

# Supplementary Materials

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## I. SET18 DATASET

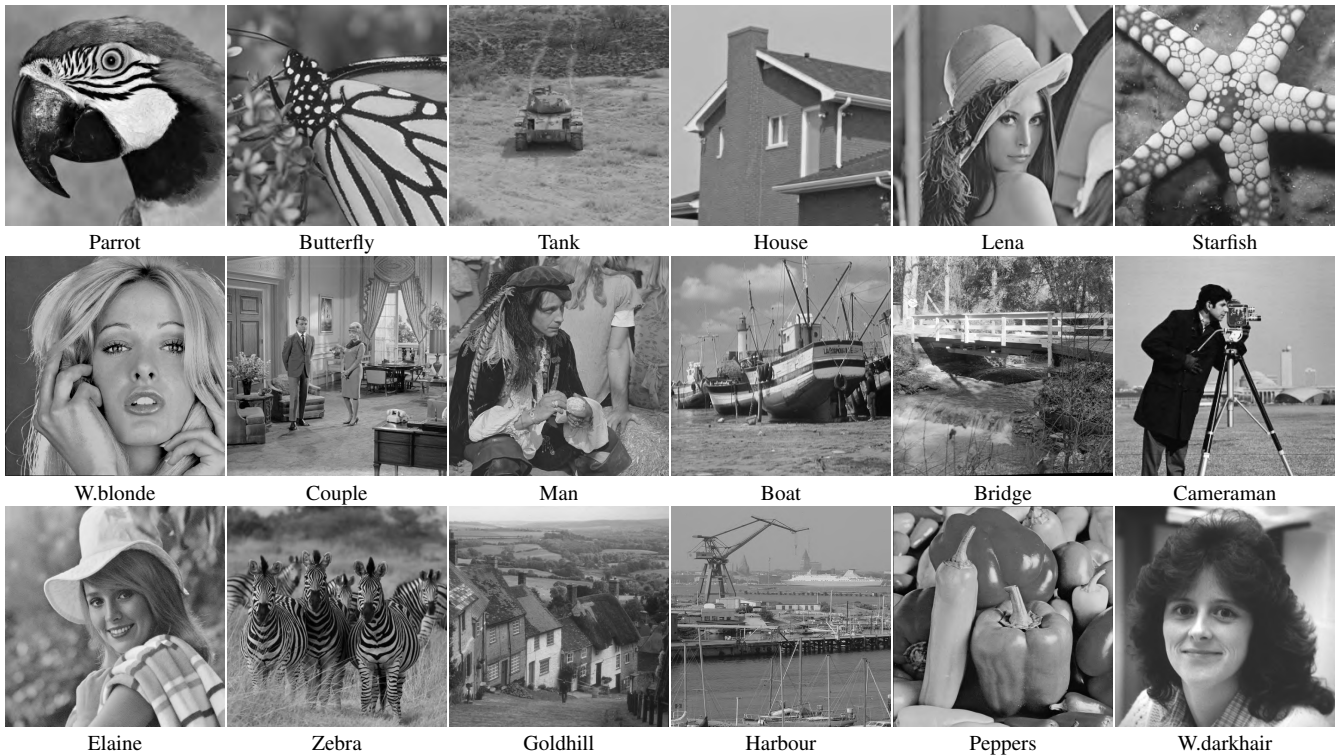


Fig. 1: The test images of Set18.

