A Benchmark Dataset and Evaluation for Non-Lambertian and Uncalibrated Photometric Stereo – Supplementary Material

Boxin Shi^{1,2} Zhe Wu^{2,3} Zhipeng Mo² Dinglong Duan³ Sai-Kit Yeung² Ping Tan⁴

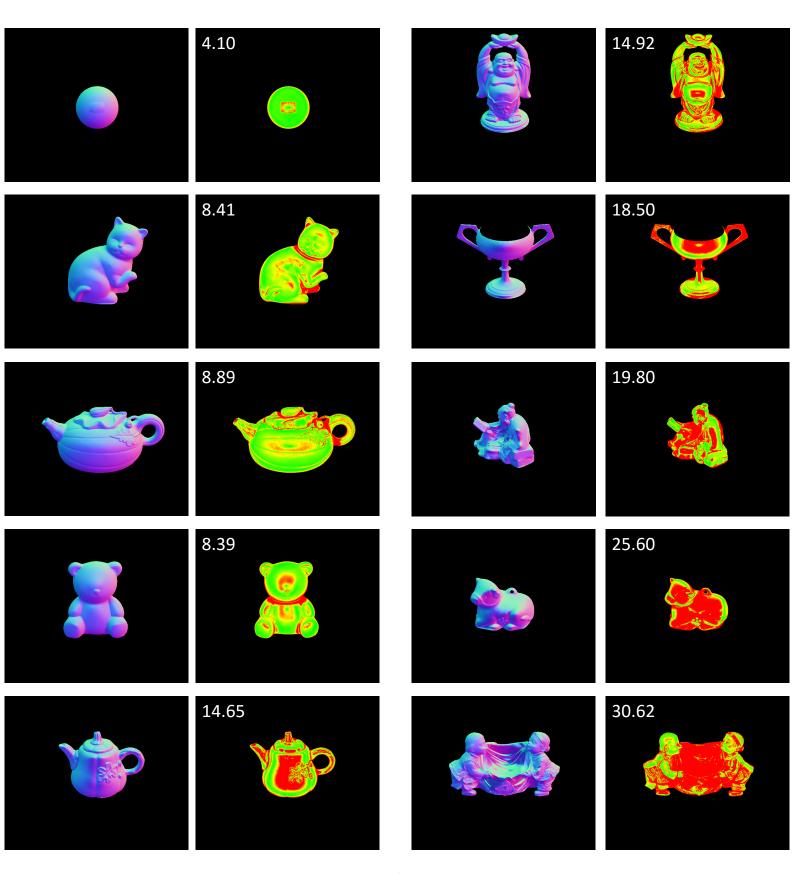
¹Artificial Intelligence Research Center, National Institute of AIST

²Singapore University of Technology and Design

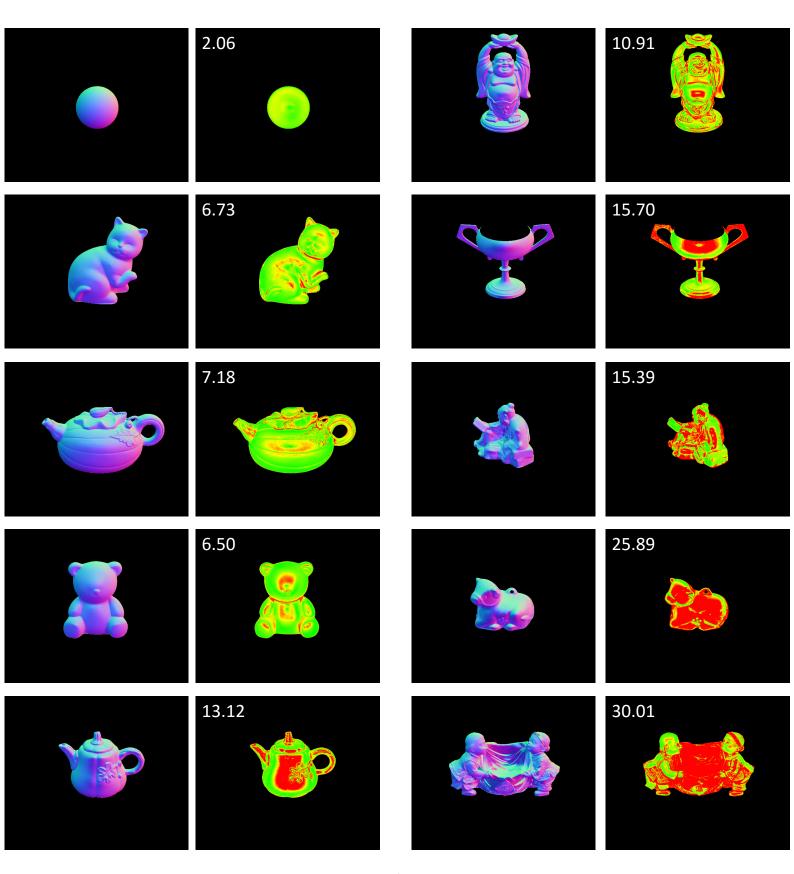
³National University of Singapore ⁴Simon Fraser University

We show the complete results of estimated surface normals and their different maps w.r.t. the 'ground truth' normals for the evaluated methods. Each page in the following shows results of all objects for one evaluated method according to each subplot of Figure 2 and Figure 4 in our paper. The numbers on each difference map indicate the mean angular errors in degrees.

