

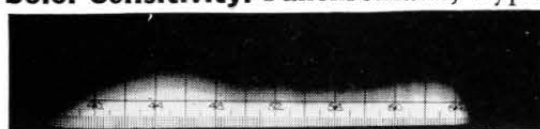
## Data—KODAK SUPER-XX PANCHROMATIC ROLL FILM AND FILM PACKS

**General Properties:** Very high speed, for indoor and outdoor use under adverse lighting conditions. Especially valuable for use with artificial light. With Photoflood Lamps, permits instantaneous exposures with simple lens cameras.

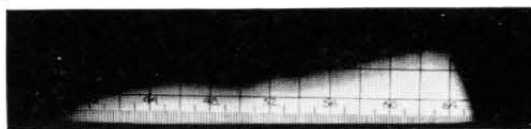
**Film Exposure Index:** Daylight **100** Tungsten **80**.

These values are suitable for use with Weston and General Electric Exposure Meters and supersede meter settings previously recommended. The Daylight value is the same as the ASA Film Exposure Index as specified by the American Standards Association. When it is desired to reduce the exposure to a minimum, these values can be doubled with little danger of serious underexposure.

**Color Sensitivity:** Panchromatic, Type C.



BLUE GREEN RED  
Spectrogram to Sunlight



BLUE GREEN RED  
Spectrogram to Tungsten Light

**Filter Factors:** (Correction Filters: Sunlight, X1; Tungsten, X2.)

FILTER	K2	G	X1	X2	A	B	C5	KODAK POLA-SCREEN
Sunlight	2	2.5	5	—	4	7	5	2
Tungsten	1.5	2	4	5	2	6	10	2

**Daylight Exposure Table:** Lens Apertures at 1/100 Second

SUBJECT TYPE	BRIGHT SUN	HAZY SUN	CLOUDY-BRIGHT	CLOUDY-DULL
Brilliant	<i>f/22</i>	<i>f/16</i>	<i>f/11</i>	<i>f/8</i>
Bright	<i>f/16</i>	<i>f/11</i>	<i>f/8</i>	<i>f/5.6</i>
Average	<i>f/11</i>	<i>f/8</i>	<i>f/5.6</i>	<i>f/4</i>
Shaded	<i>f/8</i>	<i>f/5.6</i>	<i>f/4</i>	<i>f/2.8</i>

**Brilliant Subjects:** Beach, marine, and snow scenes, distant landscapes and mountains without prominent dark objects in the foreground.  
**Bright Subjects:** People in marine, beach or snow scenes; scenics with foreground objects.  
**Average Subjects:** Near-by people, gardens, houses and scenes **not in the shade**.  
**Shaded Subjects:** Subjects in **open shade** (not under trees, porch, roof, etc.).

**Photoflood Exposure Table:** One No. 1 Photoflood *near camera axis* and one No. 2 Photoflood as *side light* in Kodak Handy Reflectors or Kodaflector Senior (matte side).

Distance, lamps-to-subject	3½'	5½'	7'	8'	10'	11'	13'
Aperture at 1/25 sec.	<i>f/11</i>	<i>f/8</i>	<i>f/6.3</i>	<i>f/5.6</i>	<i>f/4.5</i>	<i>f/4</i>	<i>f/3.5</i>

**Photoflash Exposures** for average subjects in average rooms with light-colored walls and ceilings. For dark subjects in dark-colored surroundings, or outdoors at night, give four times the indicated exposure.

No. 22 lamp in Kodak Handy Reflector at:	14'	20'	28'		
Lens aperture for open-flash exposures:	<i>f/32</i>	<i>f/22</i>	<i>f/16</i>		
GUIDE EXPOSURE NUMBERS*	SM	No. 5	No. 11	No. 22	No. 31
Kodak Senior and Similar Synchronizers—1/100 sec.	—	225	255	380	—
Kodak Junior Synchronizer—1/50 sec.	140	270	—	—	—
Focal-plane shutter synchronizers—1/100 sec.	—	—	—	—	155

\*Divide by distance in feet from lamp to subject to find *f*-number.

