



## GENERAL DATA

|                    |                                                     |
|--------------------|-----------------------------------------------------|
| Spectral Response  | See Curve                                           |
| Wavelength of      |                                                     |
| Max. Response      | 6100 $\pm$ 400 Angstroms                            |
| Sensitive Material | Cadmium-Sulfide                                     |
| Sensitive Area     | Viewed from End                                     |
| Construction       | Hermetically Sealed in<br>Glass with Flexible Leads |
| Outline            | See Drawing                                         |
| Operating Position | Any                                                 |

## ELECTRICAL DATA

## RATINGS (Absolute Maximum Values)

|                                |               |
|--------------------------------|---------------|
| Breakdown Voltage <sup>2</sup> | 300 Volts     |
| Dissipation (See Curve)        |               |
| T-amb = 25°C                   | 50 mW         |
| T-amb = 70°C                   | 5 mW          |
| Ambient Temperature Range      | -40 to +70 °C |
| Illumination                   | Note 3        |

## CHARACTERISTICS

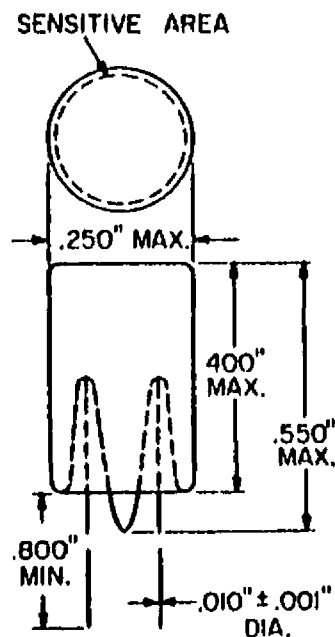
|                              |                   |
|------------------------------|-------------------|
| Cell Resistance <sup>4</sup> |                   |
| Illumination 2 FC            |                   |
| Color Temperature 2870°K     | 6000 Ohms         |
| Dark Resistance <sup>5</sup> | 600,000 Ohms Min. |

## NOTES:

1. Minute increases in relative humidity will produce change in color.
2. Measured with cell in complete darkness at a pulse rate of 100 pps, 100  $\mu$  sec. duration. Voltage in excess of the rated value may damage the cell. Max. DC or AC peak voltage is limited by max. dissipation and min. dark resistance rating.
3. Care should be exercised to prevent localized overheating of the sensitive surface when the cell is used with a lens system.
4. Measured after 60 minutes minimum exposure to approximately 50 FC illumination (ambient room light).
5. Measured in complete darkness, 10 seconds after removal of 2 FC illumination.

## QUICK REFERENCE DATA

The Sylvania Type 8476 is a miniature cadmium-sulfide photoconductive cell featuring high sensitivity and hermetically sealed-in-glass construction. The cell is gaseous back-filled for a high dissipation safety factor and includes a blue-dot compound which turns pink<sup>1</sup> if the cell envelope becomes damaged. The 8476 is designed for use in a wide variety of industrial applications.

