Appendix

(The Appendix is not a part of this SMPTE Recommended Practice, but is included for information purposes only.)

In the writing of RP 41-1974, difficulties in measurement of screen color temperature and luminance became apparent. Particularly with increased use of xenon arcs, heat-rejecting mirrors and other optical equipment altering the spectral distribution of illumination, it is becoming necessary also to evaluate the light in terms of its observed deviation from the black-body locus. Correlated color temperature is no longer a sufficient specification although, as yet, there is no standard specification of tolerance for deviation. The green and magenta filters specified in this practice provide a means for evaluating the magnitude of the deviation. Since it is easier for nontechnical people to visualize color differences when displayed, rather than by description in terms of color temperature, printer light points or filter packs by name only, it was suggested that a visual reference might suffice. Subsequently, it was determined that an illuminator similar to that specified in American National Standard Direct Viewing of Photographic Color Transparencies, PH2.31-1969, would be of value.

The instrument is a color and luminance reference; it is not intended to measure spectral distribution or to give an accurate measurement of the difference between screens. Its purpose is solely to determine readily the suitability of a given projection condition for use in evaluation of films for color television. The instrument would serve equally well for evaluation of projection conditions for theatrical color films where the same standards of color and luminance apply.

Filters suitable for defining limits of tolerance are the Wratten Photometric Series 81 and 82, CC-M and CC-G. 81A lowers 5400 K to 4940 K and 82A raises 5400 K to 5980 K. As shown on the CIE Chromaticity Diagram, CC05M and CC05G are approximately the correct magnitude, although they do not change the CIE color coordinates exactly perpendicular to the black body locus.

PROPOSED

SMPTE RECOMMENDED PRACTICE — RP 59

Color and Luminance of Review Room Screens for Viewing Motion-Picture Materials Intended for Slides or Film Strips

1. *Scope*

This recommended practice specifies the luminance (photometric brightness) and color quality of projection illumination in review rooms for prints on motion-picture film intended for ultimate use as slides or film strips.

2. *Luminance Level*

The luminance (photometric brightness) at the center of the screen shall be 16 ± 2 footlamberts (55 ± 7 candelas per square meter), measured within the standard observing area with the projector in complete operation but with no film in the aperture.

3. *Spectral Distribution*

The color quality of the projected light reflected from the screen surface shall approximate the spectral distribution of a black body at a color temperature between 3200 K (x = 0.42, y = 0.40) and 3450 K (x = 0.41, y = 0.41), which is the approximate color quality produced by a 3200 K (incandescent) lamp burned at its rated voltage as modified by normal lamphouse optics and heat-absorbing filter in the projector.

4. *Special Applications*

Prints balanced for higher color temperatures may be requested when use conditions are known to require them for optimum quality (such as for xenon or arc projection or for television). American National Standard Screen Luminance and Viewing Conditions for 16 mm Review Rooms, PH22.100-1967, encompasses the above specifications as part of a broader set of specifications and gives detailed descriptions of methods of measurement and surrounding conditions. SMPTE Recommended Practice RP 41-1974, Evaluation of Color Films Intended for Television, should be used when slides are specifically requested for television.

Appendix

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It is the purpose of this recommended practice to specify the brightness and color quality of standard review room conditions for the subjective evaluation of motion-picture prints in the laboratory when the intended use of the prints will be as slides or film strips.

If the viewing conditions used to establish "normal" printing conditions of density and color balance for any laboratory are the same from laboratory to laboratory, there should be greater consistency in "standard" prints from various sources.

Because the conditions of ultimate use may vary greatly in terms of such factors as screen brightness and ambient light, it is quite possible that prints may be ordered at densities greater or less than normal.

PROPOSED

SMPTE RECOMMENDED PRACTICE — RP 60

Labels for Cartridge Spools for 2-inch Quadruplex Video Magnetic Tape

1. *Scope*

This practice specifies the dimensions of the labels to be used with spools as specified in Draft American National Standard Dimensions of Cartridge Spools for 2-inch Quadruplex Video Magnetic Tape, C98.15. The practice also specifies the minimum information required on the label and the space to be reserved for that information.

2. *Specifications*

The dimensions of the label and the minimum information contained on the label shall be as specified in Figure 1 and Table 1.

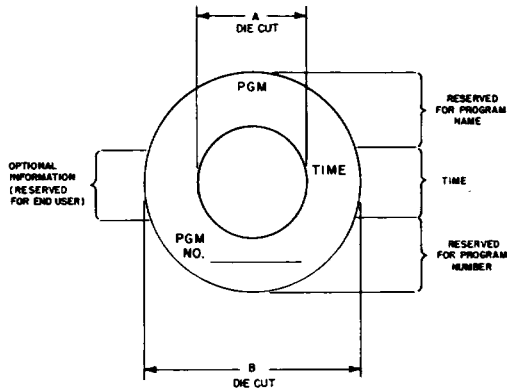

Figure 1

Table 1

Dimensions	Inches	Millimeters
A	0.770 ± 0.010	19.56 ± 0.25
B	1.600 ± 0.010	40.64 ± 0.25

A and B are concentric to within 0.010 in (0.25 mm).

Appendix

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To ensure that the label is properly applied to the spool and to prevent its interfering with the drive areas, it is recommended that the fixture described in Figure 2 be used. It is also recommended that the label be of the press-a-ply type and have an adhesive such that it be removable.

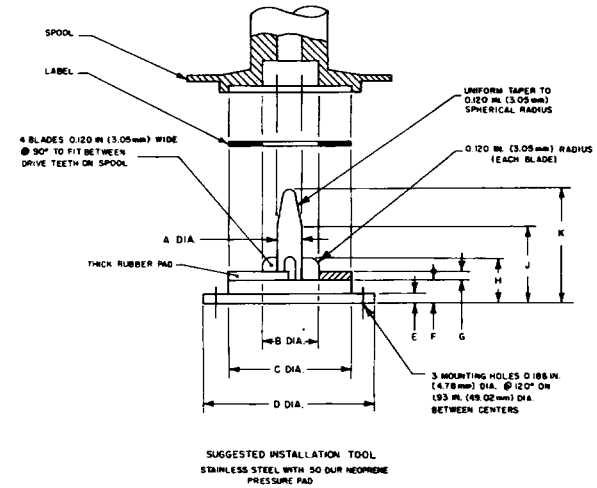

Figure 2

Table 2

Dimensions	Inches	Millimeters
A	0.311 $^{+\ 0.001}_{-\ 0.000}$	7.90 $^{+\ 0.03}_{-\ 0.00}$
B	0.750 nom	19.05 nom
C	1.610 nom	40.89 nom
D	2.25 nom	57.15 nom
E	0.12 nom	3.05 nom
F	0.30 nom	7.62 nom
G	0.12 nom	3.05 nom
H	0.60 nom	15.24 nom
J	1.00 nom	25.4 nom
K	1.50 nom	38.1 nom

Dimensions A through D are concentric to within 0.010 in (0.25 mm).