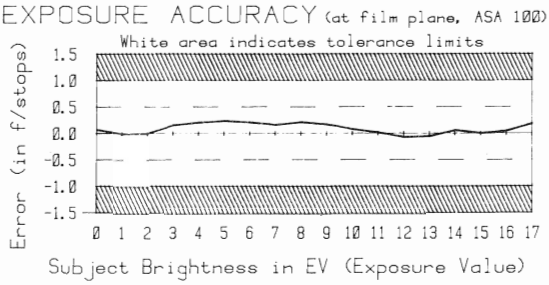
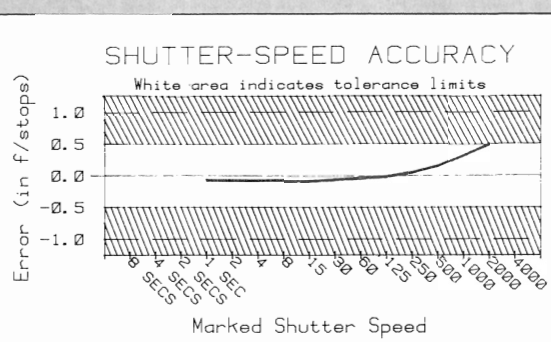
Lab Results: Olympus OM-4T No. 1126042





PERFORMANCE

Our Standard	As Tested
Focal length: ±5% (47.50-52.50mm)	50.94mm
Aperture: ±5% (f/1.33-1.47)	f/1.45
Distortion: (±1.5%)	0.9% (barrel)
Light falloff: at f/5.6 +1 stop from theoretical limit (0-1.5 stops)	0.9 stops

Lab Results: 50mm f/1.4 Zuiko No. 1140088

RESOLUTION

ZUIKO 50mm f/1.4 at 1:49

f/	Center (l/mm)		Corner (l/mm)	
1.4	V. Good	55	Excellent	49
2	V. Good	62	Excellent	55
2.8	Good	62	V. Good	55
4	V. Good	69	Excellent	62
5.6	V. Good	69	Excellent	62
8	V. Good	69	Excellent	62
11	V. Good	62	Excellent	55
16	V. Good	62	Excellent	55

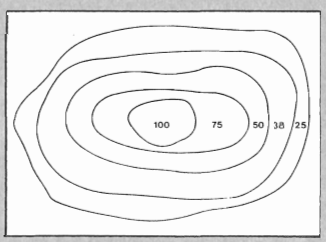
CONTRAST

ZUIKO 50mm f/1.4 at 30 lines/mm

f/	Center (%)		Corner (%)	
1.4	Medium	41	Medium	30
2	Medium	45	Medium	35
2.8	Medium	47	Medium	40
4	Medium	56	High	45
5.6	High	59	High	48
8	Medium	57	Medium	42
11	High	55	High	41
16	Medium	48	Medium	33

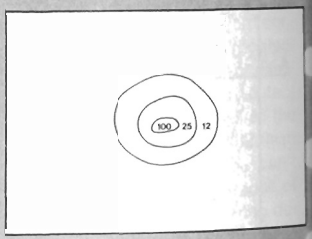
GENERAL PERFORMANCE

Checkpoints	Our Standard	As Tested
FINDER:		
Apparent viewing distance	Between infinity and 20 in. (0.5m)	Adjustable between 39 in. (1.0m) - 13 in. (0.33m)
Apparent distance of shutter speed scale	Same as above	Same as above
View area compared to film area	Vertically and horizontally more than 90%, less than 100%	Vertical: 97% Horizontal: 93%
Parallax error compared to film	Vertical: 0.3mm Horizontal: 1.3mm	Vertical: 0.2mm (up) Horizontal: 0.1mm (left)
Focusing accuracy at maximum aperture	Within depth of focus	No discrepancy
Image magnification	0.84X ±.1X	0.88X
PICTURE SIZE:	24 ±0.6mm x 36 ±0.9mm	24.0mm x 36.2mm
SHUTTER:		
Curtain travel evenness	±0.33 stop	0.1 stop
Insulation from sync	More than 7 megohms	Infinity
Sync contact efficiency	More than 60%	70% (pc) 62% (hotshoe)
Sync delay time	X: within full opening	Okay
Shutter curtain bounce	Not allowed	None
Self timer delay	7-15 sec.	12 sec.
CAMERA NOISE:	72 dB(a), same as OM-4, typical for today's manual focus SLR	
CAMERA SIZE:	Body: 5 7/16 in. wide x 3 7/16 in. high x 2 9/16 in. deep (137 x 87 x 55mm) Lens: 1 9/16 in. long, 2 5/16 in. diameter (40 x 60mm)	
WEIGHT:	Body: 1 lb. 2 1/4 oz. (517g) with batteries Lens: 7 11/16 oz. (218g)	



