

# Supplemental materials

Paper ID 1913

## 1. Primary data set



Figure 1: Five input images. (Figure 12 in the paper)

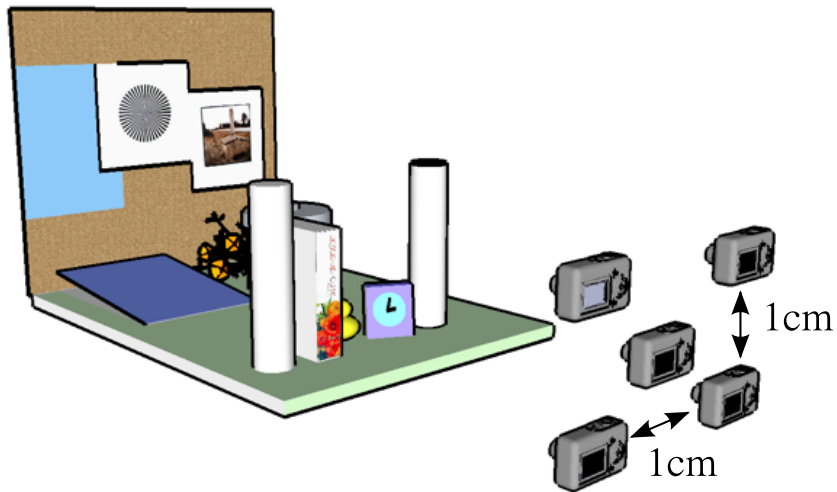


Figure 2: Arrangement of viewpoints.



(a) Focused on Frontal objects (Figure 13(a) in the paper)



(b) Focused on background (Figure 13(b) in the paper)

Figure 3: Changing the focused distance.





(A) Without defocus (F22)



(B) Defocus by actual lens (F4)

Figure 4: Images for subjective evaluation.





(J) Circular PSF with relative radius  $r = 4$  (appeared as (C) in the paper)



(K) Weighted circular PSF with relative radius  $r = 4$  (appeared as (D) in the paper)

Figure 5: Images for subjective evaluation (cont.)





(M) Weighted circular PSF with relative radius  $r = 6$  (appeared as (E) in the paper)



(L) Rectangular PSF with relative sides  $r = 4$  (appeared as (F) in the paper)

Figure 6: Images for subjective evaluation (cont.)



(G) Without interpolation



(N) Weighted circular PSF with relative radius  $r = 8$  (not appeared in the paper)

Figure 7: Images for subjective evaluation (cont.)



## 2. Data set taken with handheld camera

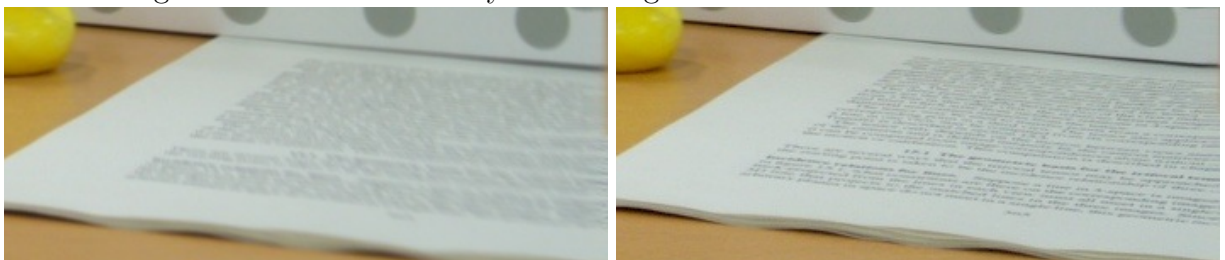


(a) Focused on the clock (Figure 14(a) in the paper) (b) Focused on background (Figure 14(b) in the paper)



(c) Larger blur (d) Focused on the document on the table

Figure 8: Results from only three images taken with handheld camera.



(a) Focused on the clock (d) Focused on the document on the table

Figure 9: Magnified pictures of Figure 8(a) and (d).

