Table 3. Quantitative evaluation of state-of-the-art SR approaches, including PSNR and SSIM for scale 4×, 8× and 16×. Red indicates the best and blue indicates the second best results.

Algorithm	Scale	Set5		Set14		BSD100		Urban100		Manga109	
		PSNR	SSIM	PSNR	SSIM	PSNR	SSIM	PSNR	SSIM	PSNR	SSIM
Bicubic	4×	28.42	0.810	26.10	0.704	25.96	0.669	23.64	0.659	25.15	0.789
A+ [23]		30.30	0.859	27.43	0.752	26.82	0.710	24.34	0.720	27.02	0.850
CRFSR [33]		31.10	0.871	27.87	0.765	27.05	0.719	24.89	0.744	28.12	0.872
SRCNN [8]		30.49	0.862	27.61	0.754	26.91	0.712	24.53	0.724	27.66	0.858
LapSRN [17]		31.54	0.885	28.19	0.772	27.32	0.728	25.21	0.756	29.09	0.890
EDSR [19]		32.46	0.897	28.80	0.788	27.71	0.742	26.64	0.803	31.02	0.915
RCAN [31]		32.63	0.900	28.87	0.789	27.77	0.744	26.82	0.809	31.22	0.917
ESRGAN [28]		32.73	0.901	28.99	0.792	27.85	0.745	27.03	0.815	31.66	0.920
ABPN(Ours)		32.69	0.900	28.94	0.789	27.82	0.743	27.06	0.811	31.79	0.921
Bicubic	8×	24.39	0.657	23.19	0.568	23.67	0.547	21.24	0.516	21.68	0.647
A+ [23]		25.52	0.692	23.98	0.597	24.20	0.568	21.37	0.545	22.39	0.680
CRFSR [33]		26.07	0.732	23.97	0.600	24.20	0.569	21.36	0.550	22.59	0.688
SRCNN [8]		25.33	0.689	23.85	0.593	24.13	0.565	21.29	0.543	22.37	0.682
LapSRN [17]		26.15	0.738	24.42	0.622	24.59	0.587	21.88	0.583	23.60	0.742
EDSR [19]		26.97	0.775	24.94	0.640	24.80	0.596	22.47	0.620	24.58	0.778
RCAN [31]		27.47	0.791	25.40	0.655	25.05	0.608	23.22	0.652	25.58	0.809
HBPN [20]		27.17	0.785	24.96	0.642	24.93	0.602	23.04	0.647	25.24	0.802
ABPN(Ours)		27.25	0.786	25.08	0.638	24.99	0.604	23.04	0.641	25.29	0.802
		DIV8K val		DIV2K val		BSD100		Urban100		Manga109	
Bicubic	16×	-	-	22.867	0.598	21.73	0.477	18.92	0.434	19.10	0.568
EDSR [19]		-	-	24.13	0.631	22.62	0.506	19.96	0.481	20.62	0.635
RCAN [31]		-	-	24.30	0.639	22.69	0.511	20.20	0.496	20.88	0.656
ESRGAN [28]		-	-	19.09	0.421	18.01	0.281	15.42	0.262	17.41	0.428
ABPN(Ours)		26.81	0.68	24.38	0.641	22.72	0.512	20.39	0.515	21.25	0.673