## II. VISUAL COMPARISON OF DEBLURRING IN THE PRESENCE OF AWGN WITH KNOWN NOISE STRENGTH

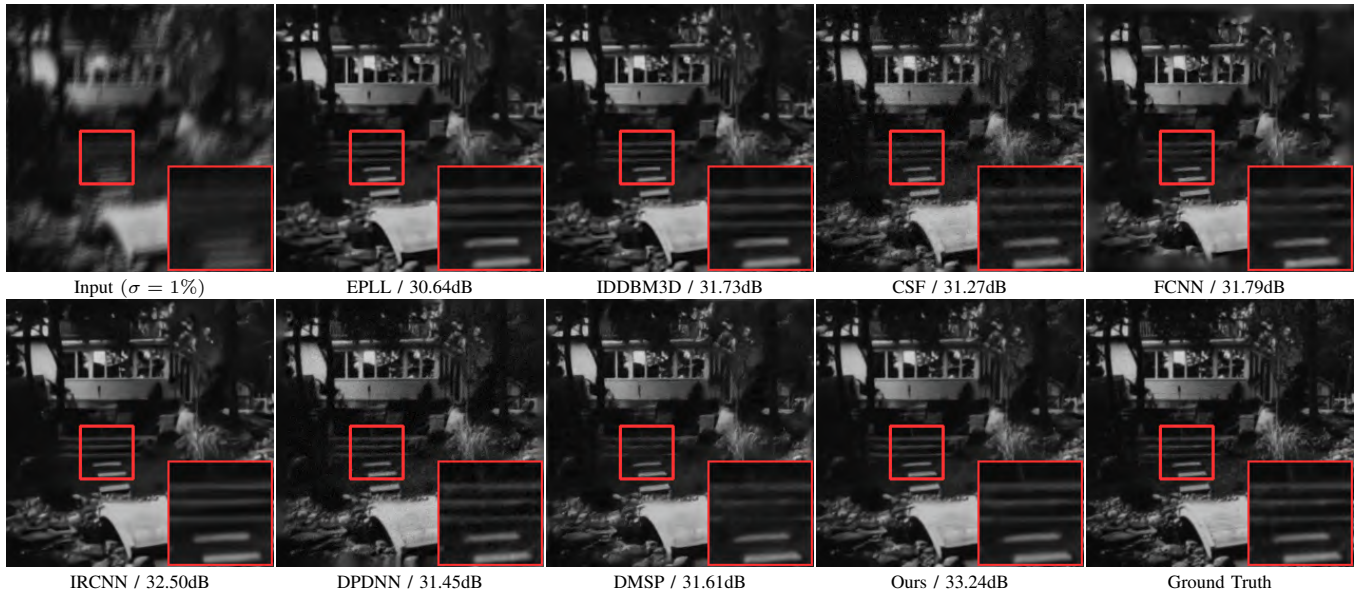


Fig. 2: Visual comparison of noise-nonblind deblurring results on one image of Levin *et al.*'s dataset in the presence of AWGN.

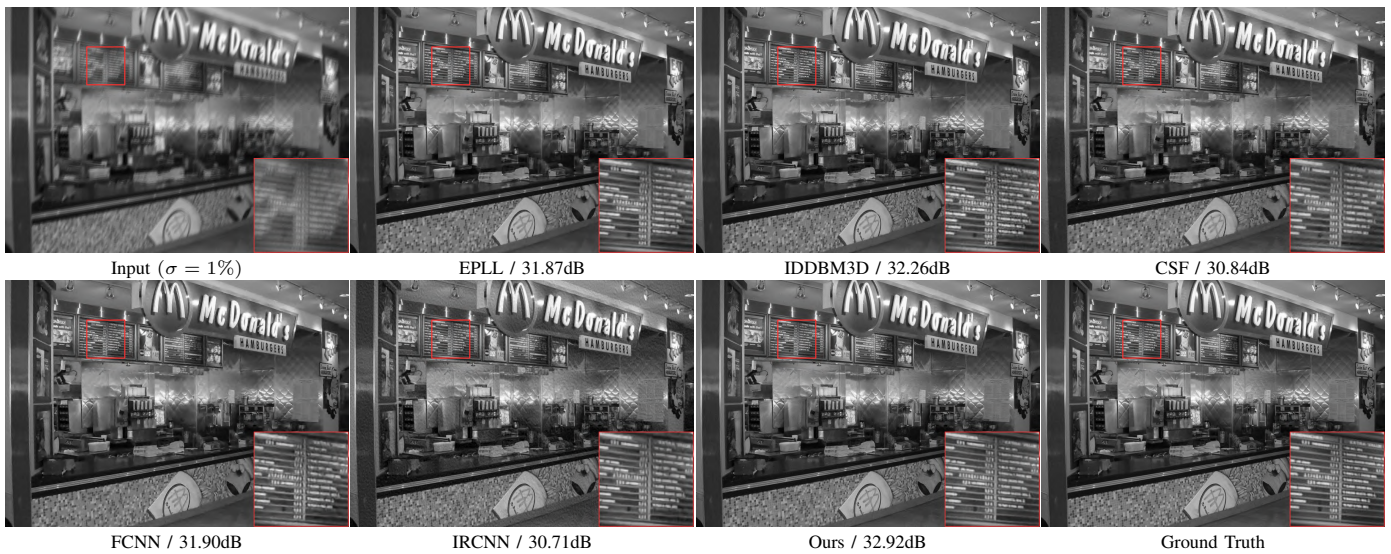


Fig. 3: Visual comparison of noise-nonblind deblurring results on one image of Sun *et al.*'s dataset in the presence of AWGN.