BASELINE

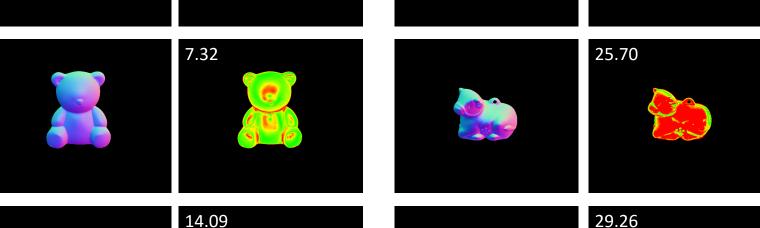


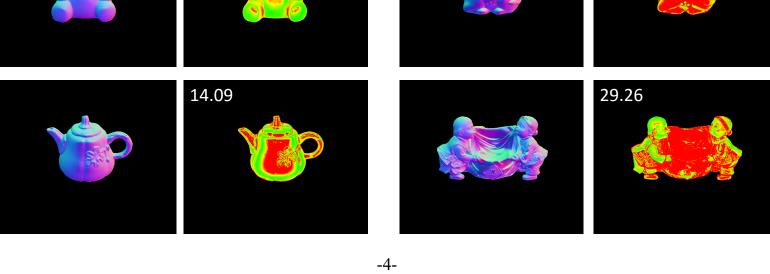
WG10



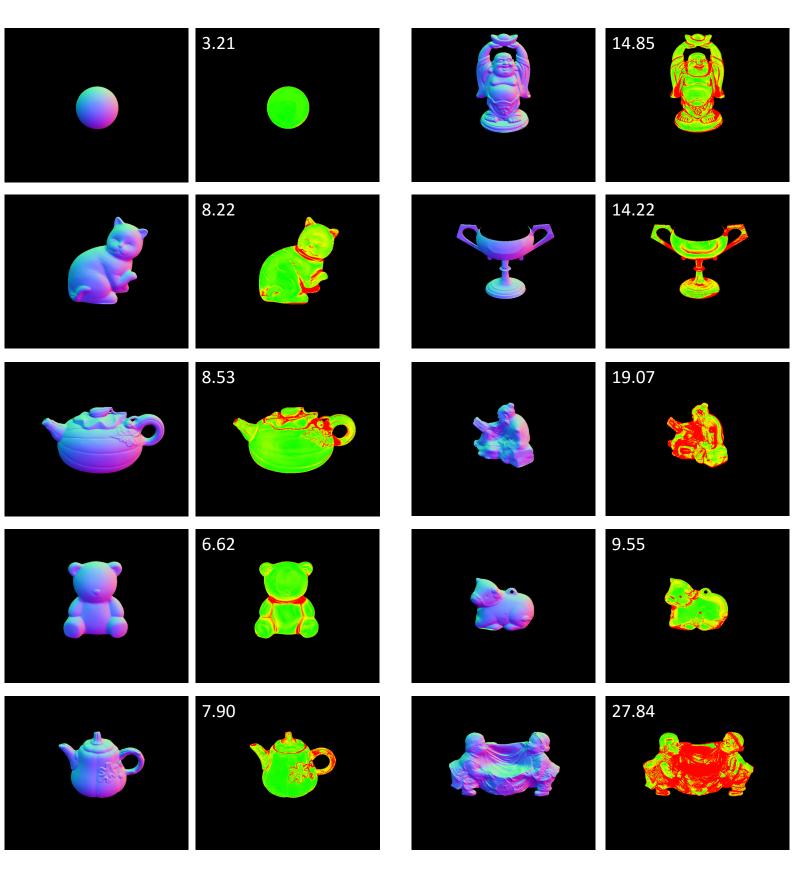
IW12

7.21
7.74
16.17
16.17

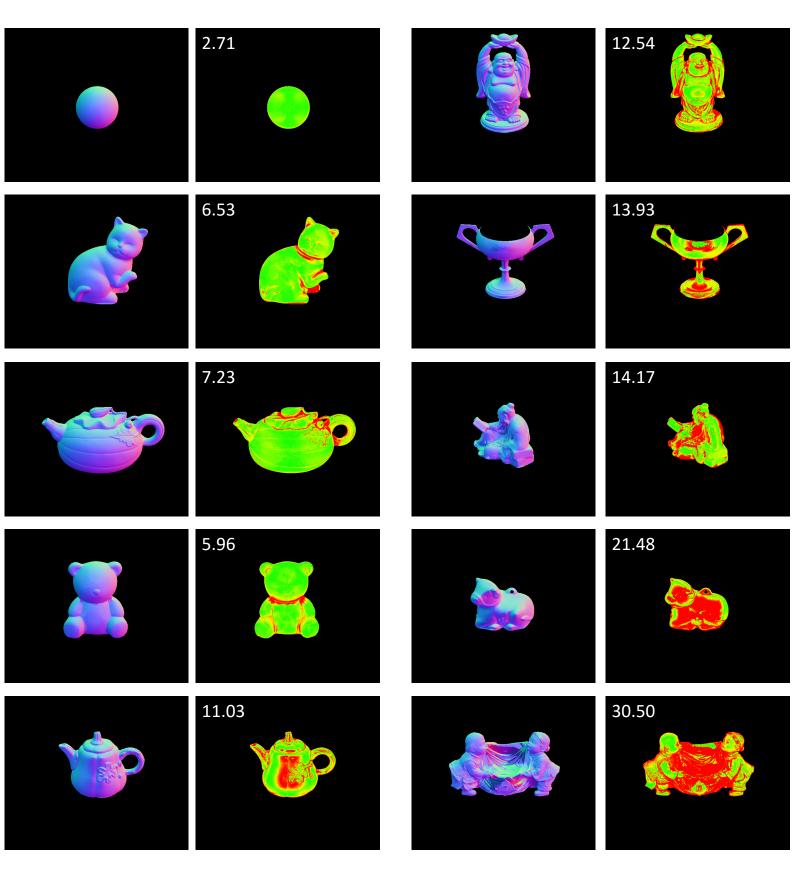




GC10



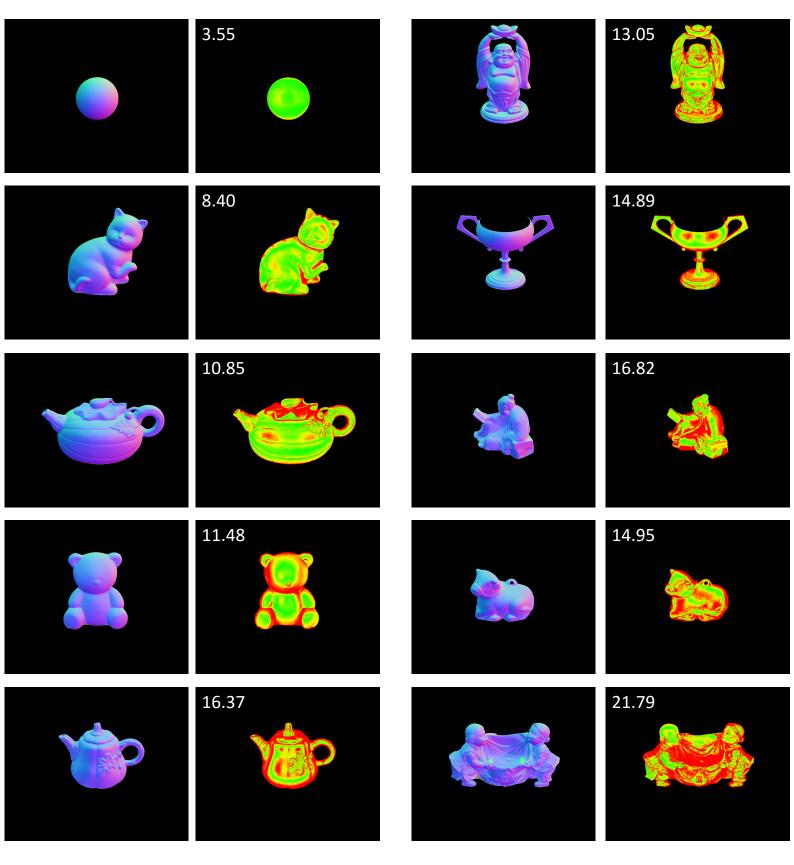
AZ08



ST12

0 20 13.58 18.37 12.34 17.80 10.37 17.17 7.62 19.44 9.84 19.30

HM10



ST14

0 20 10.60 1.74 6.12 10.09 6.51 13.63 6.12 13.93 8.78 25.44

IA14

0 20 10.47 3.34 6.74 9.71 6.64 14.19 13.05 7.11 8.77 25.95

AM07

0 45 32.81 7.27 46.54 31.45 53.65 18.37 16.81 54.72 49.16 61.70

SM10

0 45 8.90 15.54 19.84 48.79 16.68 26.93 11.98 22.73 50.68 73.86

PF14

0 45 14.92 4.77 9.54 29.93 9.51 24.18 9.07 19.53 15.90 29.21

Uncalibrated methods

WT13

0 45 13.19 4.39 36.55 20.57 9.39 58.96 6.42 19.75 14.52 55.51

Uncalibrated methods

LM13

0 45 25.76 22.43 29.16 25.01 32.82 48.16 15.44 22.53 20.57 34.45

Opt. A

0 45 13.64 3.37 15.12 7.50 8.06 18.94 8.13 16.72 12.80 27.14 0

Opt. G

45

14.29 4.72 8.27 17.30 8.49 20.36 8.32 17.98 14.24 28.05