### 3. Data set with point light sources



Figure 10: Six input images. (Figure 15 in the paper)

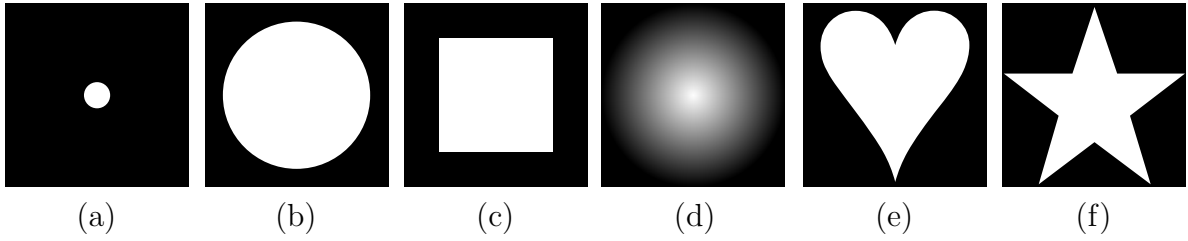


Figure 11: Designed PSFs for experiment. (Figure 16 in the paper)

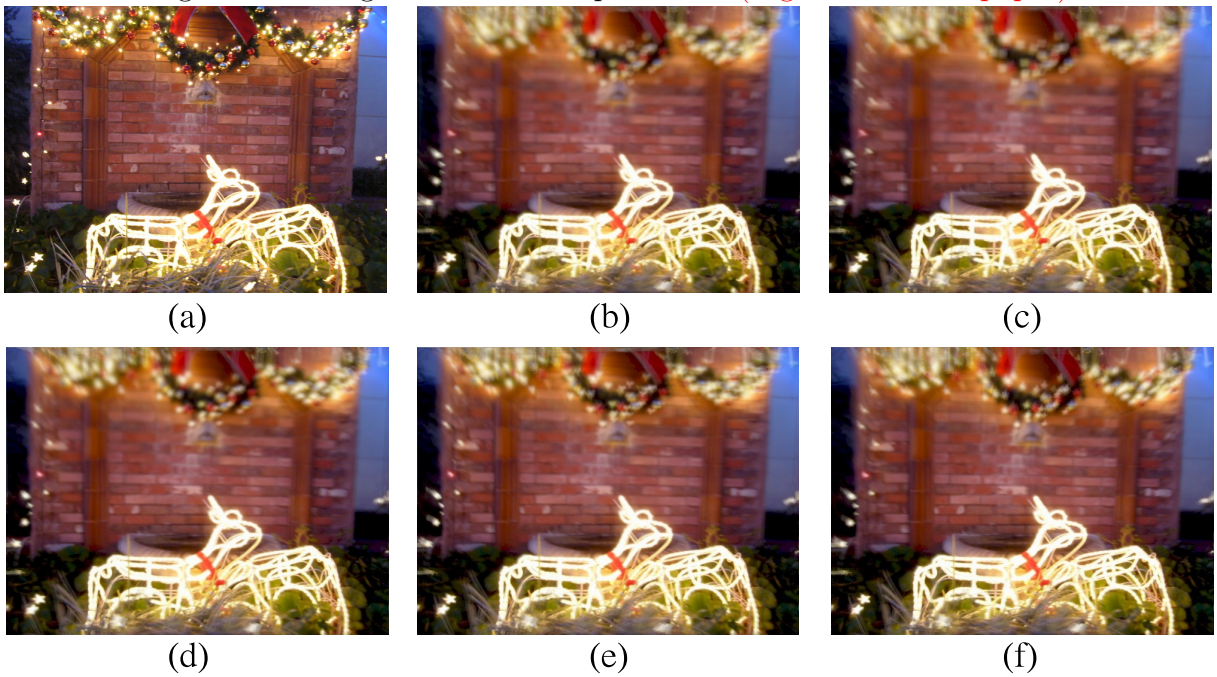
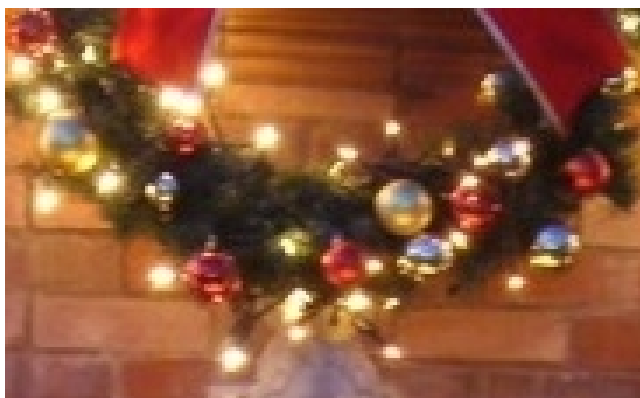
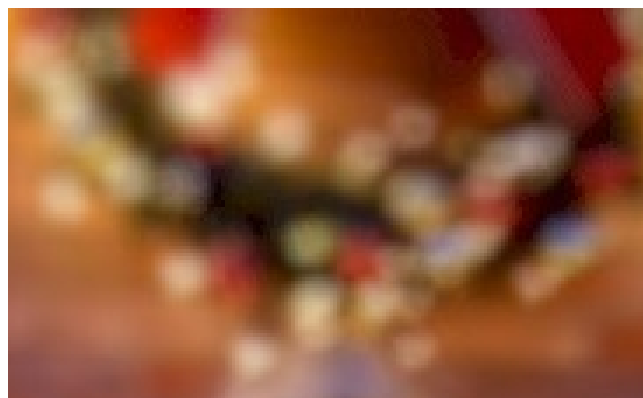