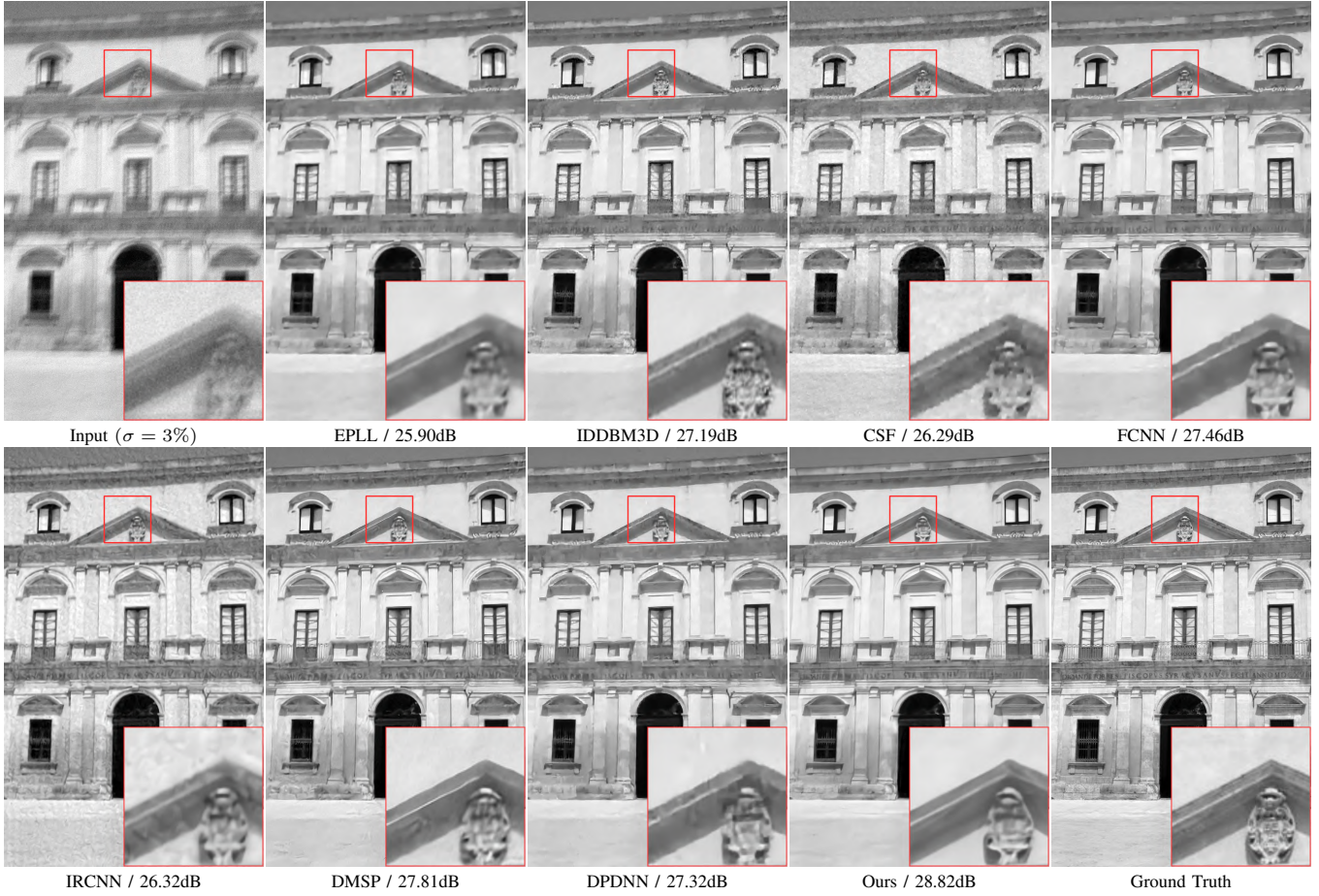


Fig. 4: Visual comparison of noise-nonblind deblurring results on one image of Sun *et al.*'s dataset in the presence of AWGN

