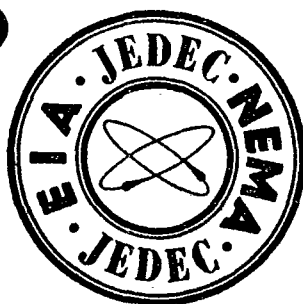


MARCH, 1972



EIA STANDARD
on
REGISTERED SCREEN DIMENSIONS
FOR
MONOCHROME PICTURE TUBES

**ELECTRONIC INDUSTRIES ASSOCIATION
STANDARD RS-266-A**

Formulated by

JEDEC Electron Tube Council

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REGISTERED SCREEN DIMENSIONS FOR MONOCHROME PICTURE TUBES

(From EIA Standards RS-266 and RS-266-1 and Standards Proposal No. 1117, formulated under the cognizance of JEDEC Committee JT-6 on Cathode Ray Tubes.)

HEIGHT, WIDTH, AND DIAGONAL DIMENSIONS

The minimum useful screen dimensions to be used in the registration data shall be obtained from the bulb design print by reducing the design height, width, and diagonal screen dimensions by 1/2 percent. These design dimensions are the chordal distances between a pair of screen terminal points, where the latter are defined as points where lines at 30° to the bulb axis are tangent to the inside face plate fillet surface.

SCREEN AREA

The minimum useful screen area by JEDEC definition (projected) to be used in the registration data shall be the calculated area encompassed by the screen boundary (as defined below) but rounded to the next lower integral number of square inches. Where this rounded area value is within 1% of the registered area for an already registered tube of nominally the same size, the previously registered value shall be used.

SCREEN BOUNDARY

The screen boundary shall be determined by passing arcs through the end points of the registered screen height and width and tangent to arcs passing through the end points of the registered screen diagonal. The latter arc shall be made concentric with the design outside corner arc of the face panel.

FORMULAE AND SAMPLE CALCULATIONS

HEIGHT, WIDTH, AND DIAGONAL DIMENSIONS

The design screen dimensions are determined by the following calculations:

$$\text{Design screen width} = 2 (u_W + a \cos 30^\circ)$$

$$\text{ " " height} = 2 (u_H + a \cos 30^\circ)$$

$$\text{ " " diagonal} = 2 (u_D + a \cos 30^\circ)$$

where "a" is the inside face plate fillet radius, and "u" is the radial displacement of the radius center. The subscripts "H", "W", and "D" are used to denote the screen dimension in question.