

Table 1. Benchmarking results for low-light enhancement. Among unsupervised methods, we highlight the top-ranking scores in **red** and the second in **blue**. Additionally, we denote the training set used by each model. “LOL+” indicates a fusion of LOL and other datasets.

Datasets		Train Set	LOL [48] [56]				MIT-Adobe FiveK [2]				Unpaired Sets	
Metrics			PSNR↑	SSIM↑	LPIPS↓	LOE↓	PSNR↑	SSIM↑	LPIPS↓	LOE↓	BRISQUE↓	NL↓
Supervised	Retinex-Net [48]	LOL	16.19	0.403	0.534	0.346	12.30	0.687	0.258	0.244	27.10	3.254
	KinD [64]	LOL	20.21	0.814	0.147	0.245	14.71	0.756	0.176	0.174	26.89	0.700
	KinD++ [65]	LOL	16.64	0.662	0.410	0.288	15.76	0.650	0.319	0.176	26.16	0.431
	URetinex-Net [49]	LOL	20.93	0.854	0.104	0.245	14.10	0.734	0.182	0.187	23.80	1.319
	Retinexformer [3]	LOL	28.48	0.877	0.117	0.256	13.87	0.692	0.222	0.224	14.77	1.064
	Retinexformer [3]	MIT	13.02	0.426	0.365	0.280	24.93	0.907	0.063	0.162	24.13	0.684
	DiffLL [18]	LOL+	28.54	0.870	0.102	0.253	15.81	0.719	0.244	0.213	14.96	0.888
Unsupervised	ExCNet [62]	test images	16.29	0.455	0.380	0.295	14.21	0.719	0.197	0.197	19.03	1.563
	EnlightenGAN [19]	own data	18.57	0.700	0.302	0.291	13.28	0.738	0.203	0.199	20.65	0.779
	PairLIE [7]	LOL+	19.70	0.774	0.235	0.278	10.55	0.642	0.273	0.225	29.84	1.471
	NeRCo [55]	LSRW [12]	19.67	0.720	0.266	0.310	17.33	0.767	0.208	0.213	22.81	0.603
	CLIP-LIT [27]	own data	14.82	0.524	0.371	0.320	17.00	0.781	0.159	0.194	23.44	1.962
	ZeroDCE [10]	own data	17.64	0.572	0.316	0.296	13.53	0.725	0.201	0.191	21.76	1.569
	ZeroDCE++ [23]	own data	17.03	0.445	0.314	0.391	12.33	0.408	0.280	0.417	19.34	1.150
	RUAS [30]	MIT	13.62	0.462	0.346	0.292	9.53	0.610	0.301	0.272	29.91	2.091
	RUAS [30]	LOL	15.47	0.490	0.305	0.330	5.15	0.373	0.669	0.399	44.70	3.312
	RUAS [30]	FACE [57]	15.05	0.456	0.371	0.292	5.00	0.366	0.685	0.398	46.21	3.633
	SCI [34]	MIT	11.67	0.395	0.361	0.286	16.29	0.795	0.143	0.165	16.73	0.853
	SCI [34]	LOL+	16.97	0.532	0.312	0.289	7.83	0.573	0.360	0.187	24.46	1.893
	SCI [34]	FACE [57]	16.80	0.543	0.322	0.297	10.95	0.684	0.272	0.205	18.33	1.335
	Ours	COCO [28]	20.31	0.808	0.202	0.281	18.51	0.785	0.163	0.188	14.64	0.423