Learning to Restore Low-Light Images via Decomposition-and-Enhancement  
(Supplementary Material)

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This material first visualizes the internal results of the proposed network in Figure 1 and Figure 2. It then provides visual comparisons between the proposed method and four state-of-the-art low-light image enhancement methods (SID [1], LIME [3], DSLR [4] and DeepUPE [7], which are the top four existing methods according to Table 1 in the paper) in Figure 3, Figure 4 and Figure 5. Finally, we provide visual comparison between our method and different combinations of deep learning based enhancement methods and denoising methods in Figure 6.

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Figure 1: Visualization of internal results from the proposed network: (a) input image, (b) histogram equalization, (c) predicted content, (d) predicted amplification map, (e) predicted amplified image, (f) predicted detail map, (g) final output, and (h) ground truth.
Figure 2: Visualization of internal results from the proposed network: (a) input image, (b) histogram equalization, (c) predicted content, (d) predicted amplification map, (e) predicted amplified image, (f) predicted detail map, (g) final output, and (h) ground truth.
Figure 3: Visual results of state-of-the-art methods and ours on input low-light images from our test set.
Figure 4: Visual results of state-of-the-art methods and ours on input low-light images from our test set.
Figure 5: Visual results of state-of-the-art methods and ours on input low-light images from our test set.
Figure 6: Comparison to different combinations of deep learning based enhancement methods (DeepUPE[7] and DSLR[4]) and denoising methods (BM3D[2], xDnCNN[6] and TWSC[5]).

References