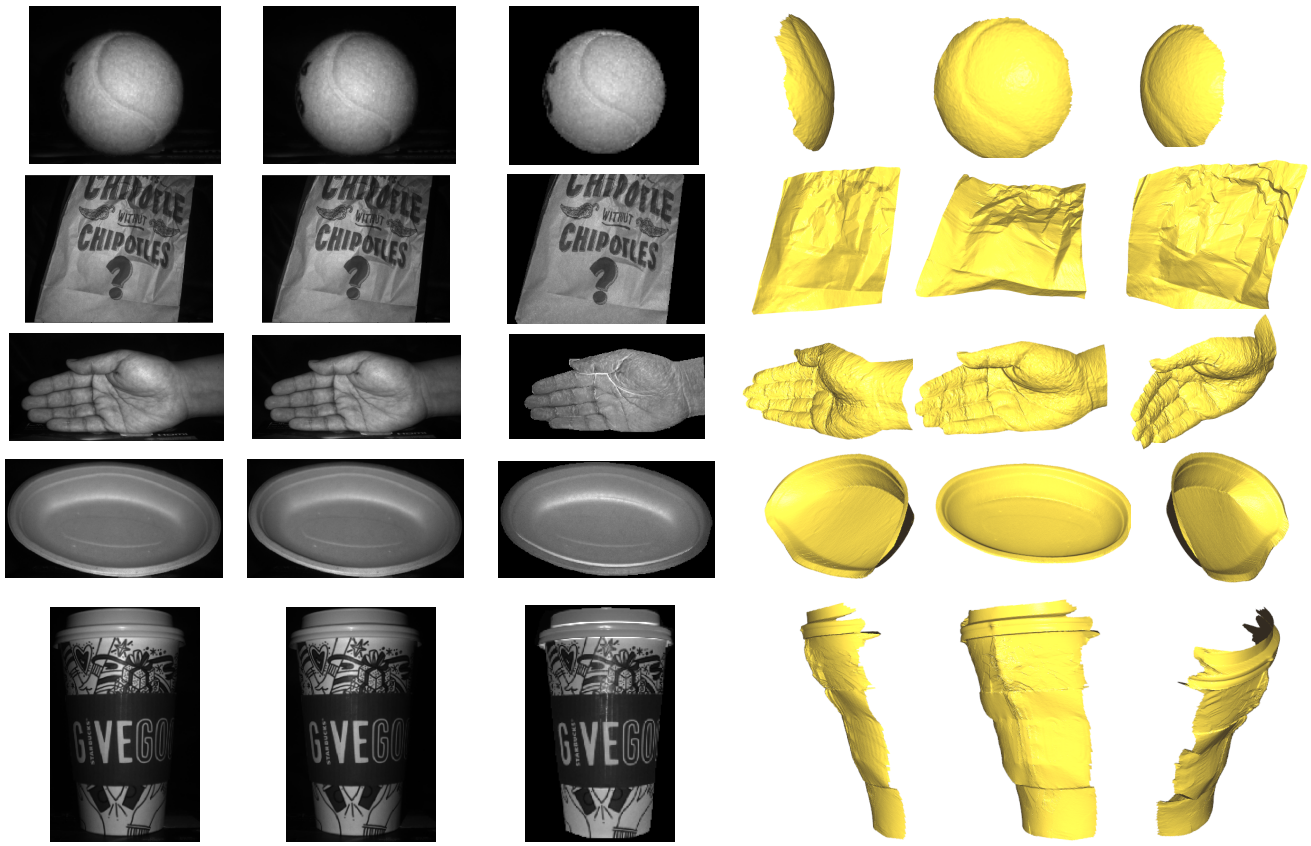
1. More Results

The surface reconstruction results and the corresponding albedo maps for more objects are shown in Fig.1. Our method works well by successfully recovering both the depth variation and the fine-grained surface structures for the objects with Lambertian surface, such as the tennis ball (first row), paper bag (second row), salad bowl (fourth row) and the diffuse regions on the hand (third row) and coffee cup (last row). The artifacts in the reconstruction of the hand are due to the specular reflection component from the epidermis of skin and the motion of object during capturing the images. For the salad bowl, the lower rim area is occluded for the camera, so the reconstruction for that region differs from the reconstructed surface for the upper rim region.



(a) Two of 24 input images (b) Albedo map (c) Surface reconstruction

Figure 1. Inputs and reconstruction results for the proposed method. (a) Two of 24 input images taken with lights on the opposite sides of the LED ring turned on; For each column, the LED positions are the same; (b) The estimated albedo map; (c) Reconstructed surfaces viewed from different angles.