

light became very slight by f/16. Slight skew ray flare was present to f/11 with very slight lateral color.

Slight spherical aberration to f/11 was seen on axis at 210mm. There was slight coma to f/11 with very slight lateral color.

## 100-200mm ONE-TOUCH ZOOM FROM OLYMPUS

**Specifications:** 100-200mm f/5.8 Zuiko mount for Olympus bayonet; No. 104140; accepts 49mm filters; f/5 to f/32 full-stop detents; min. foc. dist. 8 ft. (2.4m); 5 1/2 in. long, 2 1/2 in. diam. (142 x 62mm); 1 1/2 lb. (4 oz., 687.6g); \$235.00



Zuiko's first push-pull zoom provides fast handling, quality optics, in a feather-weight mount.

**Practical comments:** Relative light weight, push-pull zoom balances well on Olympus bodies despite its length. Zoom and focus are controlled by a broad 2 1/2 in. diamond knurled rubber ball at zooms out to 200mm with a velvet 1/4 in. stroke. At closest focusing distance with collapsible hood extended is close to 9 in. long but is easy handling because of its slim, light weight body. Apertures are large and easily legible. Zoom range is colorated in green at 100, 120, 160 and 200mm; footage scales in orange and metric scales in white. Apertures are set by a narrow 1/4 in. ring next to the bayonet mount. Depth of field preview buttons on the mount at 9 o'clock in conventional Olympus styling; instrument black finish.

**Field test slides:** Our Kodachrome 64 transparencies were sharp and crisp—fine detail rendering was noted even at f/5.6 wide-open. Performance was above average for a zoom of this range. Flare control was average for a multi-element zoom.

**Optical bench analysis** (for optical experts only): At 100mm on axis—very slight flare; performance near diffraction limits by f/11. Off-axis, very slight astigmatism gone by f/11; very slight lateral color. At 150mm on axis, very slight flare disappearing by f/8; very slight lateral color

by f/16. Slight skew ray flare was present lateral color, again near diffraction limit by f/8. Off-axis, slight flare disappeared by f/8. Slight lateral color throughout.

### PERFORMANCE

| Our Standard                   |  | as Tested                  |  |
|--------------------------------|--|----------------------------|--|
| <b>Focal length:</b> ±5%       |  |                            |  |
| (95.00–105.00mm)               |  | 104.66mm                   |  |
| (190.00–210.00mm)              |  | 194.36mm                   |  |
| <b>Aperture:</b> ±5%           |  |                            |  |
| 100mm: (f 4.75–5.25)           |  | f 5.24                     |  |
| 200mm: (f 4.75–5.25)           |  | f 5.25                     |  |
| <b>Distortion:</b>             |  |                            |  |
| 100mm: (±2%)                   |  | 1.13% (barrel)             |  |
| 200mm: (±2.5%)                 |  | less than 10% (pincushion) |  |
| <b>Light falloff:</b> at f/8   |  |                            |  |
| –1 stop from theoretical limit |  |                            |  |
| 100mm: (0–1.1 stops)           |  | 0.1 stops                  |  |
| 200mm: (0–1.0 stops)           |  | 0.4 stops                  |  |

### RESOLUTION

| OLYMPUS 100-200mm f/5 at 100mm at 1:49.01 |               |               |           |    |
|---|---------------|---------------|-----------|----|
| f   | Center (1 mm) | Corner (1 mm) |           |    |
| 5   | Excellent     | 55            | Excellent | 55 |
| 8   | Excellent     | 62            | Excellent | 55 |
| 11  | V. Good       | 55            | Excellent | 55 |
| 16  | Good          | 49            | Excellent | 44 |
| 22  | Accept        | 44            | Excellent | 44 |
| 32  | Accept        | 35            | Excellent | 35 |

### RESOLUTION

| OLYMPUS 100-200mm f/5 at 150mm at 1:49.01 |               |               |           |    |
|---|---------------|---------------|-----------|----|
| f   | Center (1 mm) | Corner (1 mm) |           |    |
| 5   | Excellent     | 55            | Excellent | 44 |
| 8   | Excellent     | 62            | Excellent | 49 |
| 11  | Excellent     | 49            | Excellent | 55 |
| 16  | V. Good       | 4             | Excellent | 44 |
| 22  | V. Good       | 44            | Excellent | 44 |
| 32  | Excellent     | 39            | Excellent | 39 |

### RESOLUTION

| OLYMPUS 100-200mm f/5 at 200mm at 1:50 |               |               |           |    |
|--|---------------|---------------|-----------|----|
| f                                      | Center (1 mm) | Corner (1 mm) |           |    |
| 5                                      | Excellent     | 56            | Excellent | 50 |
| 8                                      | Excellent     | 50            | Excellent | 50 |
| 11                                     | Excellent     | 50            | Excellent | 50 |
| 16                                     | Excellent     | 45            | Excellent | 45 |
| 22                                     | Excellent     | 45            | Excellent | 45 |
| 32                                     | Excellent     | 40            | Excellent | 40 |

### CONTRAST

| OLYMPUS 100-200mm f/5 at 100mm at 30 lines/mm |            |            |      |    |
|---|------------|------------|------|----|
| f   | Center (%) | Corner (%) |      |    |
| 5   | High       | 53         | High | 32 |
| 8   | High       | 62         | High | 52 |
| 11  | High       | 63         | High | 50 |
| 16  | High       | 54         | High | 42 |
| 22  | High       | 48         | High | 38 |
| 32  | High       | 44         | High | 36 |

