EASTMAN PLUS-X Reversal Film 7276™

DESCRIPTION

EASTMAN PLUS-X Reversal Film 7276 is a black-and-white reversal camera film designed for general production use both outdoors and in the studio. You can also use this film for television news coverage and documentary production.

This is a medium-speed, panchromatic film that has good contrast, a high degree of sharpness, high resolving power, and excellent tonal gradation.

When processed as a reversal film, you can use the resulting positive for projection or for duplication; processed as a negative material by conventional methods, the film will yield satisfactory results, although with some loss in speed and an increase in granularity.

BASE

This film has a gray acetate safety base.

DARKROOM RECOMMENDATIONS

Handle unprocessed film in total darkness. If necessary, the film can be examined *for a few seconds only* after developing is 50 percent complete, using the following safelight combinations: a 15-watt bulb and KODAK Safelight Filter No. 3 (dark green), no closer than 4 feet (1.2 metres) to the film.

STORAGE

Store *unexposed film* at 13˚C (55˚F) or below. Process exposed *film* promptly. Store processed *film* at 21˚C (70˚F) or lower at a relative humidity of 40 to 50 percent for normal commercial storage. For more information on long-term storage conditions, see KODAK Publications No. H-1, *KODAK Motion Picture Film,* and No. H-23, *The Book of Film Care.*

EXPOSURE INDEX/DIN

For reversal processing:

Daylight—50/18

Tungsten (3200 K)—40/17

Use these exposure indexes with incident- or reflected-light exposure meters and cameras marked for ISO or ASA speeds or exposure indexes. These indexes apply for meter readings of average subjects made from the camera position or for readings made from a gray card of 18-percent reflectance held close to and in front of the subject. For unusually light- or dark-colored subjects, decrease or increase the exposure indicated by the meter accordingly.

When exposing this film in manually operated super 8 cameras (through a KODAK WRATTEN Gelatin Filter No. 85), the effective speed is lowered to 32 for daylight.

In automatic cameras, because of the cartridge speed-and-filter notching system, the film will be exposed as follows:

Daylight (with filter)—25/15

Tungsten (without filter)—40/17

The film latitude will provide satisfactory results at these exposure levels.

For *negative* processing in a typical negative motion picture developer, use the following exposure indexes:

Daylight—25/15

Tungsten—20/14

EXPOSURE TABLE FOR TUNGSTEN LIGHT

At 24 frames per second (fps), 170˚ shutter opening:

Lens Aperture	***f*/1.4**	***f*/2**	***f*/2.8**	***f*/4**	***f*/5.6**	***f*/8**
Footcandles required *	64	125	250	500	1000	2000

* At 18 fps, use ¾ of the footcandles (fc) shown. When you use this film as a negative material, double the values listed in the table.

FILTER FACTORS

KODAK WRATTEN Filter No.	3	8	11	12	15	21	23A	25	29	96†
Filter Factor for Daylight	1.5	2.0	4	2.0	2.5	3	5	10	40	8

† For use in bright sunlight to reduce the exposure without modifying color rendering or depth of field. This neutral density filter with a density of 0.9 reduces the exposure by 3 stops.

RECIPROCITY CHARACTERISTICS

For an exposure time of 1/10,000 second, increase exposure by ½ stop. You do not need to make any filter corrections or exposure adjustments for exposure times from 1/1,000 to 1 second.

PROCESSING

The following starting-point recommendations are for a typical continuous-immersion processing machine using KODAK Reversal Liquid Chemicals. See KODAK Publication H-24, *Manual for Processing KODAK Motion Picture Films*, for more information on solution formulas for machine processing.

When this film is handled as a *negative* (not illustrated), use conventional negative processing techniques. The recommended control gamma is 1.0.

IDENTIFICATION

After processing, the product code number 7276, emulsion and roll number identification, EASTMAN KEYKODE Numbers, and internal product symbol (PXR) are visible along the length of the film.

Processing Step	Temperature and Processing Time (min:sec)		
	20°C (68°F)	35°C (95°F)	43°C (110°F)
First Developer	2:00	0:40	0:13
Rinse *	0:30	0:20	0:10
Bleach	0:50	0:40	0:10
Rinse	0:30	0:30	0:20
Clear	0:30	0:20	0:10
Rinse†	0:30	0:30	0:20
Re-exposure	8600 lux-seconds (800 fcs)		
Redeveloper	0:50	0:20	0:10
Rinse†	0:30	0:20	0:10
Fix	0:50	0:30	0:10
Wash	As Required‡		
Dry	As Required (about 1 minute in a typical machine)		

* Do not use an acid stop bath at this point.
† You can use an acid stop bath, such as KODAK Stop Bath SB-1a, in place of a water rinse following redevelopment.
‡ The amount of washing needed is determined by the efficiency of the water application and the permissible residual hypo concentration for the intended use.