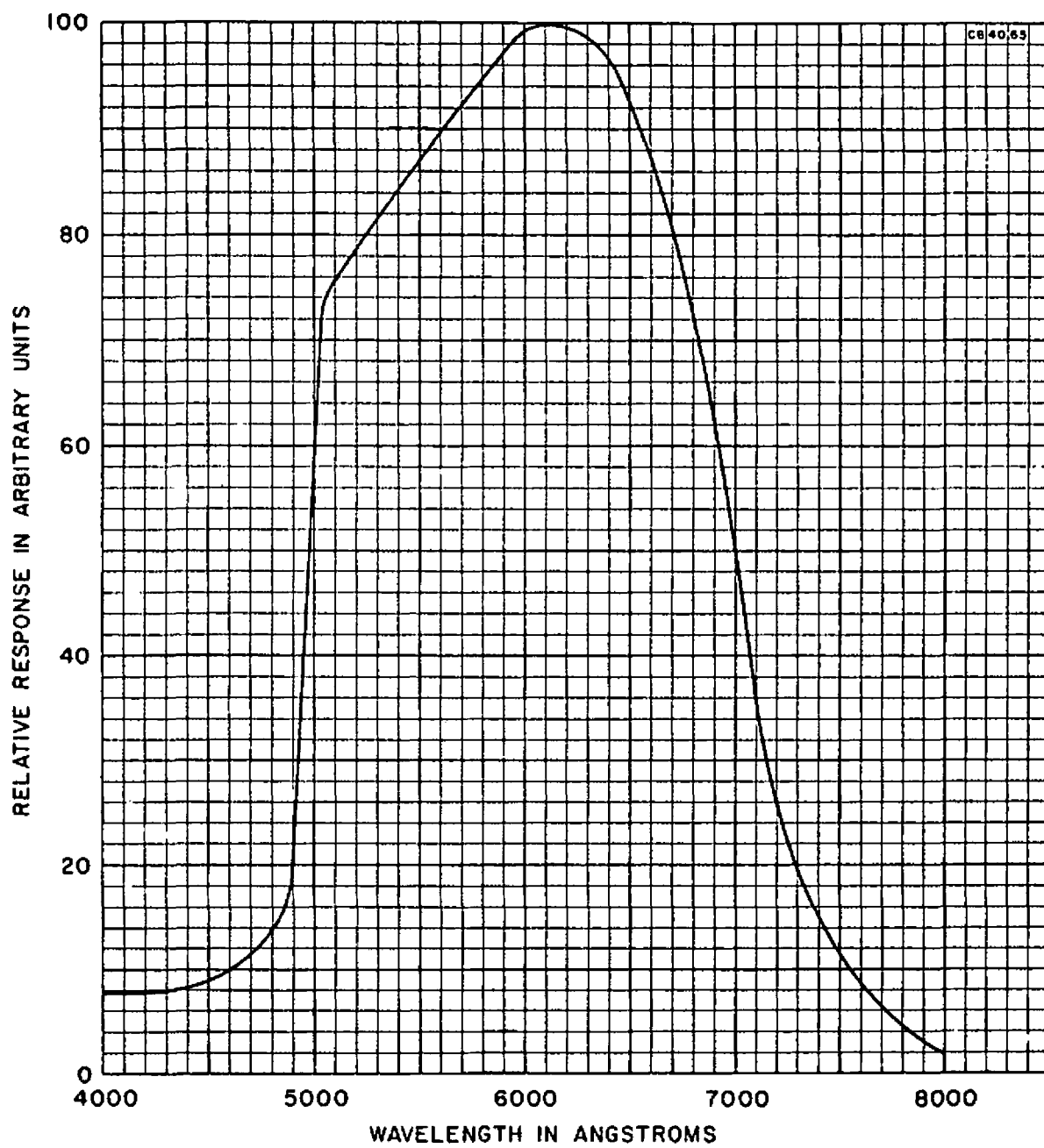
SYLVANIA ELECTRIC  
PRODUCTS INC.

Electronic Components Group  
ELECTRONIC TUBE DIVISION  
EMPORIUM, PA.