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### CONTRAST

| OLYMPUS 100-200mm f/5 at 150mm at 30 lines/mm |            |            |        |    |
|---|------------|------------|--------|----|
| f   | Center (%) | Corner (%) |        |    |
| 5   | High       | 52         | Medium | 24 |
| 8   | High       | 57         | High   | 34 |
| 11  | High       | 60         | High   | 42 |
| 16  | High       | 54         | High   | 44 |
| 22  | High       | 50         | High   | 36 |
| 32  | High       | 46         | High   | 33 |

### CONTRAST

| OLYMPUS 100-200mm f/5 at 200mm at 30 lines/mm |            |            |        |    |
|---|------------|------------|--------|----|
| f   | Center (%) | Corner (%) |        |    |
| 5   | High       | 68         | Medium | 22 |
| 8   | High       | 73         | Medium | 24 |
| 11  | High       | 78         | Medium | 32 |
| 16  | High       | 70         | Medium | 34 |
| 22  | High       | 69         | Medium | 35 |
| 32  | High       | 48         | High   | 36 |

## UPDATED SUPERFAST NORMAL FOR OLYMPUS

**Specifications:** 50mm f/1.2 Zuiko Auto-S; fixed mount for Olympus SLRs; No. 100538; Accepts 49mm filters; f/1.2 to f/16 with full-stop detents; min. foc. dist. 1 1/2 ft. (0.45m); 1 1/2 in. long, 2 1/2 in. diam. (42 x 62mm); 10 1/2 oz. (288.5g);



Zuiko 50mm f/1.2 is compact for superfast normal lens.

**Practical comments:** The new, more compact Zuiko 50mm f/1.2 replaces the earlier 55mm f/1.2 with enhanced performance, reduced size. Compact, medium weight, ultra-high speed normal lens offering 7 elements in 6 groups. Balances well on compact Olympus bodies yielding an ultra-bright focusing image. Limited depth of field for very easy focus. Front mounted aperture control with easy to read white numerals clicked at full stops; focal length marked in green. 5/8 in. diamond pattern rubber focusing focuses from 18 in. to infinity with smooth

120° counterclockwise turn. Traditional Olympus bayonet release stud at top and stop down button at 8 o'clock positions. Metric distance numbers are in white, footage scale in orange. Finish is instrument black.

**Field test slides:** Remarkably sharp images for a lens of this speed. Although there was a slight lack of detail and snap fully open at f/1.2, images were crisp and snappy at smaller stops. Flare was very well corrected throughout.

**Optical bench analysis** (for optical experts only): On-axis we saw very slight violet flare at f/2 which was almost gone by f/2.8. Slight spherical aberration was greatly improved by f/5.6, gone by f/8. Off-axis there were slight traces of skew ray flare. Very slight astigmatism was greatly improved by f/5.6. Performance was near diffraction limits by f/11. Very slight lateral color was present.

### PERFORMANCE

| Our Standard                   |  | as Tested             |  |
|--------------------------------|--|-----------------------|--|
| <b>Focal length:</b> ±5%       |  |                       |  |
| (47.50–52.50mm)                |  | 52.48mm               |  |
| <b>Aperture:</b> ±5%           |  |                       |  |
| (f/1.14–1.26)                  |  | f/1.26                |  |
| <b>Distortion:</b>             |  |                       |  |
| (±1.5%)                        |  | less than 1% (barrel) |  |
| <b>Light falloff:</b> at f/5.6 |  |                       |  |
| +1 stop from theoretical limit |  |                       |  |
| (0–1.5 stops)                  |  | 0.3 stops             |  |

### RESOLUTION

| ZUIKO 50mm f/1.2 at 1:50 |              |              |           |    |
|--------------------------|--------------|--------------|-----------|----|
| f                        | Center (1mm) | Corner (1mm) |           |    |
| 1.2                      | V. Good      | 45           | Excellent | 35 |
| 2                        | Good         | 50           | Excellent | 40 |
| 2.8                      | Good         | 56           | Good      | 45 |
| 4                        | V. Good      | 63           | V. Good   | 50 |
| 5.6                      | V. Good      | 63           | Excellent | 56 |
| 8                        | V. Good      | 63           | Excellent | 56 |
| 11                       | V. Good      | 56           | Excellent | 50 |
| 16                       | V. Good      | 56           | V. Good   | 45 |

### CONTRAST

| ZUIKO 50mm f/1.2 at 30 lines/mm |            |            |        |    |
|---------------------------------|------------|------------|--------|----|
| f                               | Center (%) | Corner (%) |        |    |
| 1.2                             | High       | 58         | Medium | 26 |
| 2                               | High       | 60         | Medium | 30 |
| 2.8                             | High       | 64         | High   | 44 |
| 4                               | High       | 68         | High   | 60 |
| 5.6                             | High       | 76         | High   | 73 |
| 8                               | High       | 78         | High   | 74 |
| 11                              | High       | 75         | High   | 66 |
| 16                              | High       | 67         | High   | 61 |

Would you like to test your own lens? Get MODERN'S Lens Test kit, \$12.95. Write to Lens Test Kit, MODERN PHOTOGRAPHY, 825 7th Ave., NY, NY 10019. Please allow 4-6 weeks for delivery.