LENSTESTS



Yes indeed, Canon does have a 28-200mm zoom

Hands on: Fairly massive, solid, weighty, satin-black-finished lens with easy-to-grasp, overly large rubberized zoom ring collar. Narrow but conveniently placed and easy-to-turn manual-focusing ring. Large, highly readable silver-colored zoom focal-length numerals are the only numerals on barrel—there are no distance or magnification ratio scales. Ultrasonic motor makes autofocusing extremely fast and quiet. Good damping prevents zoom setting from slipping when camera is held up or down. Switch close to lensmount shifts focus between auto and manual. Chromed-steel lensmount.

In the lab: SQF data indicates excellent performance at 28mm, and good at 135mm and 200mm. At 28mm there was considerable barrel distortion (1.4 percent), noticeable pincushion at 135mm (1.98 percent) and at 200mm (1.3 percent).

At 28mm, exposure at the film plane was accurate with underexposure by $\frac{1}{2}$ f-stop at maximum aperture due to light falloff, about $\frac{2}{5}$ f-stop from f/5.6 to f/16 and $\frac{1}{3}$ f-stop at f/22. At 200mm, exposure was very accurate with underexposure of $\frac{1}{3}$ f-stop at maximum aperture due to light falloff and less than $\frac{1}{5}$ f-stop from f/8 to f/38.

The closest focusing distance at 28 mm of $15^3/4$ inches [1:11.11 magnification] showed excellent center sharpness at all apertures. Corner sharpness was poor from f/3.5 to f/5.6, acceptable at f/8, very good at f/11, and excellent at f/16, good at f/22. Optimum performance was at f/16.

At 135mm, the closest focusing distance was 12½ inches (1:2.85). Center sharpness was poor at f/5.6, good at f/8, excellent at f/11, very good from f/16 to f/22, and poor at f/32. Corner sharpness was poor from f/5.6 to f/11, acceptable at f/16, very good at f/22, and acceptable at f/32. Optimum performance was at f/22.

At 200mm, closest focusing distance was 16 3/4 inches (1:3.4). Center sharp-

ness was poor from f/5.6 to f/11, acceptable at f/16, good at f/22, and acceptable at f/38. Corner sharpness was poor from f/5.6 to f/16, acceptable at f/22 and poor at f/38. Optimum performance was at f/22

In the field: Test slides were very sharp and contrasty from center to corners at every aperture and focal length, except corner sharpness at f/3.5 and f/5.6 (at 28mm and 135mm, respectively), and center and corner sharpness were slightly soft at f/38 200mm. Flare was considerable from f/3.5 to f/8 at 28mm and from f/5.6 to f/11 at 135mm and 200mm. Light falloff was gone at 28mm by f/5.6 and by f/8 at 135mm and 200mm.

Conclusion: Not optically up to usual Canon standards or those of other 28—200mm brands and rather large. But quietness of operation and remarkable close focusing at small apertures, particularly at 135mm are admirable.



SPECIFICATIONS

28–200mm (29.40–201.78mm tested), 1/3.5–5.6 (f/3.88–5.85 tested), 16 elements in 12 groups. Focusing turns 70 degrees counterclockwise. Zoom ring turns 70 degrees clockwise. Focal lengths marked at 28–, 35–, 50–, 70–, 135–, and 200mm. Diagonal View Angle: 75–12 degrees. Weight: 1lb 113/16 oz. Filter size: 72mm. Mount: Canon AF. List price: \$640. Street price: Approx. \$370.

SUBJECTIVE QUALITY FACTOR

@ 28mm								
MAG	5	6	8	12	17	22		
Size	4x6	5x7	8x10	11x14	16x20	20x24		
3.5	95.8	95.4	94.0	90.7	83.8	75.3		
5.6	96.2	95.8	94.5	91.4	85.2	77.6		
8.0	96.5	96.1	94.9	92.1	86.5	79.7		
11.0	96.4	96.1	94.9	92.0	86.2	79.2		
16.0	96.2	95.8	94.6	91.5	85.5	78.2		
22.0	95.7	95.3	93.8	90.3	83.3	74.7		

@ 135mm								
17 22	12	8	6	5	MAG			
4 16x20 20x2	11x14	8x10	5x7	4x6	Size			
69.2 59.4	82.1	90.8	93.8	94.6	5.6			
71.0 60.9	83.4	91.3	94.1	94.8	8.0			
71.7 61.8	83.8	91.5	94.2	94.9	11.0			
72.9 63.7	84.4	91.8	94.4	95.1	16.0			
72.1 62.3	84.0	91.6	94.3	95.0	22.0			
65.0 52.3	80.3	89.8	93.1	94.0	32.0			
71.7 6 72.9 6 72.1 6	83.8 84.4 84.0	91.5 91.8 91.6	94.2 94.4 94.3	94.9 95.1 95.0	11.0 16.0 22.0			

@ 200mm							
MAG	5	6	8	12	17	22	
Size	4x6	5x7	8x10	11x14	16x20	20x24	
5.6	94.6	93.7	90.4	80.6	66.1	55.8	
8.0	94.6	93.7	90.3	80.3	65.8	55.9	
11.0	95.1	94.4	91.6	83.3	70.8	61.6	
16.0	95.3	94.6	91.9	84.2	72.4	63.6	
22.0	95.2	94.4	91.6	83.4	70.9	61.3	
38.0	94.1	93.2	89.8	79.4	63.0	50.0	