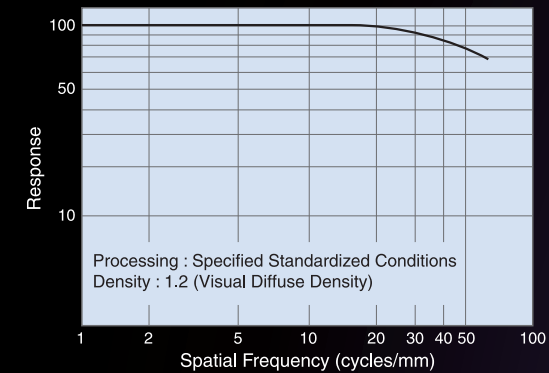
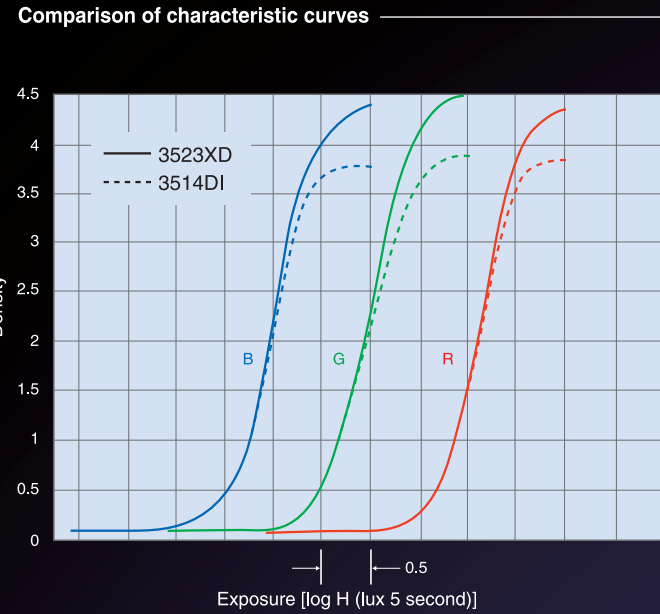


In order to simulate conditions closest to practical use, exposure was made under a 2854K Tungsten light source, through CC-90Y and CC-60M print color correction filters and a Fuji SC-41 ultraviolet absorbing filter in combination. Processing was carried out under standard conditions and the three color densities (status A) were measured. The results of measurements are plotted as characteristic curves. Curves G and B are shifted 1.0 Log H to avoid overlapping.

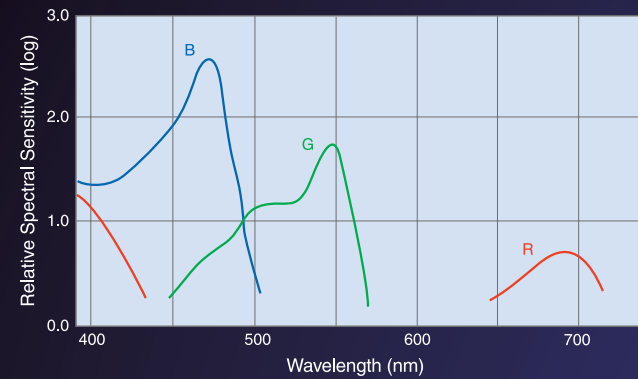
Contrast transfer function (CTF)*



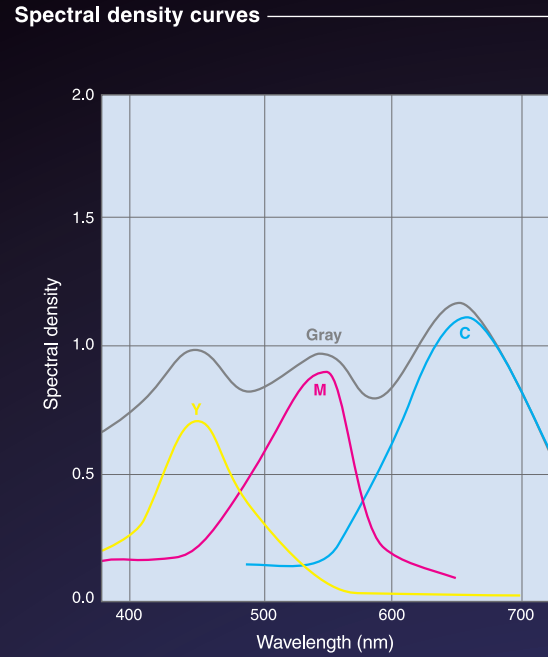
* Spatial frequency attenuation characteristic of amplitude relative to rectangular wave chart (However, the presented data is normalized with the amplitude of zero frequency.)



