

Table I. PSNR (dB) results of the reconstructed *fence* images by different demosaicking and denoising methods.

Demosaicking Methods	Denoising Methods	PSNR Results (dB)					
		$\sigma_r = \sigma_g = \sigma_b = 12$			$\sigma_r = 13, \sigma_g = 12, \sigma_b = 10$		
		R	G	B	R	G	B
[1]	[5]	28.0	30.3	28.8	28.4	30.3	28.6
	[6]	28.1	30.6	28.3	27.9	30.6	28.6
[2]	[5]	30.5	31.3	30.8	30.3	31.3	31.2
	[6]	30.5	31.3	30.9	30.3	31.3	31.2
[3]	[5]	29.9	30.7	30.1	29.7	30.7	30.3
	[6]	30.2	31.1	30.6	30.0	31.2	30.9
[4]	[5]	30.4	31.5	30.7	30.2	31.5	31.1
	[6]	30.4	31.5	31.0	30.2	31.6	31.3
Joint Demosaicking-Denoising [7]			28.6	28.3	27.1	28.8	28.5
Joint Demosaicking-Denoising [8]			31.5	31.2	30.5	31.6	31.5
PCA-based CFA Denoising + Demosaicking [1]			31.4	30.2	29.5	31.4	30.3
PCA-based CFA Denoising + Demosaicking [2]			31.6	31.6	30.9	31.7	31.8
PCA-based CFA Denoising + Demosaicking [3]			31.5	31.4	30.7	31.5	31.5
PCA-based CFA Denoising + Demosaicking [4]			31.5	31.5	30.7	31.6	31.7

Table II. PSNR (dB) results of the reconstructed *houses* images by different demosaicking and denoising methods.

Demosaicking Methods	Denoising Methods	PSNR Results (dB)					
		$\sigma_r = \sigma_g = \sigma_b = 12$			$\sigma_r = 13, \sigma_g = 12, \sigma_b = 10$		
		R	G	B	R	G	B
[1]	[5]	25.9	27.9	25.9	25.8	27.9	26.2
	[6]	25.6	28.0	25.5	25.5	28.0	25.8
[2]	[5]	28.2	29.1	28.2	28.0	29.1	28.5
	[6]	28.2	28.8	28.3	28.0	28.9	28.6
[3]	[5]	27.4	28.3	27.5	27.4	28.4	27.7
	[6]	27.6	28.5	27.8	27.6	28.7	28.1
[4]	[5]	28.4	29.5	28.6	28.3	29.6	28.8
	[6]	28.6	29.6	28.9	28.5	29.7	29.2
Joint Demosaicking-Denoising [7]		24.7	26.3	24.9	24.7	26.3	25.0
Joint Demosaicking-Denoising [8]		28.3	29.3	28.5	28.2	29.3	28.8
PCA-based CFA Denoising + Demosaicking [1]		26.4	28.7	26.5	26.3	28.8	26.6
PCA-based CFA Denoising + Demosaicking [2]		28.6	29.5	29.0	28.6	29.5	29.1
PCA-based CFA Denoising + Demosaicking [3]		28.2	29.1	28.6	28.2	29.2	28.7
PCA-based CFA Denoising + Demosaicking [4]		28.5	29.4	28.9	28.5	29.5	29.1

Table III. PSNR (dB) results of the reconstructed *parrot* images by different demosaicking and denoising methods.

Demosaicking Methods	Denoising Methods	PSNR Results (dB)		
		$\sigma_r = 13, \sigma_g = 12, \sigma_b = 10$		
		R	G	B
[2]	[6]	33.15	34.62	34.16
[3]	[6]	32.65	34.30	33.32
[4]	[6]	32.84	34.58	33.63
Joint Demosaicking-Denoising [7]		32.46	33.90	32.78
Joint Demosaicking-Denoising [8]		33.20	34.80	34.11
PCA-based CFA Denoising + Demosaicking [2]		33.72	34.79	34.19

Table IV. PSNR (dB) results of the reconstructed *window* images by different demosaicking and denoising methods.

Demosaicking Methods	Denoising Methods	PSNR Results (dB)		
		$\sigma_r = 13, \sigma_g = 12, \sigma_b = 10$		
		R	G	B
[2]	[6]	28.52	29.14	29.08
[3]	[6]	28.13	28.86	28.57
[4]	[6]	29.05	29.77	29.59
Joint Demosaicking-Denoising [7]		26.36	26.91	26.57
Joint Demosaicking-Denoising [8]		28.90	29.45	29.43
PCA-based CFA Denoising + Demosaicking [2]		28.91	29.27	29.33

Table V. PSNR (dB) results of the reconstructed *motor* images by different demosaicking and denoising methods.

Demosaicking Methods	Denoising Methods	PSNR Results (dB)		
		$\sigma_r = 13, \sigma_g = 12, \sigma_b = 10$		
		R	G	B
[2]	[6]	28.94	29.69	29.54
[3]	[6]	28.48	29.45	28.85
[4]	[6]	29.17	30.14	29.66
Joint Demosaicking-Denoising [7]		26.64	27.29	27.15
Joint Demosaicking-Denoising [8]		28.90	29.75	29.37
PCA-based CFA Denoising + Demosaicking [2]		29.21	29.84	29.55

Table VI. PSNR (dB) results of the reconstructed *flower* images by different demosaicking and denoising methods.

Demosaicking Methods	Denoising Methods	PSNR Results (dB)		
		$\sigma_r = 13, \sigma_g = 12, \sigma_b = 10$		
		R	G	B
[2]	[6]	32.16	33.12	32.96
[3]	[6]	31.89	33.20	32.44
[4]	[6]	32.16	33.63	32.88
Joint Demosaicking-Denoising [7]		30.16	30.15	29.67
Joint Demosaicking-Denoising [8]		32.06	33.23	32.70
PCA-based CFA Denoising + Demosaicking [2]		32.47	33.28	32.89

References

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