

Supplementary material: Employing Multiple Priors in Retinex-Based Low-Light Image Enhancement

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Abstract

To more vividly demonstrate the superiority of our proposed method, this supplementary material includes an additional eight visual comparison charts.

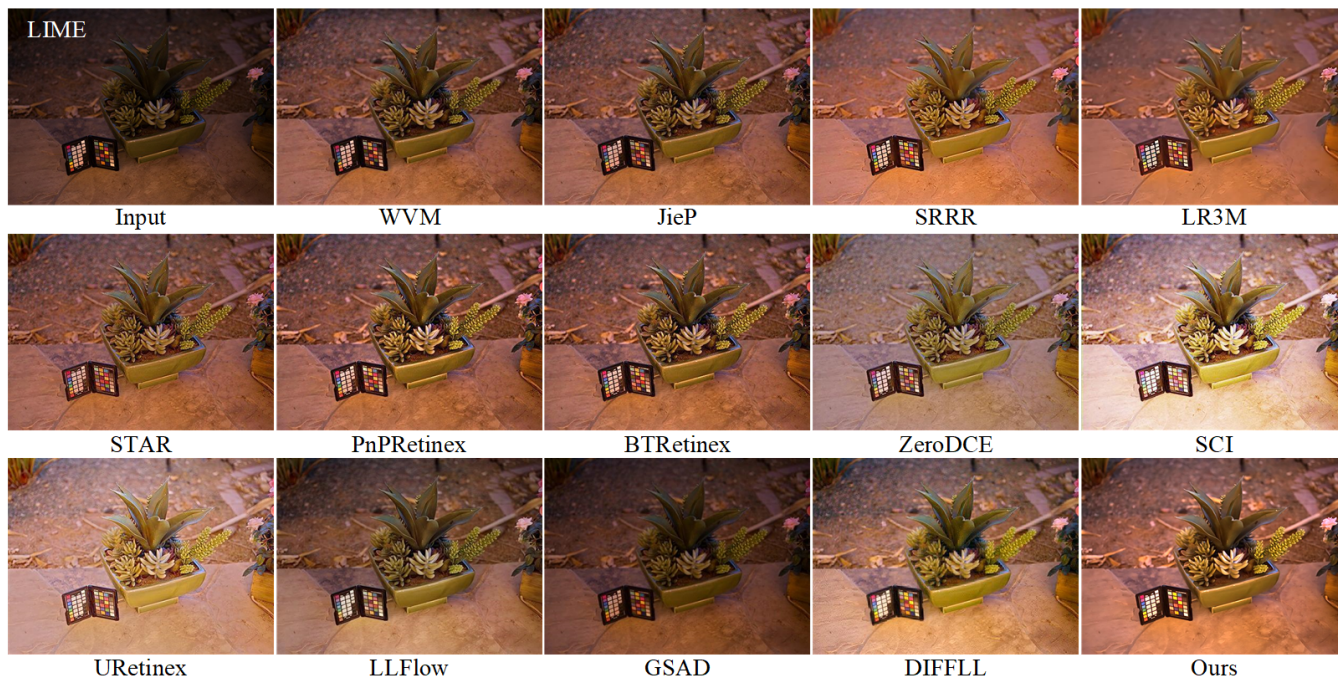


Figure 1: Global Comparative analysis of enhanced results on the subset LIME [GLL16] of unpaired dataset PG660. Zoom in for a better view.

References

- [FLZ*15] FU X., LIAO Y., ZENG D., HUANG Y., ZHANG X.-P., DING X.: A probabilistic method for image enhancement with simultaneous illumination and reflectance estimation. *IEEE Transactions on Image Processing* 24, 12 (2015), 4965–4977. 3
- [FZH*16] FU X., ZENG D., HUANG Y., LIAO Y., DING X., PAISLEY J.: A fusion-based enhancing method for weakly illuminated images. *Signal Processing* 129 (2016), 82–96. 2
- [GLL16] GUO X., LI Y., LING H.: Lime: Low-light image enhancement via illumination map estimation. *IEEE Transactions on image processing* 26, 2 (2016), 982–993. 1