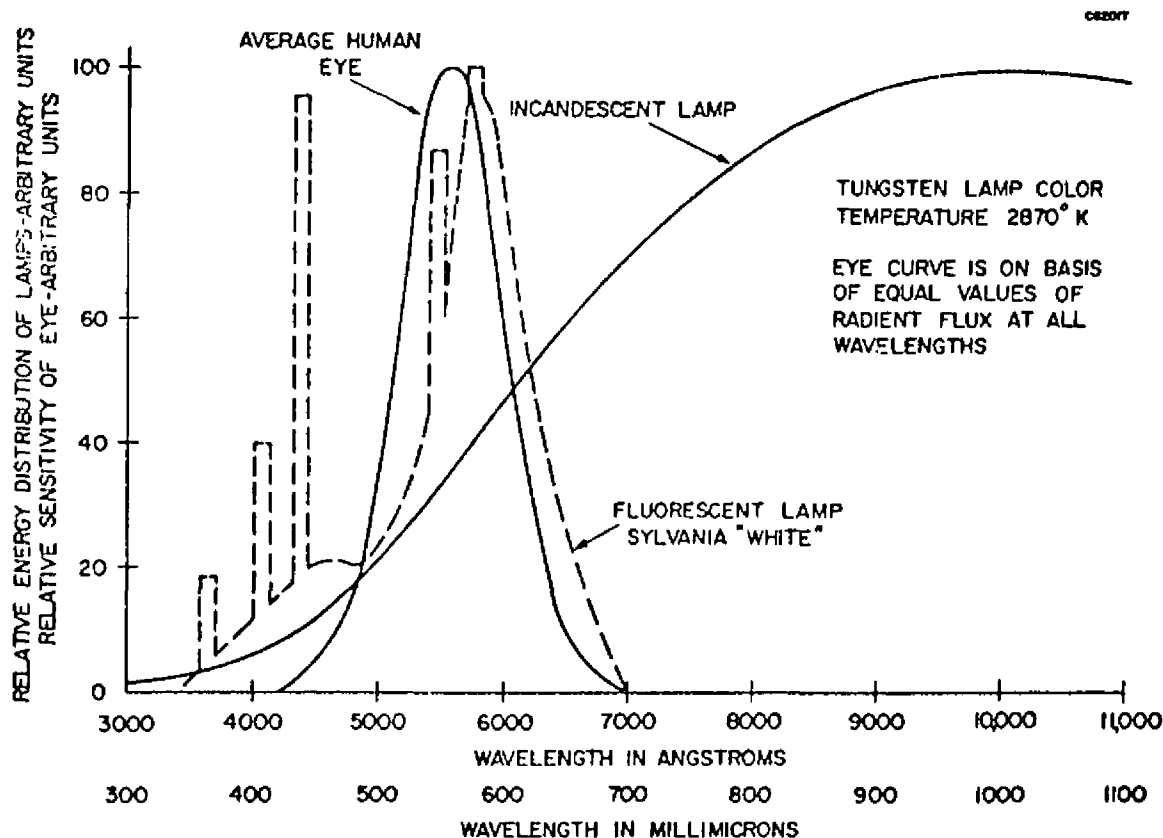
A Technical Publication

July 9, 1964  
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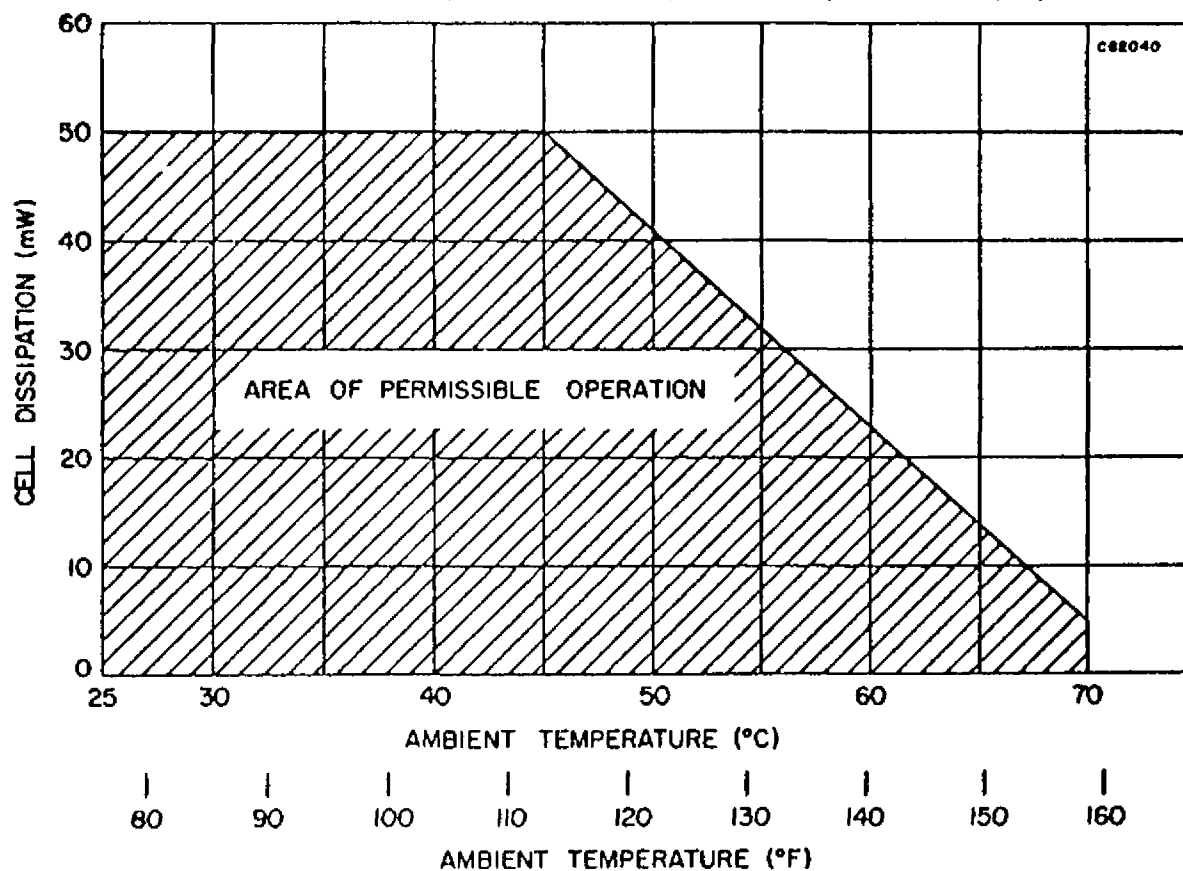
SPECTRAL RESPONSE