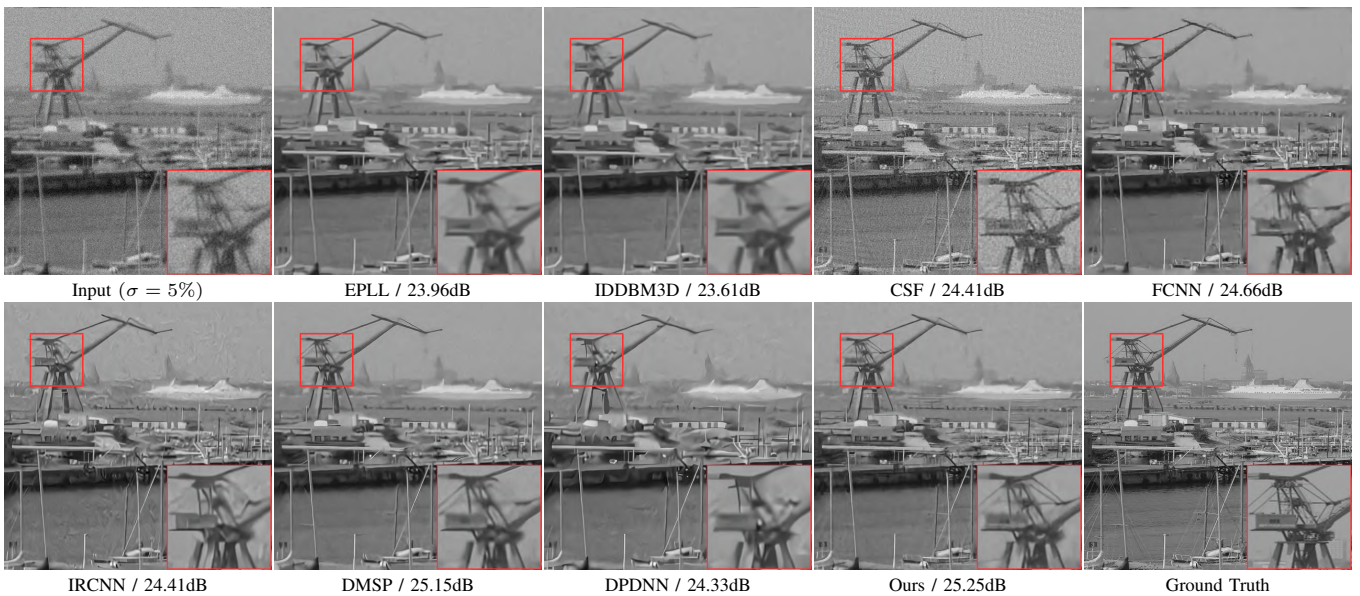


Fig. 5: Visual comparison of noise-nonblind deblurring results on image 'Harbour' in the presence of AWGN



### III. VISUAL COMPARISON OF DEBLURRING IN THE PRESENCE OF AWGN WITH UNKNOWN NOISE STRENGTH

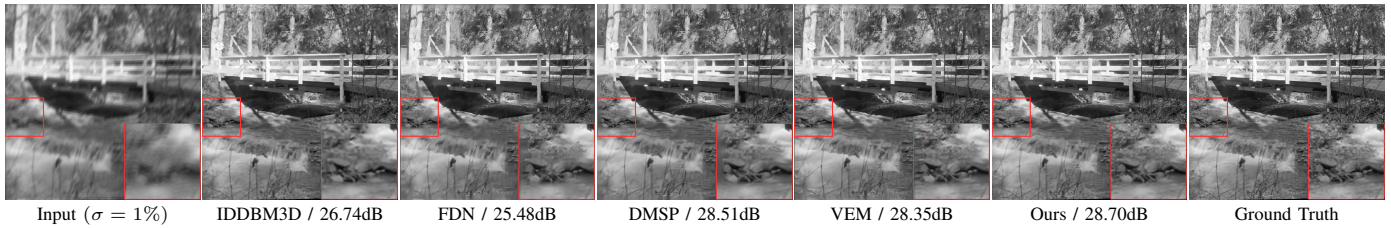


Fig. 6: Visual comparison of noise-blind deblurring results on image 'Bridge' in the presence of AWGN.