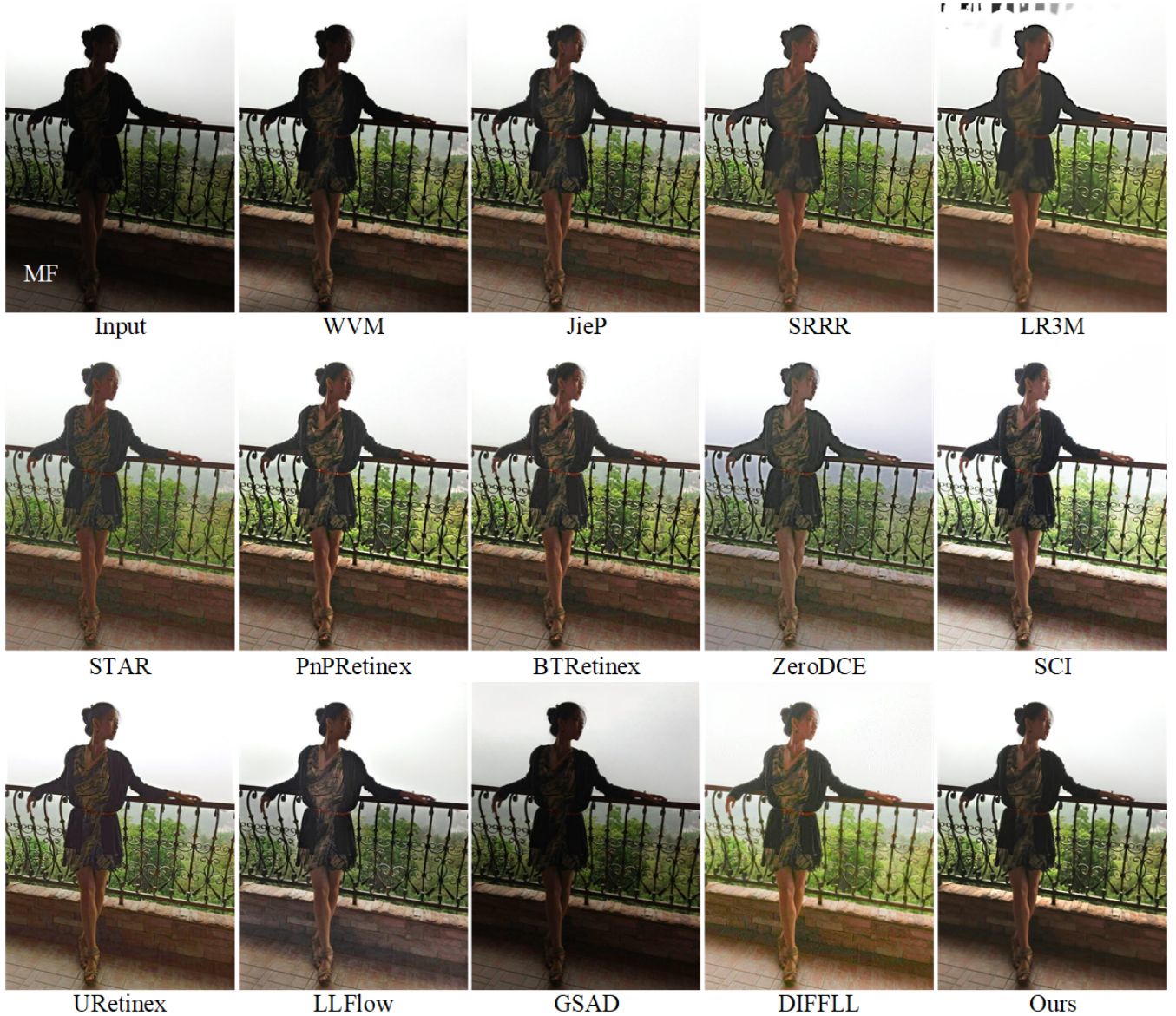


Figure 2: Global comparative analysis of enhanced results on the subset MF [FZH*16] of unpaired dataset PG660. Zoom in for a better view.