Normal centerweighted metering pattern of OM-4T closely resembles that of other Olympus SLRs.

In spot metering mode, high selectivity of Olympus metering system is dramatically shown. All meter sensitivity is concentrated in small central area indicated.



nious close-up accessories, marked the next step—camera and flash system began to be thought of as an integral unit. Once you perfect exposure control, there's only one place to go; you must control the lighting. No matter how brilliantly a picture is exposed, it will fail if the lighting is too contrasty and unflattering to begin with. That is why the Full Synchro flash system on the OM-77AF and the OM-4T entailed the next logical step—the automatic light-emitting camera.

The OM-4T, as the professional level companion to the "broad spectrum" OM-77AF, has been cleverly designed to provide convenience along with the control a discriminating amateur or pro needs for precise results.

We wouldn't be surprised to see the OM-4T eventually replace both the OM-4 and the OM-3, since it is virtually as dependable as the latter and even more com-

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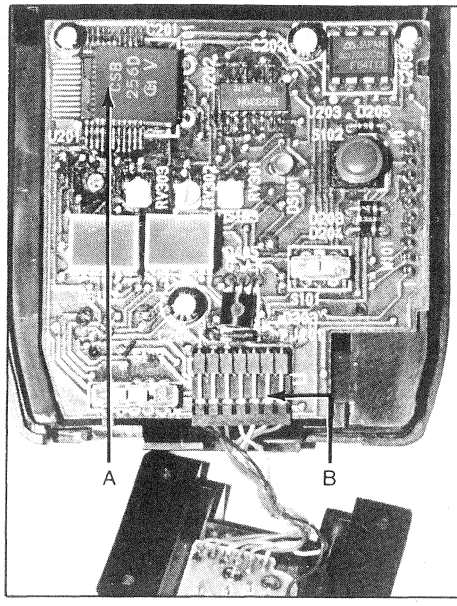
MODERN PHOTOGRAPHY'S unbiased test reports are based on actual field work and measurements carried out in our own laboratories. Only production equipment and materials similar to those available to the reader are tested. Readers are warned however, that our tests, particularly of lenses and cameras, are often far more critical and specific than those published elsewhere and cannot therefore be compared with them. In all lens tests, unless specifically noted, some of the sharpness falloff at the edges can be traced to curvature of field, most noticeable at close focusing distances, at distant settings, this effect would be minimized. Note too that the standards for center sharpness are higher than for edge sharpness, so that no comparison should be made between center and edge ratings. Should you have difficulty locating sources for any product, write to the Readers Service Editor of Modern Photography. **WARNING:** Since optics and precision mechanisms may vary from unit to unit, we strongly suggest that our readers carry out their own tests on equipment they buy. **PRICES ARE MANUFACTURER'S SUGGESTED LIST PRICES. ITEMS ARE OFTEN AVAILABLE AT LOWER PRICES THROUGH DEALERS.**



Inside The F280 Flash

Quartz oscillator (A) sits atop IC in F280 flash's circuit board. This unusual arrangement is for Super FP function. Solderless connector (B) is used to connect hot shoe and TTL cord socket, provides for more convenient repairs.

Continued from page 50

prehensive than the former. Its enhanced ruggedness and reliability under humid working conditions are bound to appeal to its intended audience of sophisticates. Although the OM-4T is clearly a more evolutionary design than some of its illustrious predecessors, its underlying philosophy is timeless. By building a ruggedized camera with sealed electronic components that equal or surpass the reliability of mechanical systems, Olympus has succeeded in making the OM-4T a "better OM-4." And remember, the original OM-4 was—and is—a pretty darn good camera to begin with.