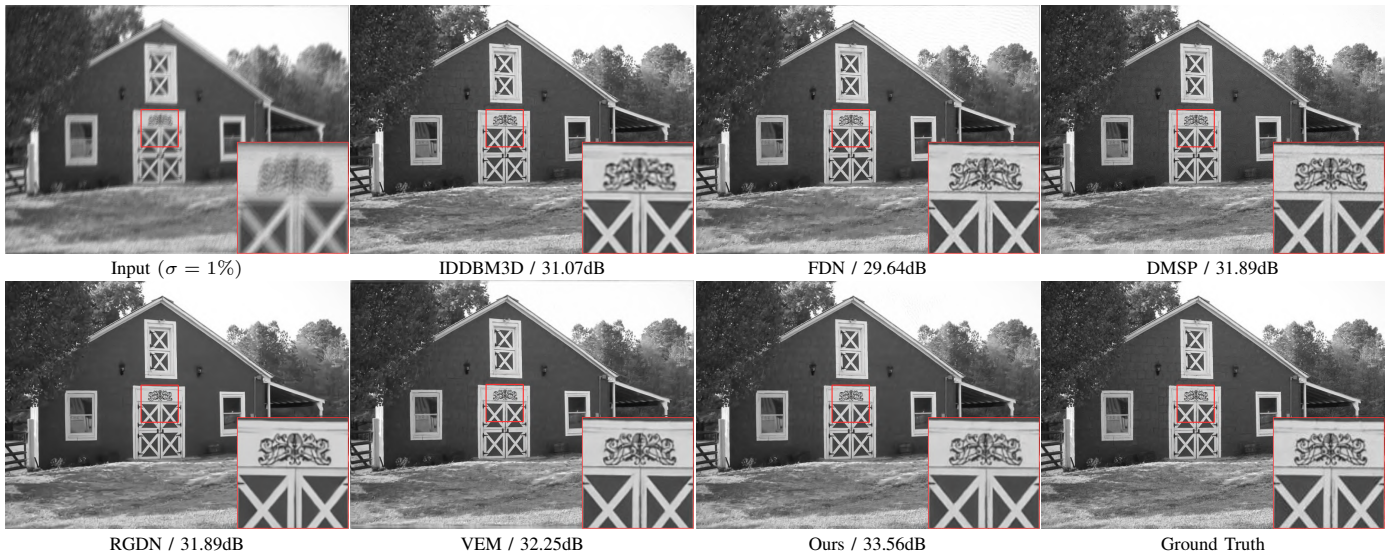


Fig. 7: Visual comparison of noise-nonblind deblurring results on one image of Sun *et al.*'s dataset in the presence of AWGN

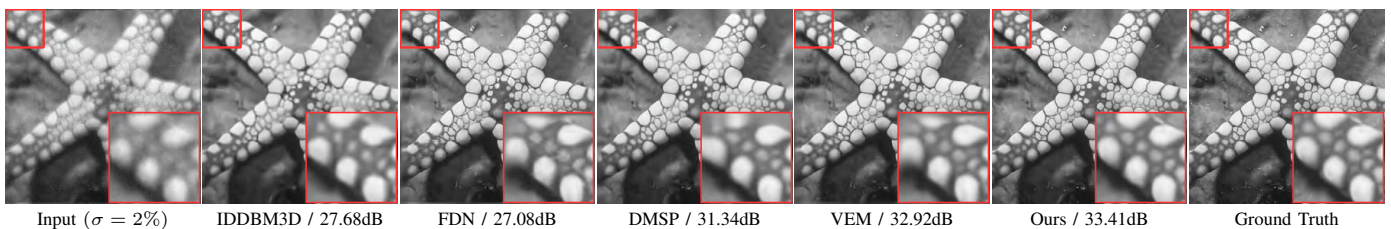


Fig. 8: Visual comparison of noise-blind deblurring results on image 'Starfish' in the presence of AWGN.

