



SUBJECT: **SETTLING P15 FLUORESCENT SCREENS**
Process Specifications

SUPERSEDES Feb. 24, 1954

SCHEDULE NO. 1

1. **EQUIPMENT** As specified in 34-17-14.
2. **MATERIALS**
- Z635 Zinc-Magnesium Oxide Phosphor Suspension (or Z632 Zinc Oxide Suspension if permitted by construction data)
 - P69B 1-N Potassium Sulfate, Purified
 - * P264D 16% Potassium Silicate, Purified
 - W7K Distilled, W7J Distilled, or W60D Deionized Water
 - B610D Isobutyl Methacrylate Lacquer
 - H7 Hydrofluoric Acid



HYDROFLUORIC ACID SAFETY PRECAUTIONS: See 33-2-7A

3. **PROCEDURE**

- a. Rinse bulbs with distilled or deionized water and allow to drain.
- b. Paint face plate with B610D lacquer to form a protective layer on face plate surface.
- c. Place bulbs on settling table in perpendicular position.
- d. Measure the following materials into a 3-liter Florence flask. For 5 bulbs at 3.0 mg/cm.² use:

190 cc.	Z635 Suspension at 10 mg/cc.
* 400 cc.	Potassium Silicate*16%
500 cc.	Potassium Sulfate, 1-N
* 1160 cc.	Distilled or Deionized Water
2250 cc.	Total Settling Suspension
- e. Shake flask vigorously and pour 450 cc. of above settling suspension into a graduate.
- f. Add contents of graduate to bulb through an open-end funnel equipped with 325-mesh stainless steel strainer insert. Tip of funnel should extend just below bulb reference line.
- g. Allow screen to settle at least 3 hours.
- h. Pour off clear solution - pouring time 6-8 minutes.
- i. Air dry screen 3-4 minutes.
- j. Wash neck with 0.5-1.0% hydrofluoric acid.
- k. Alternate bulb cleaning process see 34-17-4P.

SCALE—

DIMENSIONS IN

UNLESS OTHERWISE SHOWN.

End of Schedule #1

DIMENSIONS SHOWN WITHOUT TOLERANCES ARE DESIGN CENTERS

25-552-2-64

PCL26696-126JD

● CHANGE
** ADDITION
*** DELETION

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SCHEDULE NO. 2
 (Initially for Tube Type 5AUP24)

1. **EQUIPMENT:** As specified in 34-17-14
2. **MATERIAL:**
 - Z632A Zinc Oxide Phosphor Suspension
 - * P264D 16% Potassium Silicate
 - P69B 1-N Potassium Sulfate
 - W60D Deionized Water
 - B610D Isobutyl Methacrylate Binder
3. **PROCEDURE:**
 - a. Rinse bulbs with deionized water and drain.
 - b. Paint face plate with B610D lacquer to form a protective layer on face plate surface.
 - c. Place bulbs on settling table in a perpendicular position.
 - d. Measure the following materials into a 3 liter Florence flask. For five bulbs at 6 mg/cm² use:

186 cc	Z632A Suspension
* 220 cc	Potassium Silicate*16%
595 cc	Potassium Sulfate, 1-N
* 1805 cc	Deionized Water
<u>2806 cc</u>	Total Settling Suspension
 - e. Shake flask vigorously and pour 562 cc of suspension into a graduate.
 - f. While agitating to maintain suspension pour contents of graduate to bulb through an open-end funnel equipped with a 325 mesh stainless steel strainer insert.
 - g. Allow screen to settle 3 hours.
 - h. Pour off clear solution-pouring time 8-12 minutes.
 - i. Swab out inside of bulb with deionized water being careful not to touch the screen.
 - j. Air dry.

SCALE—

DIMENSIONS IN

UNLESS OTHERWISE SHOWN.

End of Schedule #2

DIMENSIONS SHOWN WITHOUT TOLERANCES ARE DESIGN CENTERS

26-552-2-64

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* CHANGE
 ** ADDITION
 *** DELETION

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