

TABLE VI: Quantitative comparison with SOTA methods on multiple derain benchmark datasets. **Thicker** text indicates the best results. PSNR/SSIM values are calculated on the Y channel in YCbCr color space.

Methods	Venue	Rain100L [37]		Rain100H [37]		Test100 [38]		Test1200 [39]		Test2800 [40]		Average	
		PSNR	SSIM	PSNR	SSIM	PSNR	SSIM	PSNR	SSIM	PSNR	SSIM	PSNR	SSIM
DerainNet [46]	TIP'17	27.03	0.884	14.92	0.592	22.77	0.810	23.38	0.835	24.31	0.861	22.48	0.796
SEMI [47]	CVPR'19	25.03	0.842	16.56	0.486	22.35	0.788	26.05	0.822	24.43	0.782	22.88	0.744
DIDWDN [48]	CVPR'18	25.23	0.741	17.35	0.524	22.56	0.818	29.65	0.901	28.13	0.867	24.58	0.770
UMRL [49]	CVPR'19	29.18	0.923	26.01	0.832	24.41	0.829	30.55	0.910	29.97	0.905	28.02	0.880
RESCAN [50]	ECCV'18	29.80	0.881	26.36	0.786	25.00	0.835	30.51	0.882	31.29	0.904	28.59	0.857
PreNet [51]	CVPR'19	32.44	0.950	26.77	0.858	24.81	0.851	31.36	0.911	31.75	0.916	29.42	0.897
MSPFN [52]	CVPR'20	32.40	0.933	28.66	0.860	27.50	0.876	32.39	0.916	32.82	0.930	30.75	0.903
MPRNet [14]	CVPR'21	36.40	0.9650	30.41	0.8900	30.27	0.8970	32.91	0.9160	33.64	0.9380	32.73	0.9210
SPAIR [53]	ICCV'21	36.93	0.969	30.95	0.892	30.35	0.909	33.04	0.922	33.34	0.936	32.91	0.926
PCNet [54]	TIP'21	34.42	0.953	28.45	0.870	26.19	0.871	32.03	0.913	32.81	0.931	30.72	0.908
Uformer [19]	CVPR'22	33.12	0.945	25.21	0.828	28.42	0.886	32.30	0.919	30.42	0.922	29.89	0.900
DGUNet [10]	CVPR'22	37.42	0.969	30.66	0.891	30.32	0.899	33.23	0.920	33.68	0.938	33.06	0.923
KiT [22]	CVPR'22	36.65	0.969	30.47	0.897	30.26	0.904	32.81	0.918	33.85	0.941	32.81	0.929
DANet [33]	IJCAI'22	35.85	0.962	29.96	0.889	29.90	0.893	33.10	0.919	33.11	0.936	32.38	0.920
ELFormer [34]	ACMMM'22	36.67	0.968	30.48	0.896	30.45	0.909	33.38	0.925	33.20	0.935	32.84	0.927
DAWN [8]	ACMMM'23	36.73	0.971	30.62	0.896	30.69	0.910	33.79	0.926	-	-	32.95	0.926
MSHFN [11]	TNNLS'23	32.98	0.935	28.20	0.856	27.66	0.881	32.46	0.919	32.65	0.927	32.70	0.903
MFDNet [9]	TIP'24	37.61	0.973	30.48	0.899	30.78	0.914	33.01	0.925	33.55	0.939	33.08	0.930
GBPG-Net (Ours)	-	38.61	0.976	31.05	0.901	31.82	0.921	32.71	0.925	33.92	0.942	33.62	0.933