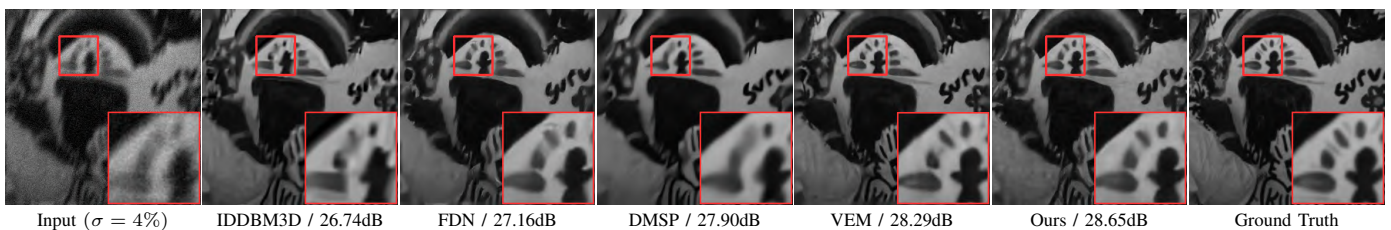


Fig. 9: Visual comparison of noise-blind deblurring results on one image of Levin *et al.*'s dataset in the presence of AWGN

#### IV. VISUAL COMPARISON OF DEBLURRING IN THE PRESENCE OF POISSON NOISE

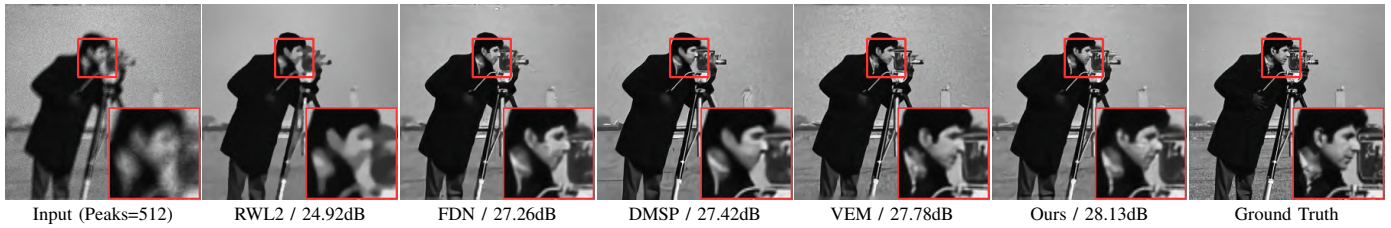


Fig. 10: Visual comparison of deblurring results on image 'Cameraman' in the presence of Poisson noise

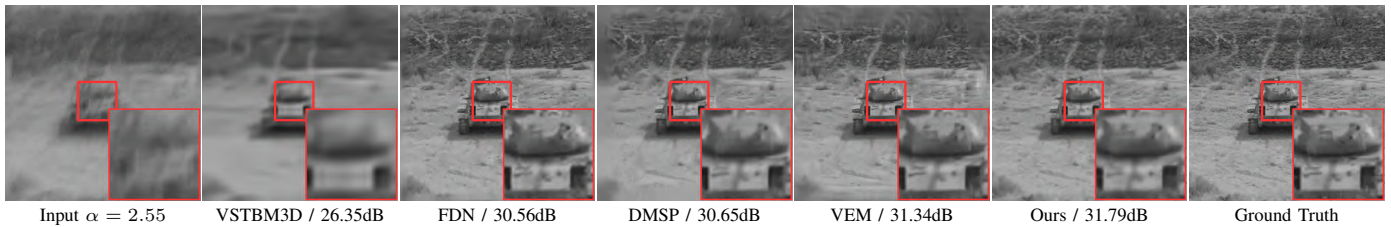


Fig. 11: Visual comparison of deblurring results on image 'Tank' in the presence of Poisson noise