Figure 12: Result with various PSFs.

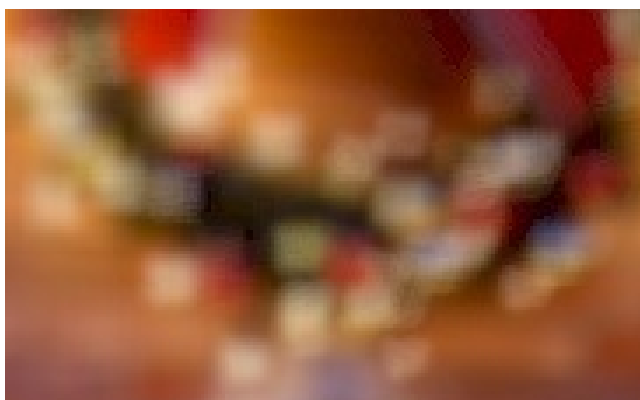




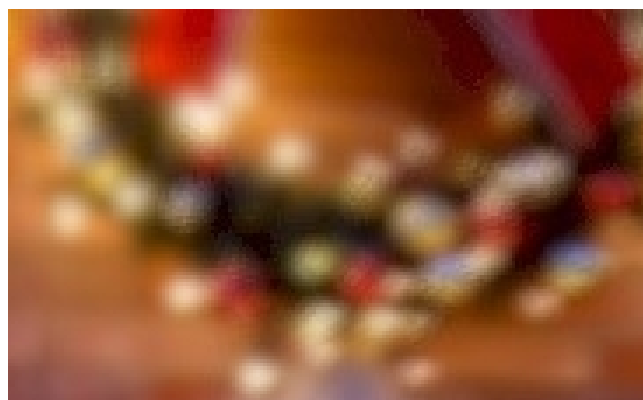
(a)Input image (point PSF)



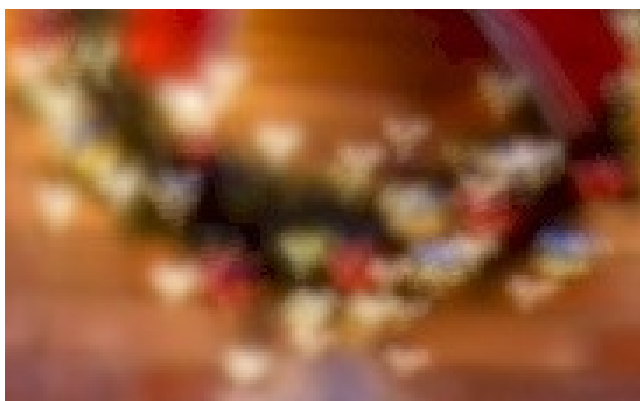
(b)Circular PSF



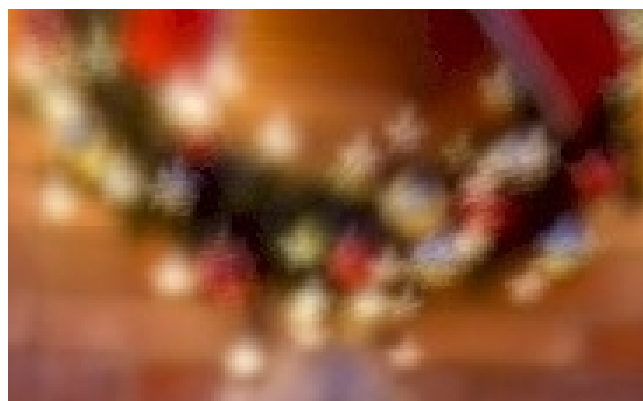
(c)Rectangular PSF



(d)Weighted circular PSF



(e)Heart-shaped PSF



(f)Star-shaped PSF

Figure 13: Magnified pictures of Figure 12(Figure 17 in the paper).