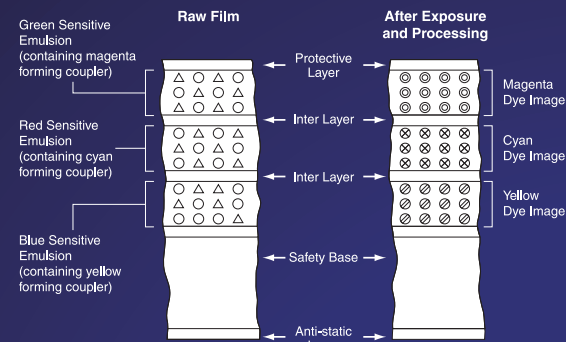
Spectral sensitivity curves



Processing: Specified standardized conditions
Densitometry: Arbitrary three color densities
Density: 1.0 above minimum density
Sensitivity: Reciprocal of exposure (ergs/cm²) required to produce specified density



Film Structure



FUJIFILM

FUJICOLOR POSITIVE FILM

ETERNA-CP

3523XD

35mm Type 3523XD



FUJIFILM
FUJIFILM Corporation

www.fujifilm.com/products/motion_picture/

Ref. No. KB-1004E (SK•10•05•F1079) Printed in Japan © 2010 FUJIFILM Corporation

FUJIFILM
MOTION PICTURE FILM



Finest blacks and shadows dynamically convey the creators' message

FUJICOLOR POSITIVE FILM

ETERNA-CP

3523XD

35mm Type 3523XD

FUJIFILM Technology

Super-Efficient Image Control Technology

The new yellow and cyan couplers, which enhance color formation efficiency during processing, and the newly-developed anti color-contamination agent make it possible to obtain crisper and clearer images. At the same time, the color reproduction range becomes wider, enabling precise color tone control. Also, the new emulsion helps to increase latitude, with outstanding gradation reproduction and more dimensional shadow areas. In addition, with fine-grain emulsion and irradiation neutralizing dyes, image sharpness has been further improved. These new technologies are collectively called "Super-Efficient Image Control Technology."

High Durability Technology

For stable and large volume production at labs, a new compound which controls development rate is introduced, improving stability unaffected by changes in developing activity. Also, by adding a metal-ion dopant to the new emulsion, the influence caused by the time between exposure and processing has become much less, resulting in higher stability of the latent image keeping. In addition, increase or decrease in sensitivity induced by physical contact or other pressure is reduced resulting in greater toughness during film handling and feeding. These technologies to demonstrate stable performance of films under various conditions are collectively called "High Durability Technology."

Film Base

The polyester (PET) safety base does not allow splicing with film cement. Use splicing tape or an ultrasonic splicing device for splicing.

Safelight

This film should be handled at a distance of 1m (31/2ft) or more from a 10-watt electric bulb by the use of a Fuji Safelight Filter N0.101A (dark orange) for color positive film. When the film is exposed to safelight for prolonged periods of time, a sufficient test should be performed to ensure safety.

Printing

Aim Print Density: Normally expose a negative film normally to 18% reflectance gray card and process the negative film under standard conditions. Print the negative image of the gray card onto the Fujicolor positive film. Fine adjustments should then be made to the printer settings so that the following density values of status A may be obtained with the gray card on the positive film.
(The aim density values are based on the assumption that the film will be projected with a xenon lamp projector.)

R 1.10 G 1.05 B 1.05

Packaging Units and Perforations

Film Width	Film Length and Winding Type	Core / Spool	Shape, Pitch and Specification of Perforations
35mm	1220m/4000ft (box bin style package)	35 x 75 mm core	KS-4.750mm [ISO 491 : 1995]
	1830m/6000ft (box bin style package)	35 x 75 mm core	

Analog Sound Track

Insert Fuji Filter SC-50 in the light path of the printer to record a sound image in the top two emulsion layers. The optimum density of the variable-area type sound track of the color positive film is determined by the combination of its density and the sound track density of the sound negative film. Obtain the optimum density of the variable-area type sound track by performing a cross modulation test. The sound track density of color positive film usually ranges from 1.1 to 1.6 when measured at a wavelength of 800nm.

Digital Sound Track

Refer to the specifications of each digital recording system.

Processing

Fujicolor Positive Film ETERNA 3523XD is designed to be processed in Process ECP-2B for Eastman Color Print Film. The process steps of prebath and rem-jet removal & rinse may be omitted.

Edge Markings

Film identification marks (FUJICOLOR, Type No, Lot No, Roll No, Slit No and Perforating Machine No) are printed as latent images. For edge markings, a magenta coloring is used in order not to interfere with the SDDS soundtracks.

Raw Stock Storage

Like other color films, Fujicolor Positive Film ETERNA 3523XD may undergo certain changes in photographic properties when stored for extended periods. Since these changes can be accelerated, particularly through the action of heat and moisture, it is recommended that raw stock be stored at temperatures below 13°C (55.4°F) in the package. A package containing film that has been refrigerated should remain sealed until it reaches equilibrium with the ambient temperature. If packages are opened too soon, moisture from outside the package may condense on the film surface before and during use.

Exposed Film Handling

Exposed films should be processed as soon as possible. If exposed films cannot be processed within 3 days of exposure, they should be stored below 10°C (50°F) and processed as soon as circumstances permit.

Processed Film Storage

Fujicolor Positive Film ETERNA 3523XD is designed to resist color fading. However, to avoid changes in dye image due to high temperatures and humidities during prolonged storage, it is recommended that processed films be kept at a temperature of 15°C (59°F) with 30% to 40% RH for long-term storage (about 100 years), and at a temperature of 20°C (68°F) with 40% to 50% RH for medium-term storage (about 50 years). Furthermore, it is also recommended that processed films in storage should be checked by visual inspection for changes (e.g., deformation, color fading, adhesion, mold) at intervals of a few years.