#### V. VISUAL COMPARISON OF DEBLURRING IN THE PRESENCE OF KERNEL UNCERTAINTY

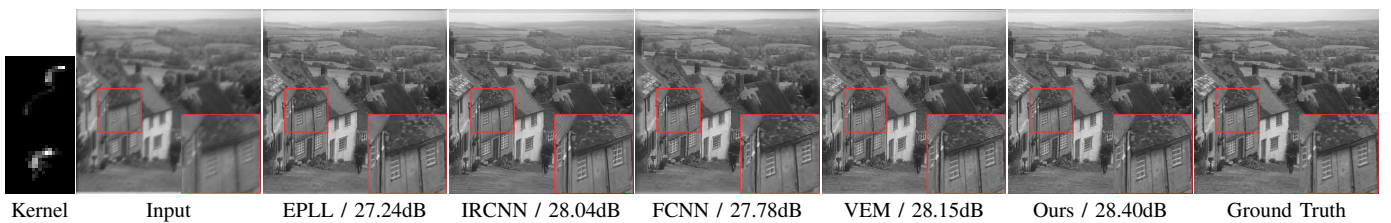


Fig. 12: Visual comparison of deblurring results on image 'Goldhill' in the presence of kernel error. The first column contains ground truth kernel (top) and estimated kernel from Pan *et al.*(bottom).

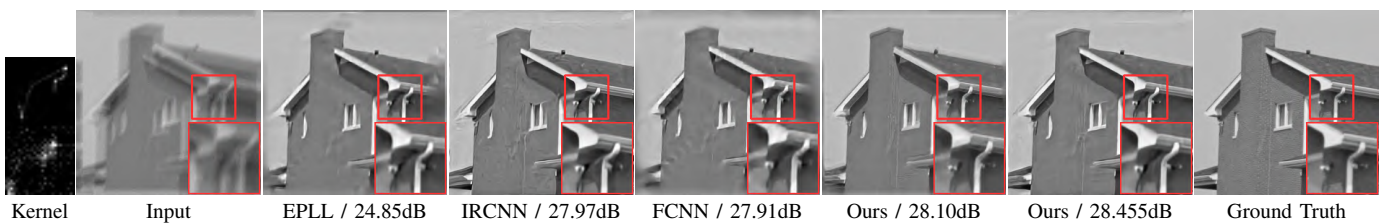


Fig. 13: Visual comparison of deblurring results on image 'House' in the presence of kernel error. The first column contains ground truth kernel (top) and estimated kernel from Perrone and Favaro (bottom).



## VI. VISUAL INSPECTION OF THE CASES THAT CHALLENGE OUR METHOD

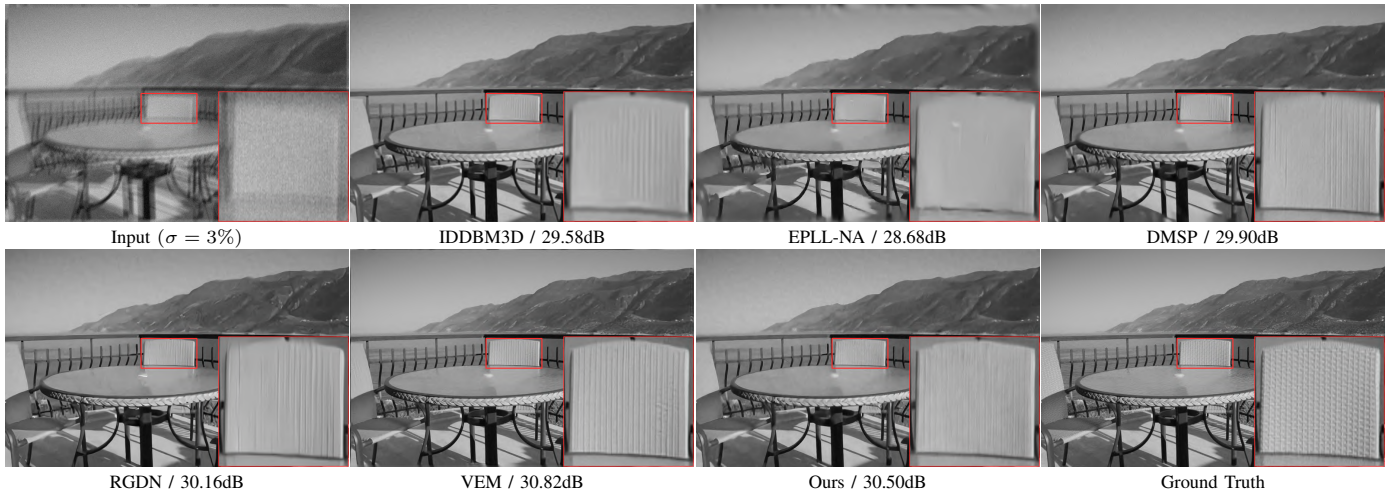


Fig. 14: Illustration of a less-successful result from the proposed method and the visual comparison to other methods in the presence of AWGN.