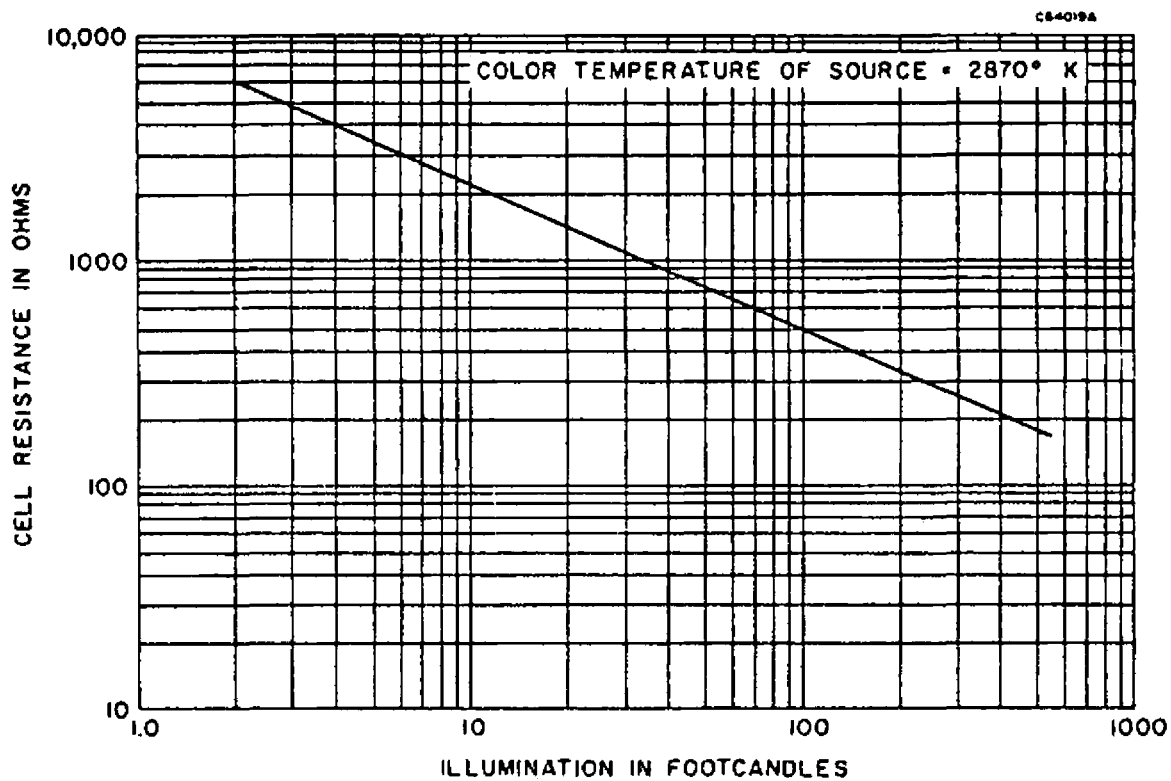
# SPECTRAL CHARACTERISTIC OF HUMAN EYE, TUNGSTEN AND FLUORESCENT LAMPS



## PERMISSIBLE DISSIPATION AS A FUNCTION OF AMBIENT TEMPERATURE



CELL RESISTANCE VS ILLUMINATION



CELL CURRENT AND DISSIPATION VS VOLTAGE