IMAGE STRUCTURE

The modulation-transfer curves, rms granularity, and resolving power data were generated from samples of EASTMAN PLUS-X Reversal Film exposed to tungsten light and processed in the recommended process at 20°C (68°F). For more information on image-structure characteristics, see KODAK Publication No. H-1, *KODAK Motion Picture Film.*

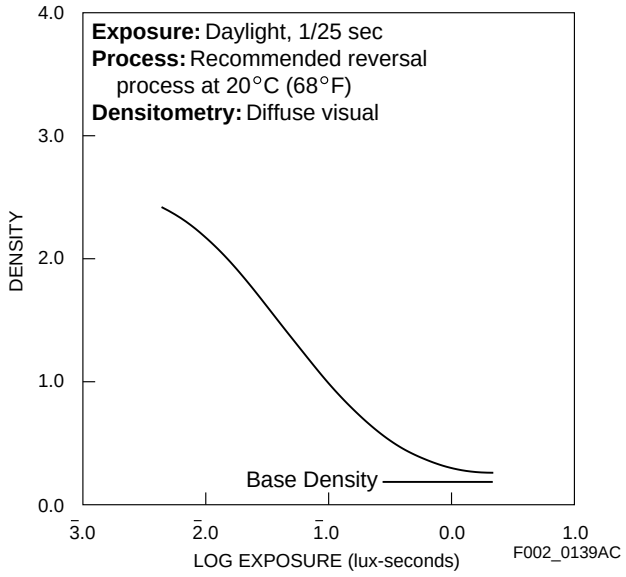
Diffuse RMS Granularity* 9

Resolving Power†	TOC 1.6:1 TOC 1000:1	50 lines/mm 125 lines/mm

* Read at a net diffuse visual density of 1.0, using a 48-micrometer aperture.

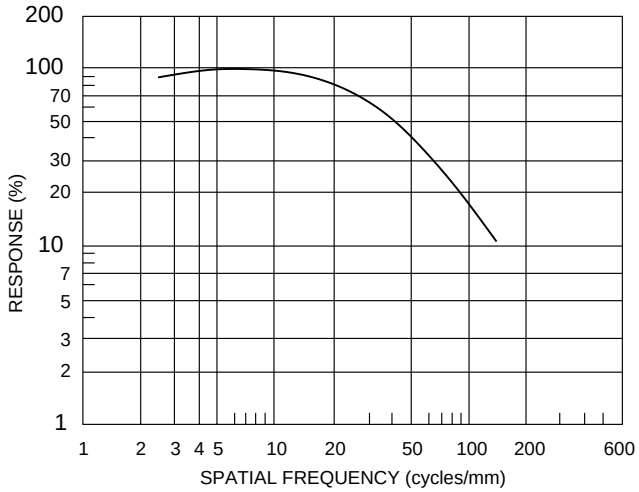
† Determined according to a method similar to the one described in ISO 6328-1982, *Photography—Photographic Materials—Determination of ISO Resolving Power.*

Characteristic Curve



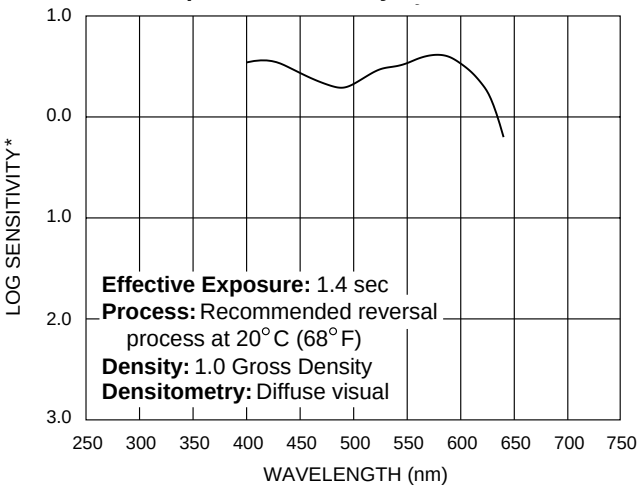
F002_0139AC

Modulation Transfer Curve



F002_0138AC

Spectral-Sensitivity Curve



*Sensitivity = reciprocal of exposure (ergs/cm^2) required to produce specified density

F002_0140AC

Notice: While the data presented are typical of production coatings, they do not represent standards which must be met by Kodak. Varying storage, exposure, and processing conditions will affect results. The company reserves the right to change and improve product characteristics at any time.

These photographic modulation-transfer values were determined by using a method similar to the one described in ANSI Standard PH2.39-1977(R1990). The film was exposed with the specified illuminant to spatially varying sinusoidal test patterns having an aerial image modulation of a nominal 60 percent at the image plane, with processing as indicated. In most cases, these photographic modulation- transfer values are influenced by development-adjacency effects and are not equivalent to the true optical modulation- transfer curve of the emulsion layer in the particular photographic product.

AVAILABLE ROLL LENGTHS

For information on film roll lengths, check Kodak's *Professional Motion Imaging Price Catalog*.

KODAK LOCATIONS

FOR DIRECT ORDERING IN THE UNITED STATES:
1-800-621-FILM

ATLANTA, GEORGIA

4 Concourse Parkway
Suite 300
Atlanta, Georgia 30328-6105
Information: 800-800-8398

CHICAGO, ILLINOIS

815 West Van Buren, Suite 320
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Information: 312-492-1423

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11337 Indian Trail
Dallas, Texas 75229
Information: 972-481-1170
312-492-1423

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P. O. Box 38939
Hollywood, California 90038-1203
Information: 323-464-6131

NEW YORK, NEW YORK

360 West 31st Street
New York, New York 10001-2727
Information: 212-631-3450

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8600 NW 17th Street, Suite 200
Miami, Florida 33126
Information: 305-507-5656

FOR DIRECT ORDERING IN CANADA:
1-800-621-FILM

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http://www.kodak.com/go/motion

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