Deep Polarimetric HDR Reconstruction, Supplementary material

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1 INTRODUCTION

The supplementary material of the paper "Deep Polarimetric HDR Reconstruction" consists of the following components:

(1) This document provides a set of additional HDR reconstruction comparisons between the proposed method and state-of-the-art methods.
(2) The model used for reconstruction is available at: https://githubLinkAnonymity. The repository shares a PyTorch implementation of the CNN, test images, training dataset, and together with the provided trained parameters reconstructions can be made from LDR polarization inputs.

2 SUPPLEMENTARY RESULTS

We provide additional visual results, as shown in Fig. 1 and 2. The proposed DPHR method consistently presents better results with color consistency, free of visible artifacts, and overall able to recover richer textures in all regions. This is because DPHR is designed to handle polarization images, as it integrated the polarimetric cues into the framework.

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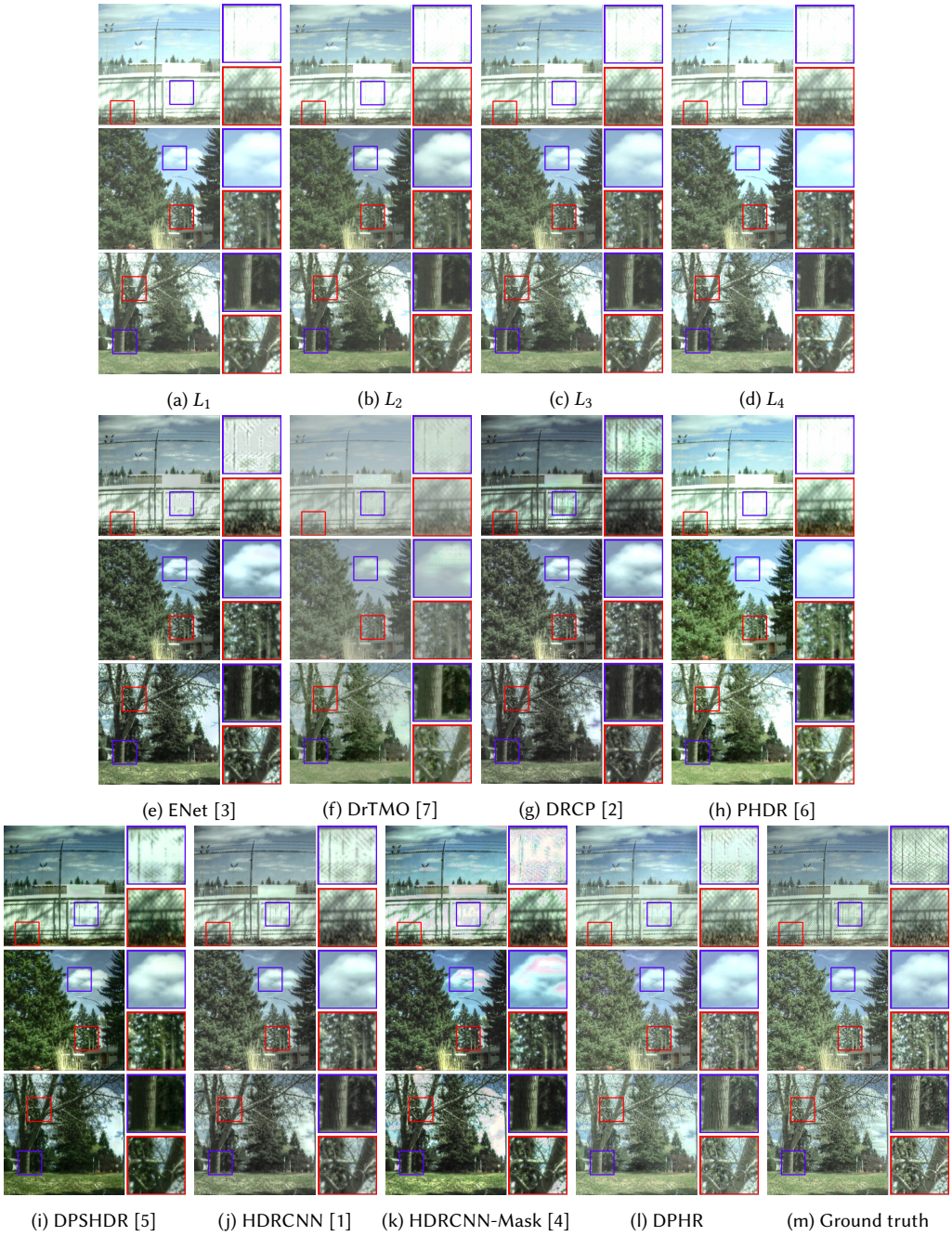

(a) L_1 (b) L_2 (c) L_3 (d) L_4

(e) ENet [3] (f) DrTMO [7] (g) DRCP [2] (h) PHDR [6]

(i) DPSHDR [5] (j) HDRCNN [1] (k) HDRCNN-Mask [4] (l) DPHR (m) Ground truth

Fig. 1. Additional qualitative comparative results with state-of-the-art methods. The proposed DPHR method presents color consistency, free of visible artifacts, and overall able to recover richer textures in all regions. The Photomatix Enhanced TMO is used.

(a) L_1 (b) L_2 (c) L_3 (d) L_4

(e) ENet [3] (f) DrTMO [7] (g) DRCP [2] (h) PHDR [6]

(i) DPSHDR [5] (j) HDRCNN [1] (k) HDRCNN-Mask [4] (l) DPHR (m) Ground truth

Fig. 2. Additional qualitative comparative results with state-of-the-art methods. The proposed DPHR method presents color consistency, free of visible artifacts, and overall able to recover richer textures in all regions. The Photomatix Enhanced TMO is used.