

CONTRAST

Minolta 75-150mm f/4
at 100mm:
at 30 lines/mm

f/ no.	Center (%)		Corner (%)	
4.0	High	65	High	56
5.6	High	72	High	64
8.0	High	72	High	70
11	High	68	High	64
16	High	58	High	57
22	High	46	High	44
32	High	38	High	38

CONTRAST

Minolta 75-150mm f/4
at 150mm:
at 30 lines/mm

f/ no.	Center (%)		Corner (%)	
4.0	High	48	High	48
5.6	High	52	High	52
8.0	High	62	High	50
11	High	64	High	48
16	High	59	High	46
22	High	54	High	40
32	High	46	High	36

BUDGET-PRICED 80-200mm FROM VIVITAR



LIMITED WARRANTY BY
Vivitar Corporation
1623 Stewart Street
Santa Monica, California 90506

Specifications: 80-200mm f/4.5 Vivitar MC, No. 28118856; mounts for Canon, Nikon AI, Minolta, Olympus, Pentax K, Yashica/Contax, M42 Universal thread; accepts 58mm filters; f/4.5 to f/32 with click stops at 1/2-stop intervals except between f/22 and f/32; min. foc. dist. 5 ft., 11 in. (1.8 m); max. magnification, 1:7.5 at 200mm; 5 3/4 in. long, 2 3/4 in. diam. (148 x 70mm); 25 1/2 oz. (730 g); \$229.95.

Practical comments: Rather large for a contemporary 80-200 zoom, but reasonably light; balances well on compact-to-mid-size SLRs; single-touch zoom/focus ring controlled by wide (2 1/2 in.), grippable, textured-rubber collar; smooth, well-damped focusing action gets lens to minimum distance in just-under-180° clockwise turn, holds settings well; zooming action, 1 3/4-in. forward thrust of control ring to go from 80-200mm settings, smooth but too loose to hold settings properly—zoom ring moves down barrel by gravity when lens pointed upwards; all numerical scales large, legible white-on-black except green-on-black metric scale; red infrared



Vivitar's 80-200mm f/4.5 is large by current standards, but it's fairly light, balances well on most SLRs.

focusing index line on barrel; convenient, easy-to-grasp 1/4-in.-wide knurled aperture ring at rear of barrel; relatively long minimum focus distance, lack of close-focus mode does not permit true close-ups in 80-120mm range, but image size can be increased with some effort by backing off, selecting longer focal length; moderately bright

finder image, expected with lenses of this aperture, has good contrast even when shooting against the sun; snaps into focus with alacrity.

Field test slides: At 80mm, sharp across field except slight softness at edges at f/4.5; same performance in 100-135mm range; at 200mm moderate flare, loss of contrast at f/4.5, improves markedly at f/8; but some astigmatism and coma flare at smaller apertures. Some illumination falloff at f/4.5, 135-200mm; ghosts, glare well controlled throughout; image quality same at closest focusing distances; overall performance better than average.

Optical bench analysis (for op-

PERFORMANCE

Our Standard	Tested
Focal length: ± 5% (76.00 to 84.00mm)	81.16mm (190.0 to 210.0mm)
Max. aperture: ± 5% (f/4.28 to f/4.73)	f/4.53 200mm: f/4.62
Distortion: 80mm: ± 2.5% 1.8% (barrel) 200mm: ± 2.5% 1.8% (pincushion)	
Light falloff: at f/5.6, + 1 stop from theoretical limit	80mm: (0-1.13 stops) 0.38 stops 200mm: (0-1.02 stops) 0.50 stops

RESOLUTION

Vivitar 80-200mm f/4.5
at 80mm:
at 1:48 magnification

f/ no.	Center Lines/mm		Corner Lines/mm	
4.5	Good	43	V. Good	30
5.6	Good	48	V. Good	34
8	Good	54	V. Good	38
11	Excellent	60	Excellent	43
16	Excellent	60	Excellent	43
22	V. Good	54	V. Good	38
32	V. Good	43	V. Good	30

CONTRAST

Vivitar 80-200mm f/4.5
at 80mm:
at 30 lines/mm

f/ no.	Center %		Corner %	
4.5	High	45	Medium	26
5.6	High	62	Medium	28
8	High	72	Low	29
11	High	69	Low	24
16	High	64	Low	24
22	High	52	V. Low	23
32	High	42	V. Low	14

RESOLUTION

Vivitar 80-200mm f/4.5
at 135mm:
at 1:50 magnification

f/ no.	Center Lines/mm		Corner Lines/mm	
4.5	Good	40	Excellent	32
5.6	Good	45	V. Good	32
8	V. Good	56	Good	35
11	Excellent	56	Excellent	40
16	V. Good	50	Excellent	45
22	V. Good	50	Excellent	45
32	V. Good	45	Excellent	35

CONTRAST

Vivitar 80-200mm f/4.5
at 135mm:
at 30 lines/mm

f/ no.	Center %		Corner %	
4.5	Medium	35	High	38
5.6	High	48	High	38
8	High	52	High	54
11	High	60	High	57
16	High	48	High	52
22	High	44	High	45
32	High	46	High	48

RESOLUTION

Vivitar 80-200mm f/4.5
at 200mm:
at 1:49 magnification

f/ no.	Center Lines/mm		Corner Lines/mm	
4.5	Good	35	V. Good	31
5.6	Good	35	V. Good	31
8	Good	44	Good	35
11	V. Good	44	V. Good	39
16	Excellent	49	V. Good	39
22	V. Good	44	V. Good	39
32	Excellent	39	Excellent	35

CONTRAST

Vivitar 80-200mm f/4.5
at 200mm:
at 30 lines/mm

f/ no.	Center %		Corner %	
4.5	High	40	Medium	24
5.6	High	49	Medium	25
8	High	54	Medium	30
11	High	58	Medium	30
16	High	57	High	36
22	High	50	High	38
32	High	44	High	40

tical experts only): At 80mm in center, slight yellow-orange flare to f/8, near perfect pattern by f/11, slight softness throughout; toward corners, slight flare to f/8, red-blue lateral color. At 135mm in center, same as above but also very slight spherical aberration. Toward corners, same as at 80mm. At 200mm in center, slight blue-violet flare to f/8, near-perfect pattern by f/8 but image soft; toward corners image soft with much flare to f/11, some lateral color.