- [HXY*23] HAI J., XUAN Z., YANG R., HAO Y., ZOU F., LIN F., HAN S.: R2net: Low-light image enhancement via real-low to real-normal network. *Journal of Visual Communication and Image Representation* 90 (2023), 103712. 5
- [MZW15] MA K., ZENG K., WANG Z.: Perceptual quality assessment for multi-exposure image fusion. *IEEE Transactions on Image Processing* 24, 11 (2015), 3345–3356. 4
- [WWYL18] WEI C., WANG W., YANG W., LIU J.: Deep retinex decomposition for low-light enhancement. *arXiv preprint arXiv:1808.04560* (2018). 5
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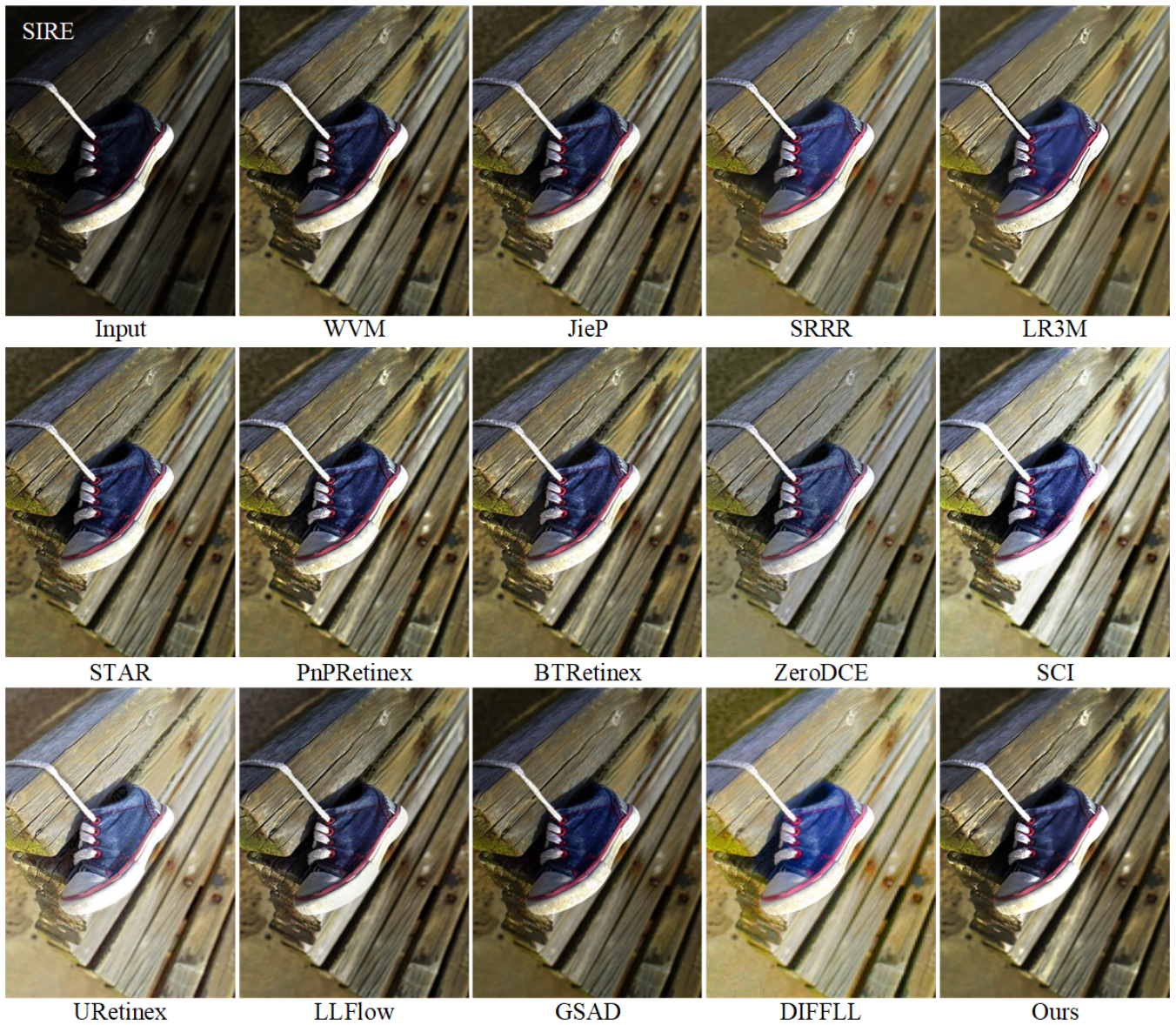


Figure 3: Global Comparative analysis of enhanced results on the subset SIRE [FLZ⁺15] of unpaired dataset PG660. Zoom in for a better view.