50mm f/1.4 Zuiko

Specifications: 50mm f/1.4 Zuiko Auto-S No.1140088, in Olympus OM mount; accepts 49mm accessories; f/1.4–16, full stop detents; min. foc. dist.: 1½ ft. (0.45m); $195.

Practical comments: Focus from infinity to min. dist. in smooth, just-under-180° turn of 1/2 in.-wide textured collar. Grippable, 3/16 in.-wide aperture ring has large, legible white-on-black scale; small but satisfactory distance scale has white-on-black metric distances, orange-on-black footages. Depth-of-field scale calibrated for only 3 apertures—f/4, f/8, f/16. Built-in depth-of-field preview button.

Field test slides: Transparencies crisp and snappy overall, fine detail well rendered. Center-to-corner sharpness consistent throughout aperture range. Slightly soft images, slight falloff in illumination in corners wide open, both improving noticeably by f/2. Overall, somewhat above average performance for high speed normal lens.

Optical bench report (for optical experts only): On axis, very slight overcorrected spherical aberration; very slight red flare, gone by f/5.6; diffraction limit was reached by f/5.6.

Off axis, slight skew-ray flare mixed with very slight astigmatism, both virtually gone by f/5.6. A minimal amount of lateral color present throughout.

50mm f/1.4 Nikkor Autofocus for Nikons

Specifications: 50mm f/1.4 AF Nikkor, No.2005750 in Nikon autofocus AI-S bayonet mount, accepts 52mm accessories; f/1.4 to

Nikon's 50mm f/1.4 is remarkably compact but manual focus ring is somewhat narrow.

f/16 with full stop detents; minimum aperture lock, min. foc. dist.: 18 in. (0.45m); 1⅝ in. long, 2⁹⁄₁₆ in. diam. (42x65mm); 9 oz. (255g). $267.50.

Practical comments: Smooth auto- and manual focusing but with relatively narrow manual focusing ring. Highly legible scales in white on satin black. Inset distance scale with depth-of-field scale.

Field test slides: Images overall were crisp and snappy. Wide open, there was some slight softness in the corners, which was gone by f/2.8. Center to corn... sharpness was very good fr... f/4 onwards. Very minimal bar... distortion was noted. Overall, ... estimated the lens to be ...

Continued on page 1

RESOLUTION

NIKKOR AF 50mm f/1.4 at 1:50

f/	Center (l/mm)		Corner (l/mm)	
1.4	Excellent	63	Excellent	50
2	Excellent	63	Excellent	56
2.8	Excellent	70	Excellent	56
4	Excellent	70	Excellent	63
5.6	V. Good	63	Excellent	56
8	V. Good	63	Excellent	56
11	V. Good	56	Excellent	50
16	Accept	50	V. Good	45

CONTRAST

NIKKOR AF 50 mm f/1.4 at 30 lines/mm

f/	Center (%)		Corner (
1.4	Medium	40	Medium
2	High	52	High
2.8	Medium	53	Medium
4	Medium	57	Medium
5.6	High	63	High
8	High	66	High
11	High	63	High
16	High	51	Medium

MODERN PHOTOGRAPHY APPROVED

LIMITED WARRANTY BY (NAME OF SUPPLIER) (ADDRESS OF SUPPLIER)

The above Seal will be awarded to those still cameras and lenses, movie cameras and projectors (see Movie Section), enlargers and color analyzers that have passed MODERN TESTS and whose suppliers agree to the following:

"The equipment, like the sample tested by MODERN PHOTOGRAPHY *will equal or better* MODERN PHOTOGRAPHY*'s laboratory and field-test performance requirements or the item will be repaired or replaced until it does. Purchaser must notify warranty issuer of such failure within 45 days of receiving item from store where it was purchased. If the equipment cannot be furnished to specifications, the purchaser will receive a refund of actual purchase price provided items are returned in original condition and packing, together with the sales slip, at the expense of the purchaser. The supplier will pay postage to return merchandise to the purchaser. This warranty gives the purchaser specific legal rights and he may also have other rights that vary from state to state."*

