## **LENSTEST**

## Canon 17–40mm f/4L USM AF: High performance, but is it worth the price?



SPECIFICATIONS: 17–40mm (17.58–39.66mm tested), 14 (f/4.14–3.98 tested), 12 elements in 9 groups. Focusing turns 120 degrees counterclockwise. Zoom ring turns 60 degrees clockwise. Focal lengths marked at 17-, 20-, 24-, 28-, 35-, and 40mm. Diagonal View Angle: 104–57 degrees. Weight: 1 lb. Filter size: 77mm. Mount: Canon AF. Included: lenshood, soft case. List price: \$1,200. Street price: Approx. \$800.

What you should know: Constant aperture, high-performance f/4 lens.

Hands on: Attractively finished in a stippled, black-epoxy paint with contrasting matte black, rubber-like collars on focusing and zoom rings, this lens is about average in size but lighter in weight than others in its class. Both focusing and zoom rings are easy to turn and well-damped. Barrel markings show feet in green; metric in white.

In the lab: SQF data were excellent at the three tested focal lengths (17-, 28-, 40mm). There was considerable barrel distortion at 17mm (2.1%); slight pincushion at 28mm (0.65%); and noticeable pincushion at 40mm (1.1%). Close-up performance was extremely good at the 17mm close-focus distance of 10.25 inches (1:8.7), with center and corner sharpness in the excellent range at all apertures; optimum performance was at f/11. At the 28mm close focusing distance of 10.25 inches (1:5.05), center sharpness was excellent at all apertures. Corner sharpness

was poor from f/4 to f/8, acceptable at f/11, and good at f/16 and f/22. Optimum performance was at f/16. At 40mm (10.50 inches; 1:3.64), center sharpness was acceptable from f/4 to f/11, good at f/16, and acceptable at f/22. Corner sharpness was poor from f/4 to f/11, acceptable at f/16 and good at f/22. Optimum performance was at f/16.

In the field: Test slides were very sharp and contrasty from center to corner at every aperture and focal length. Light falloff at edges was gone by f/5.6 at every focal length.

Conclusion: Canon, unlike other manufacturers, has limited its ultrawide zooms to just two pricey constant-aperture models, the f/2.8 (\$1,300 street) and this one; an affordable variable-aperture lens would be a welcome addition. Despite its cost, this lens is well-made, with close focusing to under 11 inches. Equally suited to film or digital systems, it would probably serve all but architectural photographers well (due to distortion at 17mm).

## HOW TO ORDER TEST REPORT REPRINTS

Would you like to receive a reprint of our lens and camera tests? Some of them are online and available for free. Check <a href="https://www.PopPhoto.com">www.PopPhoto.com</a>, under Cameras & Lenses. Or request a list of previously tested equipment by sending a self-addressed, stamped envelope to: Test Reprints, Popular Photography & IMAGING, 1633 Broadway, New York, NY 10019. Cost is \$2 per lens reprint or \$5 per camera reprint.

		@17	mm		
Size	5x7	8x10	11x14	16x20	20x24
4.0	96.5	95.4	92.9	88.4	83.2
5.6	96.4	95.3	92.7	88.1	82.8
8.0	96.3	95.2	92.5	87.8	82.2
11.0	96.2	95.0	92.3	87.3	81.5
16.0	95.8	94.4	91.4	85.7	79.0
22.0	94.9	93.4	89.7	82.6	73.9

		@28	mm		
Size	5x7	8x10	11x14	16x20	20x24
4.0	96.6	95.6	93.2	88.7	83.6
5.6	96.6	95.6	93.2	88.9	84.0
8.0	96.7	95.6	93.3	89.1	84.3
11.0	96.6	95.5	93.1	88.8	83.8
16.0	96.2	95.0	92.3	87.3	81.4
22.0	95.3	93.8	90.4	83.8	75.9

		@40	mm		
Size	5x7	8x10	11x14	16x20	20x24
4.0	96.7	95.7	93.3	88.8	83.6
5.6	96.8	95.9	93.6	89.5	84.7
8.0	96.9	95.9	93.8	89.8	85.4
11.0	96.9	95.9	93.7	89.8	85.3
16.0	96.5	95.4	92.9	88.3	83.0
22.0	95.6	94.3	91.1	84.9	77.5

## SUBJECTIVE QUALITY FACTOR

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