Figure 4: Global Comparative analysis of enhanced results on the subset NPE [WZHL13] of unpaired dataset PG660. Zoom in for a better view.

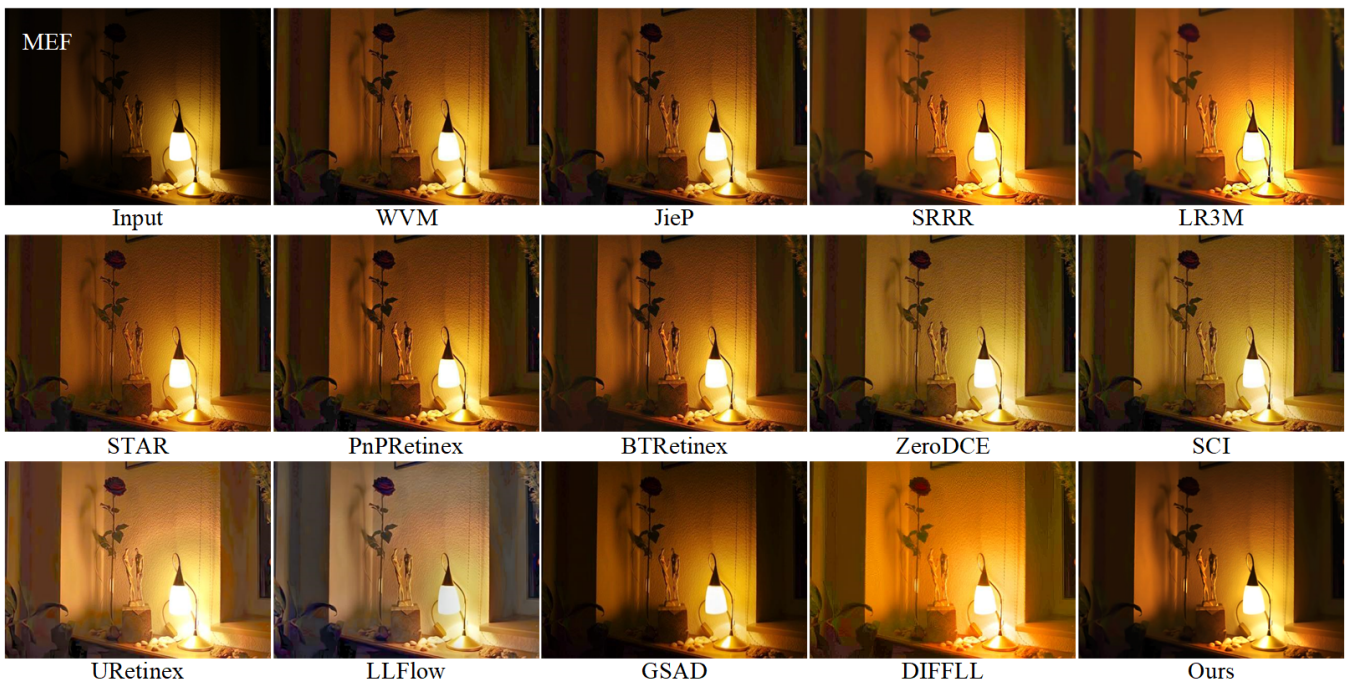


Figure 5: Global Comparative analysis of enhanced results on the subset MEF [MZW15] of unpaired dataset PG660. Zoom in for a better view.

