

Small, light, long zoom is a real bargain

Hands on: Fairly small and light, this lens balances guite well on polycarbonate SLRs. Satin-black plastic exterior is nicely finished. Focal-length and distance scales (meter and feet) are marked in legible bright white, but we'd prefer the distance scales in a different color to indicate meters or feet. Rubbery zoom ring provides good grip. Zoom action is smooth and reasonably damped, except at longer focal lengths. At lower focal-length settings, zoom creep is noticeable. Ribbed focusing ring provides adequate grip, turns very smoothly in manual focus, but is very underdamped. AF/manual focus was well-positioned and easy to use. Included barrel lenshood has bayonet mount, and can be reversed for storage. Front filter ring turns during focusing, an inconvenience for polarizer or split-density filter users. Autofocusing action smooth, about average in speed, and quiet.

In the lab: SQF data showed excellent results at 100mm, very good results at 200mm and 300mm.

Noticeable pincushion distortion (1.54 percent and 1.78 percent) was seen at 100mm and 300mm respectively; at 200mm, pincushion was measured as considerable (2.2 percent). Exposure at the film plane was very accurate at 100mm, with 1/4-stop underexposure at maximum aperture due to light falloff. Less than 1/10-stop overexposure was seen from $\frac{1}{5}$.6-8, and about 1/s-stop overexposure from f/11 through f/22 At 300mm, exposure was accurate, with ½ stop underexposure at maximum aperture (again, light falloff), about 1/3-stop underexposure f/8-f/11; 1/5-stop underexposure f/16-f/22; 1/3

stop underexposure at f/27.

At the closest focusing distance of 79½ inches at 100mm (1:16.7), center sharpness was excellent from f/4.5–5.6, very good from f/8–11, excellent at f/16, and very good at f/22. Corner sharpness started poor at f/4.5–8, became acceptable at f/11, then very good at f/16 and excellent at f/22. Optimum sharpness was at f/16.

At 200mm, at the closest normal focusing distance of 80 ³/₄ inches (1:8.36), center sharpness was acceptable at f/5.6, good at f/8, acceptable from f/11–16, and good at f/22–27. Corner sharpness was poor from f/5.6–16, acceptable at f/22, and good at f/27. Optimum performance was at f/22.

At the closest normal focusing distance of 81 inches at 300mm (1:5.85), center sharpness was good from f/5.6–8, acceptable at f/11, and poor from f/16–27. Corner sharpness was poor from f/5.6–22, and acceptable at f/27. Optimum performance was at f/8.

In the field: Test slides corroborated SQF figures, with very sharp and contrasty results from center to corner at every aperture at every focal length, except the corners at 200mm and 300mm, which were slightly soft at f/27. Light falloff was gone by f/5.6 at 100mm, by f/8 at 200mm and 300mm. Slight flare, seen from f/16–27 at 200mm and 300mm, was otherwise well controlled.

Conclusion: Hardly a close-focusing lens, and the distortion level is a bit troubling, but sharp performance at normal distances, convenient size, and excellent price (approx. \$130, street) make this a bargain hunter's find in a long zoom.



SPECIFICATIONS

100–300mm (102.10–295.92mm tested), f/4.5–6.7 (f/4.70–7.17 tested), 13 elements in 10 groups. Focusing turns 80 degrees counterclockwise. Zoom ring turns 50 degrees counterclockwise. Focal lengths marked at 100–, 135–, 200–, and 300mm. Diagonal View Angle: 24–8 degrees. Weight: 14¹³/₁₆ oz. Filter size: 55mm. Mounts: Canon AF, Minolta AF, Nikon AF, Pentax AF, and Sigma AF. Lenshood: Included. List price: \$248. Street price: Approx. \$130.

SUBJECTIVE QUALITY FACTOR

ΚË	A+	Α	B+	В	C+	С	D	F	
	@100mm								
N	IAG 🗆	5□	6□	8		12 🗆	17□	22 🗆	
	Size 🗆	4x6□	5x7□	8x1	0 1	lx14□	16x20□	20x24	
	4.5□	96.8□	96.4□	94.	7 9	0.0	82.7□	76.8□	
	5.6□	97.6□	97.3□	96.	1 9	3.2	88.7□	84.7	
	8.0□	97.8□	97.6□	96.	7 9	4.5	90.8	87.2□	
1	1.0□	97.6□	97.3□	96.	2 9	3.4	88.8	84.3□	
1	6.0	97.3□	97.0□	95.	7 9	2.3	86.6□	81.3 🗆	
2	22.0	96.9□	96.5□	94.	9 9	0.6	83.2	76.2□	

@200mm								
MAG	5□	6	8 🗆	12□	17 🗆	22 🗆		
Size□	4x6□	5x7□	8x10 🗆	11x14	16x20□	20x24		
5.6□	95.5□	94.8□	92.2	84.8 🗆	73.6□	65.2□		
8.0□	96.1□	95.5□	93.5□	87.7□	78.7□	71.4□		
11.0□	96.5□	96.1□	94.3□	89.7□	82.3□	76.2□		
16.0□	96.5□	96.0□	94.3□	89.7□	82.2	75.7□		
22.0□	96.1□	95.6□	93.5□	87.9□	78.9□	70.9□		
27.0□	95.6□	95.0□	92.6	86.0□	75.1□	65.6□		

@300mm								
MAG□	5□	6□	8 🗆	12□	17 🗆	22 🗆		
Size□	4x6□	5x7□	8x10 🗆	11x14	16x20□	20x24□		
5.6□	96.7□	96.1□	93.8□	86.6□	76.8□	68.1□		
8.0□	97.3□	96.8□	95.1□	89.8□	82.8	75.3□		
11.0	97.4□	97.0□	95.3□	90.3□	83.8 🗆	76.6□		
16.0□	97.2□	96.7□	94.9□	89.5□	81.9	73.9□		
22.0□	96.6□	96.0□	93.8□	87.2□	76.8□	67.4□		
27.0□	96.0□	95.4□	92.8□	85.0□	72.0 🗆	61.0□		