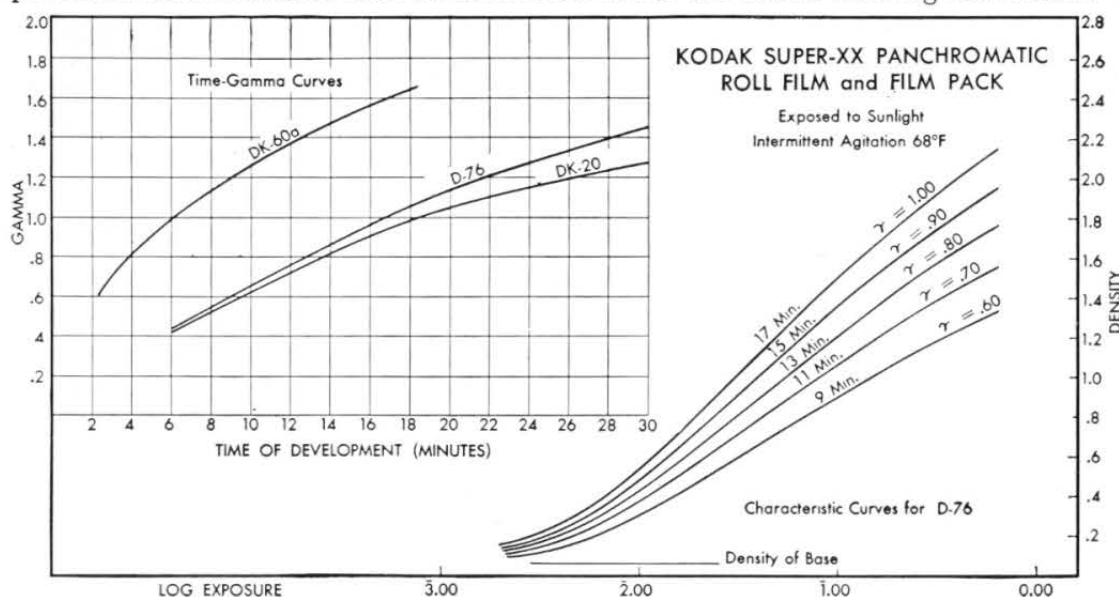
**Contrast:** Recommended development in D-76 gives gamma of approximately 1.0; more or less contrast obtained by longer or shorter development time.

**Recommended Development:**

KODAK DEVELOPER	USE	CONTINUOUS AGITATION (TRAY) 68° F. (20° C.)	INTERMITTENT AGITATION* (TANK) 68° F. (20° C.)
D-76	Amateur	13 minutes	17 minutes
DK-60a	Photofinishing	5½ minutes	7 minutes
Versatol	Amateur	(1:3) 5 minutes	(1:7) 10 minutes
Microdol	Fine grain	13 minutes	16 minutes
DK-20	Fine grain	12 minutes	15 minutes

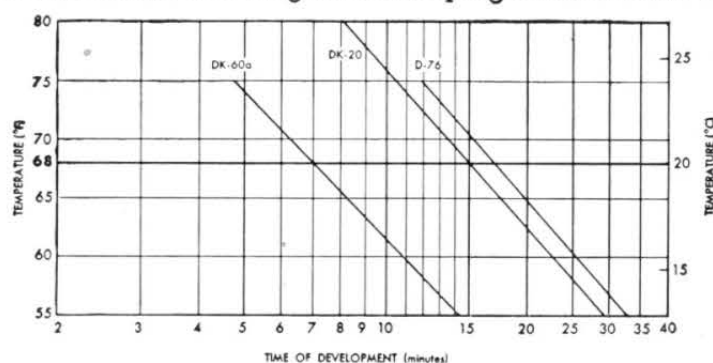
\*Agitation at one-minute intervals during development.

**Sensitometric Curves:** These data, applying to average product and average processing, are sufficiently accurate for all ordinary photographic work. For special problems the material should be calibrated under the actual working conditions.



**Time-Temperature Development Curves** showing the developing times at various

temperatures corresponding to the times at 68° F. as given in the table of Recommended Development. Curves for other contrasts can be drawn parallel to the present curves and through the respective points for the times at 68° F. as determined from the time-gamma curves above. *Best results are obtained at 65° to 70° F.*



**Graininess:** Medium, permitting considerable enlargement for such a fast film.

**Resolving Power:** 45 lines per mm. This figure is based on optimum exposure, subject contrast of 30:1, and recommended development in Kodak D-76.

**Fixing:** Rinse thoroughly in water; fix 10 to 20 minutes at 68°F. (20°C.) in a fresh acid hardening fixing bath such as Kodak Fixing Bath F-5, or the solution prepared from Kodak Acid Fixing Powder, with Hardener; wash 20 to 30 minutes in running water.

**Safelight:** Total darkness preferred, or Wratten Series 3, 10-watt bulb, at 3 ft. for a few seconds after development is half complete.

**Rolls and Packs Available:** All popular sizes of roll films and film packs.