The Seal may appear on the product itself, in advertisements, in promotional materials, or on warranty cards at the discretion of the supplier. *Repair, replacement or refunding will be done by the supplier and at his discretion and not by* MODERN PHOTOGRAPHY Magazine. This limited warranty is in addition to whatever warrantees, limited or full, that the supplier may give. Purchasers must furnish adequate proof of the equipment's disability. In terms of inaccurate exposures, shutter speeds or poor optical quality, films or slides showing proof must be furnished with proper identification of the warranty issuer—the same type of proof your repairman would like to have to check malfunctioning equipment.

MODERN will continue to test products and report on them whether or not the supplier decides to accept the Seal of Approval. The lack of a Seal in no way reflects on a product's quality. The Seal is merely an indication that the supplier has agreed to accept certain responsibilities as to minimum standards for every product sold as stated.

Minimum Resolution Standards

Type	Aperture: Max. lines/mm Center	Max. Corner	Next Center	Next Corner	Middle Center	Middle Corner	f/1 Center	f/1 Corner
35mm Camera Lenses								
Fisheye (to 16mm)	36	20	36	20	40	22	40	
17 to 24 5mm	36	20	36	20	40	28	40	
25 to 39 5mm	36	25	36	25	40	28	40	
to 39 5mm faster than f 2 1	36	22	36	22	40	27	40	
40 to 60 5mm	40	25	40	30	45	36	45	
40 to 60 5mm faster than f 1 4	36	24	40	25	45	32	45	
61 to 135mm	36	25	36	28	40	32	40	
136 to 250 5mm	32	25	32	25	40	32	40	
251 to 500 5mm	32	24	32	24	36	32	32	
501mm and longer	32	24	32	24	36	32	32	
Zoom Lenses								
to 39 5mm	32	23	32	23	36	25	36	
40 to 60 5mm	36	25	40	28	45	36	40	
61 to 135 5mm	36	23	40	25	45	28	40	
136mm and longer	28	23	28	23	36	28	32	
2¼ x 2¼ Camera Lenses								
to 74 5mm	28	14	32	18	32	18	32	
75 to 94 5mm	28	18	32	20	36	22	32	
95mm and longer	25	18	28	20	32	20	28	
2¼ x 2¾ Camera Lenses								
to 59 5mm	16	9	18	10	22	12	22	
60 to 89 5mm	18	11	20	12	22	14	25	
90 to 119 5mm	20	12	22	14	25	16	25	
120 to 499 5mm	18	11	20	12	22	14	25	
500mm and longer	16	11	18	12	20	14	22	
4 x 5 Camera Lenses								
all	28	22	28	22	34	25	34	

MODERN PHOTOGRAPHY Minimum test requirements for Seal of Approval

Still camera and lens field-test standards

All features and controls must operate properly for the equivalent of 25 rolls of film, producing adequately exposed photographs of sufficient quality to meet professional standards for a camera and lens of that size and negative format when 11 x 14 in. black-and-white prints made from negatives of that camera and or lens, or slides are projected on a 40 x 40 in. screen and are viewed at normal viewing distances.

Still camera & lens laboratory standards

(Photographic products of special benefit or interest to readers which fall below our minimums may also appear with explanation in the text.)

Resolution: See chart. **Exposure accuracy:** ±1 stop of proper exposure. **Shutter-speed accuracy:** ±½ stop of marked speed.

Apparent Viewing distance: Between infinity and 20 in. Apparent viewing distance of finder information: within ½ diopter of measured viewing distance. **View Area Compared to film:** Between 90% and 100%. **Focusing Accuracy at Maximum Aperture:** Within depth of focus. **Image Magnification:** Within 0.1X of Manufacturer's specification. **Actual Picture Size:** Normal picture size ±2.5%. **Curtain travel evenness:** ±0.33 stop. Camera insulation from sync: More than 7 megohms. **Sync contact efficiency:** More than 60% **Sync delay time:** X: Within full opening, M,16-20ms. **Shutter curtain bounce:** Not allowed. **Self timer delay:** 7-15 secs.