Supplementary Materials for "EndoUIC: Prompt Diffusion Transformer for Unified Illumination Correction in Capsule Endoscopy"

Supplementary Material

–

Table 1. Full results of EC comparison with existing methods on our CEC dataset.

Models	RetinexNet	Zero-DCE	RCTNet	MSEC	FECNet	DRBN-ENC	MIRNetv1	MIRNetv2	LA-Net
PSNR ↑	19.05	10.30	18.90	7.54	28.78	26.83	27.62	28.36	16.58
SSIM ↑	76.74	65.46	65.03	38.77	92.61	90.50	93.03	93.58	66.40
LPIPS ↓	0.4522	0.5873	0.5847	0.6561	0.1048	0.1452	0.1252	0.1080	0.4233
Models	LLCaps	PyDiff	PromptIR	LACT	PIP	CLE	PSENet	DiT	EndoUIC
PSNR ↑	27.55	28.18	28.27	28.40	25.01	27.12	12.70	23.43	**29.65**
SSIM ↑	85.95	95.79	83.14	93.09	70.09	69.99	64.74	91.18	**96.80**
LPIPS ↓	0.2366	0.0941	0.0717	0.1103	0.1833	0.1527	0.4973	0.1560	**0.0655**

Table 2. Full results of EC comparison with existing methods on the Endo4IE dataset.

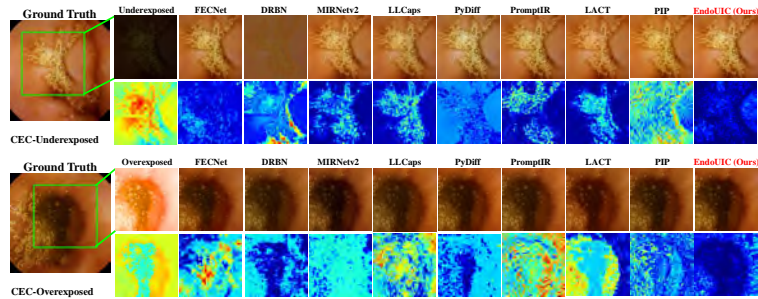| Models	LMSPEC*	LMSPEC+*	RetinexNet	Zero-DCE	RCTNet	MSEC	FECNet	DRBN-ENC	MIRNetv2
PSNR ↑	23.97	23.62	16.82	14.30	23.66	22.24	24.72	7.86	23.85
SSIM ↑	23.62	79.97	68.78	68.15	79.59	76.05	81.84	5.14	82.33
LPIPS ↓	-	-	0.3148	0.4840	0.3041	0.2508	0.2031	0.8516	0.2376
Models	LA-Net	LLCaps	PyDiff	PromptIR	LACT	PIP	CLE	PSENet	EndoUIC
PSNR ↑	23.51	22.85	24.73	23.73	22.92	25.28	21.20	17.49	**25.49**
SSIM ↑	83.78	66.42	84.78	79.57	76.88	81.94	57.39	71.12	**85.20**
LPIPS ↓	**0.1186**	0.3446	0.2148	0.2396	0.2671	0.2150	0.3816	0.2839	0.1937

Fig. 1. The visualization for the EC task on the CEC dataset.

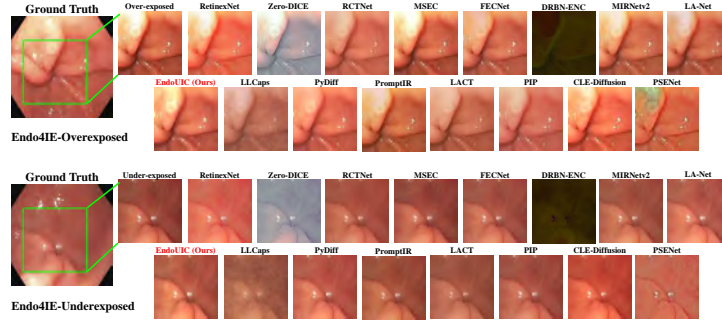**Fig. 2.** The visualization for the EC task on the Endo4IE dataset.
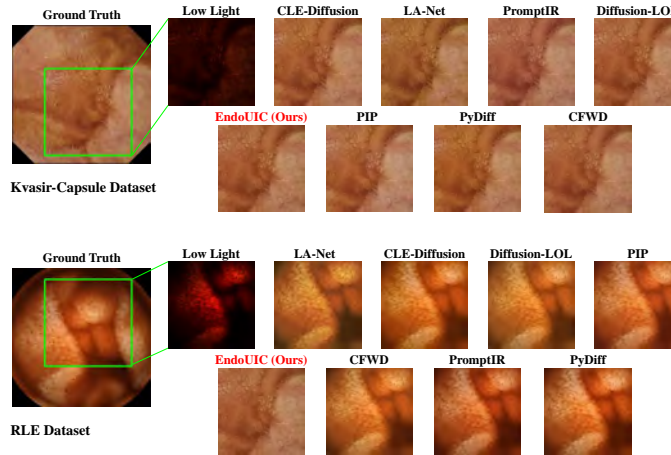

Fig. 3. The visualization for the LLIE task on Kvasir-Capsule and RLE datasets.