



TENTATIVE DATA

CHARACTERISTICS

GENERAL DATA

Focusing Method	Electrostatic
Deflecting Method	Electrostatic
Phosphor*	P31
Fluorescence	Green
Phosphorescence	None
Persistence	Medium
Faceplate	Gray Filter Glass

* In addition to the phosphor shown, the SC4022 can be supplied with several other screen phosphors.

ELECTRICAL DATA

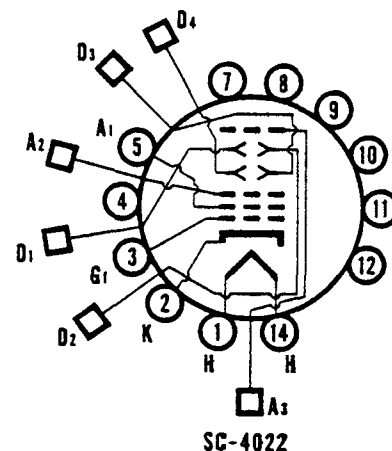
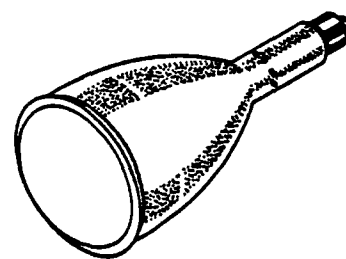
Heater Voltage	6.3	Volts
Heater Current	0.6 ± 10%	Amperes
Direct Interelectrode Capacitances (Approx.)		
Cathode to All Other Electrodes	7.0	pf
Grid No. 1 to All Other Electrodes	8.5	pf
Between Deflecting Plates 1-2	4.0	pf
Between Deflecting Plates 3-4	3.5	pf
Deflecting Plate 1 to All Other Electrodes	13.0	pf
Deflecting Plate 2 to All Other Electrodes	13.0	pf
Deflecting Plate 3 to All Other Electrodes	8.5	pf
Deflecting Plate 4 to All Other Electrodes	8.5	pf

MECHANICAL DATA

Minimum Useful Screen Diameter	9	Inches
Bulb Contact (Recessed Small Cavity Cap)	J1-22	
Neck Contact (Small Ball)	J1-25	
Base (Medium Shell Diheptal 12-Pin)	BI2-37	
Weight (Approx.)	12	Pounds
J1-22 Contact Aligns with Pins #1 & 14	±10	Degrees
Positive Voltage on D1 Deflects Beam		
Approx. toward Pin 5		
Positive Voltage on D3 Deflects Beam		
Approx. toward Pin 1 & 14		

QUICK REFERENCE DATA

Oscilloscope Tube
 10" Direct Viewed
 Round Glass Type
 Electrostatic Deflection
 Electrostatic Focus
 Post Deflection Acceleration
 Aluminized Screen

SYLVANIA ELECTRIC
PRODUCTS INC.

Electronic Components Group
 ELECTRONIC TUBE DIVISION
 SENECA FALLS, NEW YORK

A Technical Publication

April 28, 1965

Page 1 of 3

These are tentative data only. Sylvania, by the publication thereof, is under no obligation as to future manufacture of the product herein described nor as to adherence to these data in case of such future manufacture.

RATINGS

MAXIMUM RATINGS (Absolute Maximum Values)

Anode Input ¹	6	Watts
Anode No. 3 Voltage	15,000	Volts dc
Anode No. 2 Voltage	10,000	Volts dc
Anode No. 1 Voltage	3,300	Volts dc
Grid No. 1 Voltage		
Negative Bias Value	-200	Volts dc
Positive Bias Value	0	Volts dc
Positive Peak Value	2	Volts
Peak Heater-Cathode Voltage		
Heater Negative with Respect to Cathode	180	Volts
Heater Positive with Respect to Cathode	180	Volts
Peak Voltage Between Anode No. 2 and any Deflecting Plate	1,500	Volts
Ratio Post Accelerator Voltage to Anode Voltage	2:5	

TYPICAL OPERATING CONDITIONS

Anode No. 3 Voltage	12,000	Volts dc
Anode No. 2 Voltage	8,000	Volts dc
Astigmatism Correction Voltage	0 - 200	Volts dc
Anode No. 1 Voltage for Focus	2000 - 2400	Volts dc
Grid No. 1 Voltage Required for Cutoff ²	-70 to -100	Volts dc
Deflection Factor ³		
Deflecting Plates 1-2	200 to 245	Volts dc/Inch
Deflecting Plates 3-4	180 to 210	Volts dc/Inch
Modulation ⁴	27	Volts Max.
Line Width Center	.010	Inch
Line Width Corner ⁵	.015	Inch
Focus Electrode Current ⁴	-25 to +25	µa dc
Spot Position, Undeflected	Within 15	mm Square
Angle Between D1-D2 Trace and D3-D4 Trace	90 ± 1	Degree