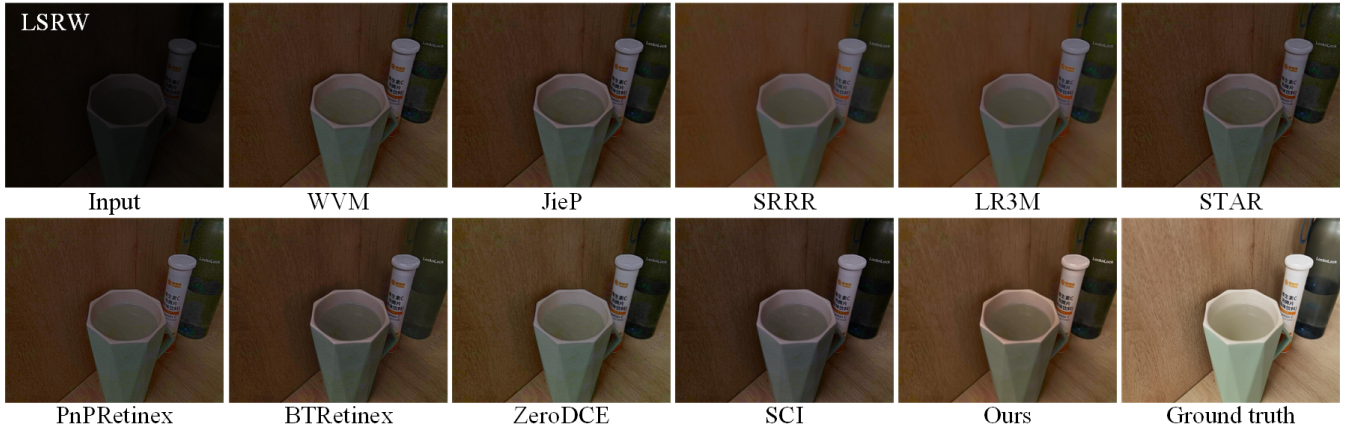


Figure 6: Global Comparative analysis of enhanced results on the paired dataset LSRW [HXY*23]. Zoom in for a better view.

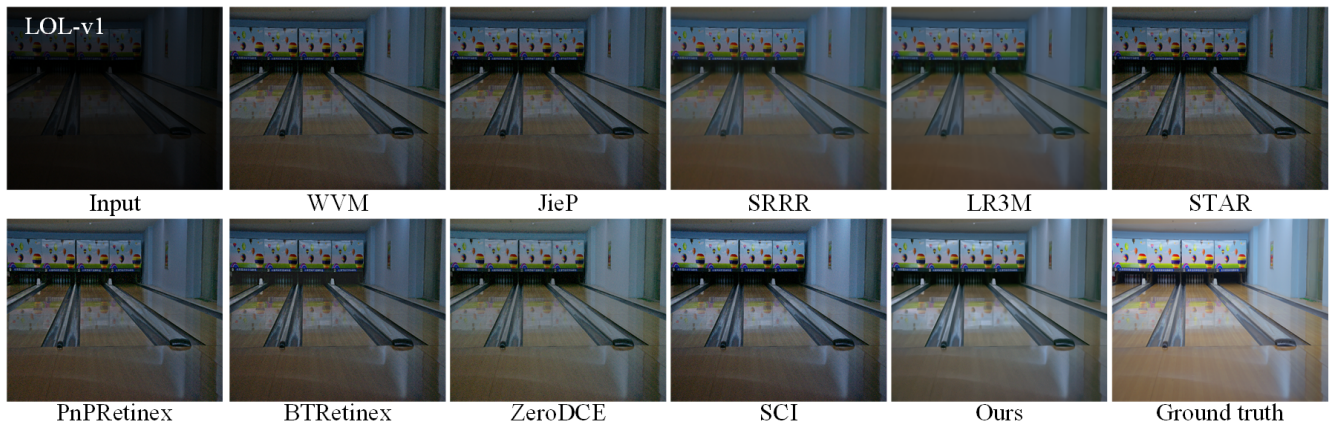


Figure 7: Global Comparative analysis of enhanced results on the paired dataset LOL-v1 [WWYL18]. Zoom in for a better view.



Figure 8: Global Comparative analysis of enhanced results on the paired dataset LOL-v2 [YWH*21]. Zoom in for a better view.