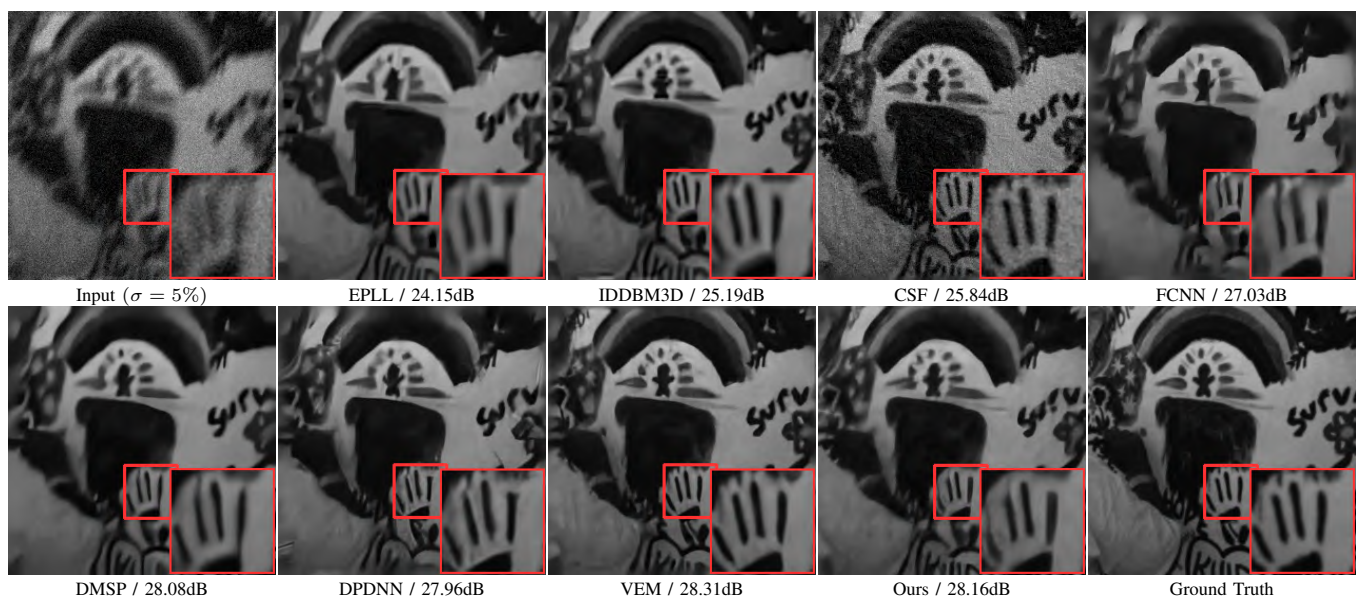


Fig. 15: Illustration of a less-successful result from the proposed method and the visual comparison to other methods in the presence of AWGN.

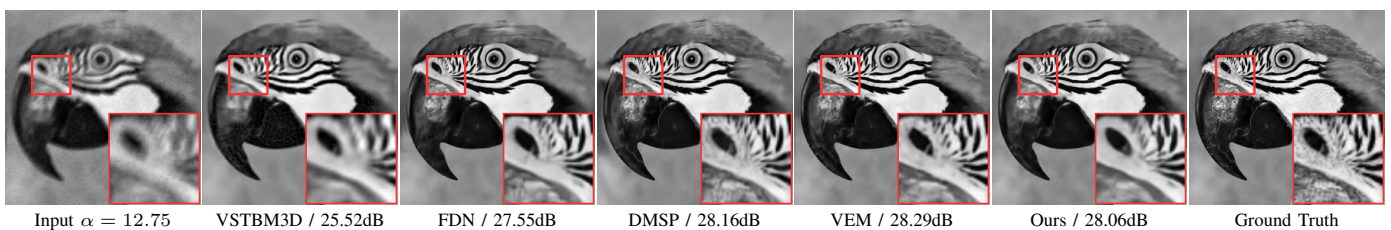


Fig. 16: Illustration of a less-successful result from the proposed method and the visual comparison to other methods in the presence of Poisson noise.