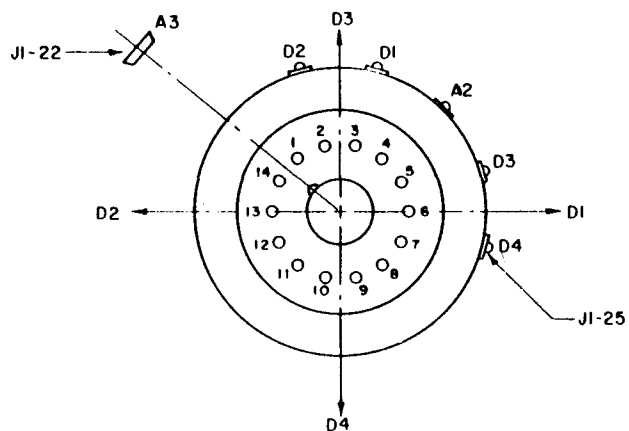
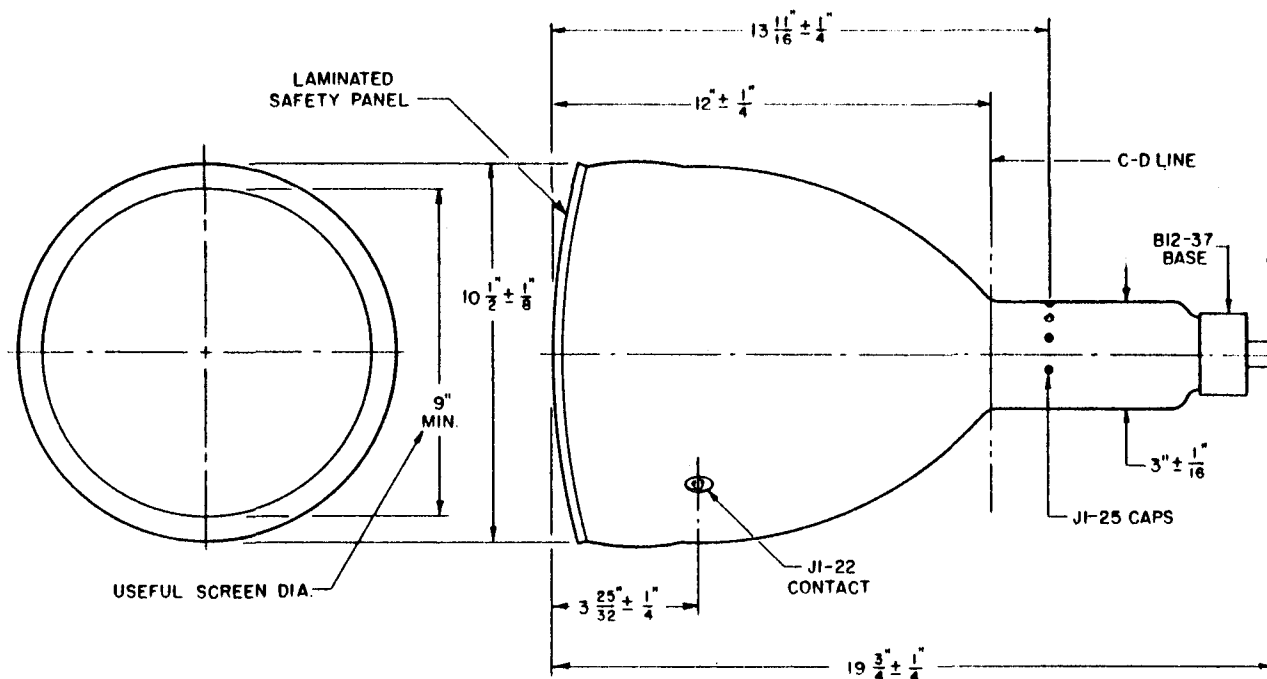
CIRCUIT VALUES

Grid No. 1 Circuit Resistance	2.0	Megohms Max.
Resistance in Any Deflection Plate Circuit	1.0	Megohms Max.

NOTES:

1. Anode input equals the product of anode No. 2 voltage and average anode No. 2 current.
2. For visual extinction of undeflected focused spot.
3. Deflection plates 1 and 2 are nearer the screen.
4. Measured on a 2 inch X 2 inch 75 line raster Light output equals 250 FT. L. using Meter. Foot Lamberts Meter Model 759.
5. 5½ inch square.

OUTLINE



BOTTOM VIEW OF BASE

D65016