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# Color Specification for Electric Signal Lighting Devices—SAE J578c

SAE Standard  
Last Revised February 1977

THIS IS A PREPRINT AND WILL  
APPEAR IN THE NEXT EDITION  
OF THE SAE HANDBOOK

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**PREPRINT**

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# COLOR SPECIFICATION FOR ELECTRIC SIGNAL LIGHTING DEVICES—SAE J578c

SAE Standard

Report of Lighting Committee approved January 1942 and last revised February 1977. Rationale statement available.

**1. Scope**—The purpose of this standard is to define and provide for the control of colors employed in motor vehicle external lighting equipment. The specification applies to the overall effective color of light emitted by the device and not to the color of the light from a small area of the lens. It does not apply to any pilot, indicator, or tell-tale lights.

**2. Definitions**—Fundamental definitions of color are expressed by Chromaticity Coordinates according to the CIE (1931) standard colorimetric system. (See Fig. 1.)

**2.1 Red**—The color of light emitted from the device shall fall within the following boundaries:

$$y = 0.33 \text{ (yellow boundary)}$$

$$y = 0.98 - x \text{ (purple boundary)}$$

**2.2 Yellow (Amber)**—The color of light emitted from the device shall fall within the following boundaries:

$$y = 0.39 \text{ (red boundary)}$$

$$y = 0.79 - 0.67x \text{ (white boundary)}$$

$$y = x - 0.12 \text{ (green boundary)}$$

**2.3 White (Achromatic)**—The color of light emitted from the device shall fall within the following boundaries:

$$x = 0.31 \text{ (blue boundary)}$$

$$x = 0.50 \text{ (yellow boundary)}$$

$$y = 0.15 + 0.64x \text{ (green boundary)}$$

$$y = 0.44 \text{ (green boundary)}$$

$$y = 0.38 \text{ (red boundary)}$$

$$y = 0.05 + 0.75x \text{ (purple boundary)}$$

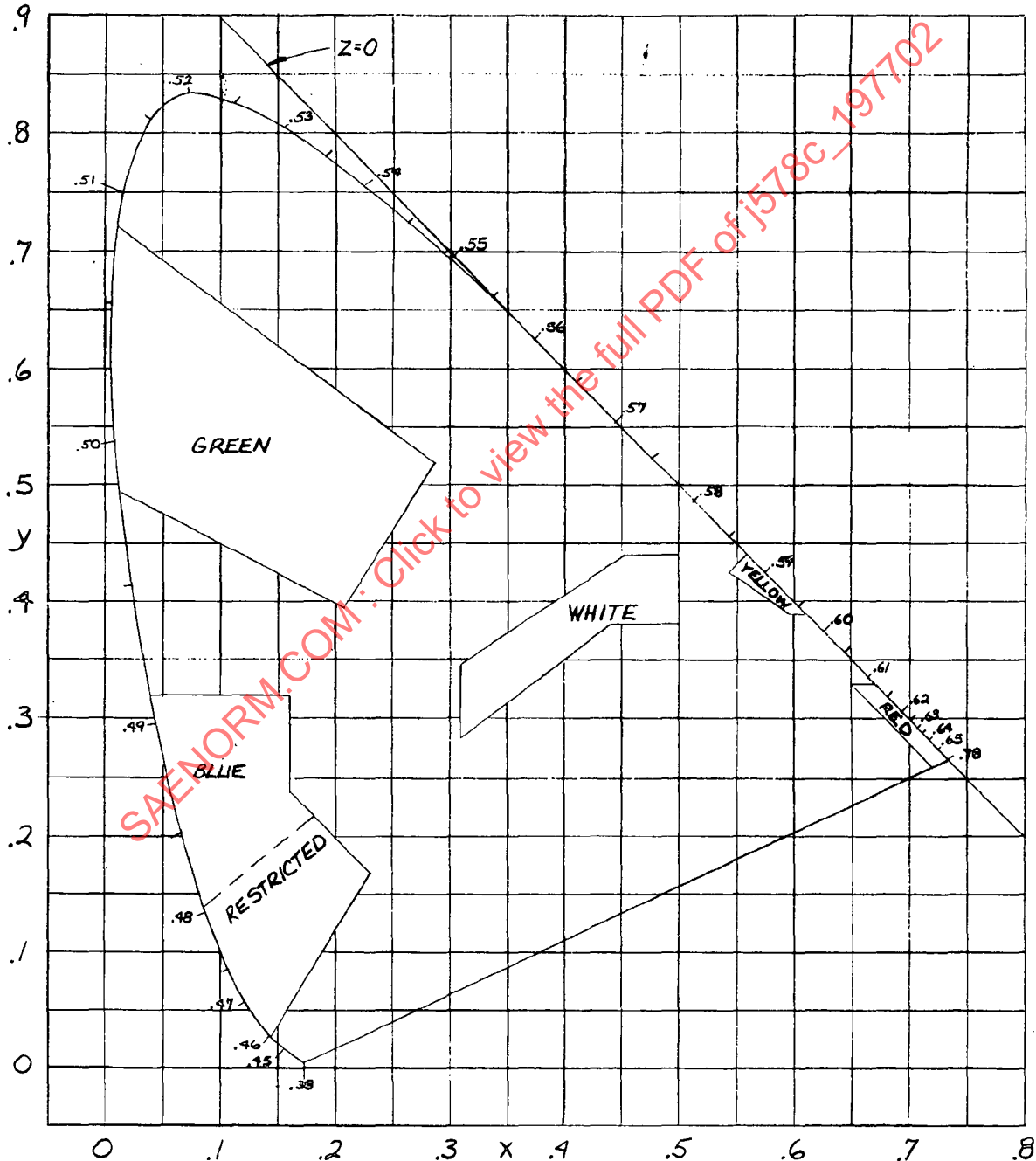


FIG 1—CHROMATICITY DIAGRAM