



CORPORATION

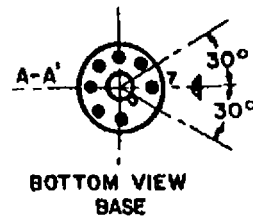
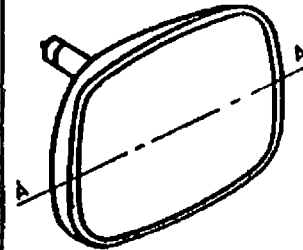
19CDP4

4245 NORTH KNOX AVE.

CHICAGO 41, ILLINOIS

TELEPHONE MULBERRY 5-5000
TELETYPE CG 2790

	<u>DESCRIPTION</u>
19" Direct View	Low G ₂ Voltage (50V.)
Rectangular Glass Envelope	Cathode Drive Design
Spherical Faceplate	114° Magnetic Deflection
Gray Filter Glass	Electrostatic Focus
Aluminized Screen	External Conductive Coating
6.3 Volt, 600 Ma. Heater	No Ion Trap

ELECTRICAL DATA

Focusing Method	Electrostatic
Deflection Angles, Approximate	
Horizontal	103 Degrees
Vertical	86 Degrees
Diagonal	114 Degrees
Direct Interelectrode Capacitances	
Cathode to all other electrodes, approximate	5 uuf
Grid #1 to all other electrodes, approximate	6 uuf
External Conductive Coating to Anode	1900 max. uuf
	1400 min. uuf
Heater Current at 6.3 volts	600 \pm 10% Ma
Heater Warm-up time	11 Seconds

OPTICAL DATA

Phosphor Number	P4, Aluminized
Light Transmittance at Center, Approximate	78 Percent

MECHANICAL DATA

Overall Length	11 5/8 \pm 1/4 Inches
Greatest Diameter of Tube	
Diagonal	18 5/8 \pm 1/8 Inches
Width	16 13/32 \pm 1/8 Inches
Height	13 11/32 \pm 1/8 Inches
Minimum Useful Screen Dimensions (Projected)	
Diagonal	17 9/16 Inches
Horizontal Axis	15 1/8 Inches
Vertical Axis	12 Inches
Area	172 Sq. Inches
Neck Length	4 3/8 \pm 1/8 Inches
Bulb	J 149 A1 or equivalent
Bulb Contact	J1-21
Base	B6-214
Basing	7FA
Bulb Contact Alignment	
Anode contact aligns with pin position #7	\pm 30 Degrees

Dec., 1961
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RATINGS (Design Maximum System)

Unless otherwise specified, voltages are positive and measured with respect to Grid #1

Maximum Anode Voltage	19,800	Volts
Minimum Anode Voltage	12,000	Volts
Maximum Grid #4 (Focusing Electrode) Voltage	± 1100 -500	Volts
Maximum Grid #2 Voltage	70	Volts
Minimum Grid #2 Voltage	40	Volts
Cathode Voltage	100	Volts
Maximum Heater Voltage	7	Volts
Minimum Heater Voltage	5.8	Volts
Maximum Heater-Cathode Voltage		
Heater negatives with respect to cathode		
During warm-up period not to exceed 15 seconds	-410	Volts
After equipment warm-up period	-180	Volts
Heater positive with respect to cathode	180	Volts

TYPICAL OPERATING CONDITIONS

CATHODE DRIVE SERVICE

Unless otherwise specified, all voltage values are positive with respect to Grid #1

Anode Voltage	16,000	Volts
Grid #4 Voltage (Focusing Electrode) 2, 3	250	Volts
Grid #2 Voltage ₁	50	Volts
Cathode Voltage	35 to 50	Volts

MAXIMUM CIRCUIT VALUES

Maximum Grid #1 Circuit Resistance	1.5	Megohms
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NOTES

1. Visual extinction of focused raster.
2. With the combined grid #1 bias voltage and video-signal voltage adjusted to give an anode current of 150 microamperes on a 15 1/8 x 12 pattern from 2F21 Monoscope or equivalent.
3. Individual tubes will have satisfactory focus at some value between 0 and 500 volts.

THE



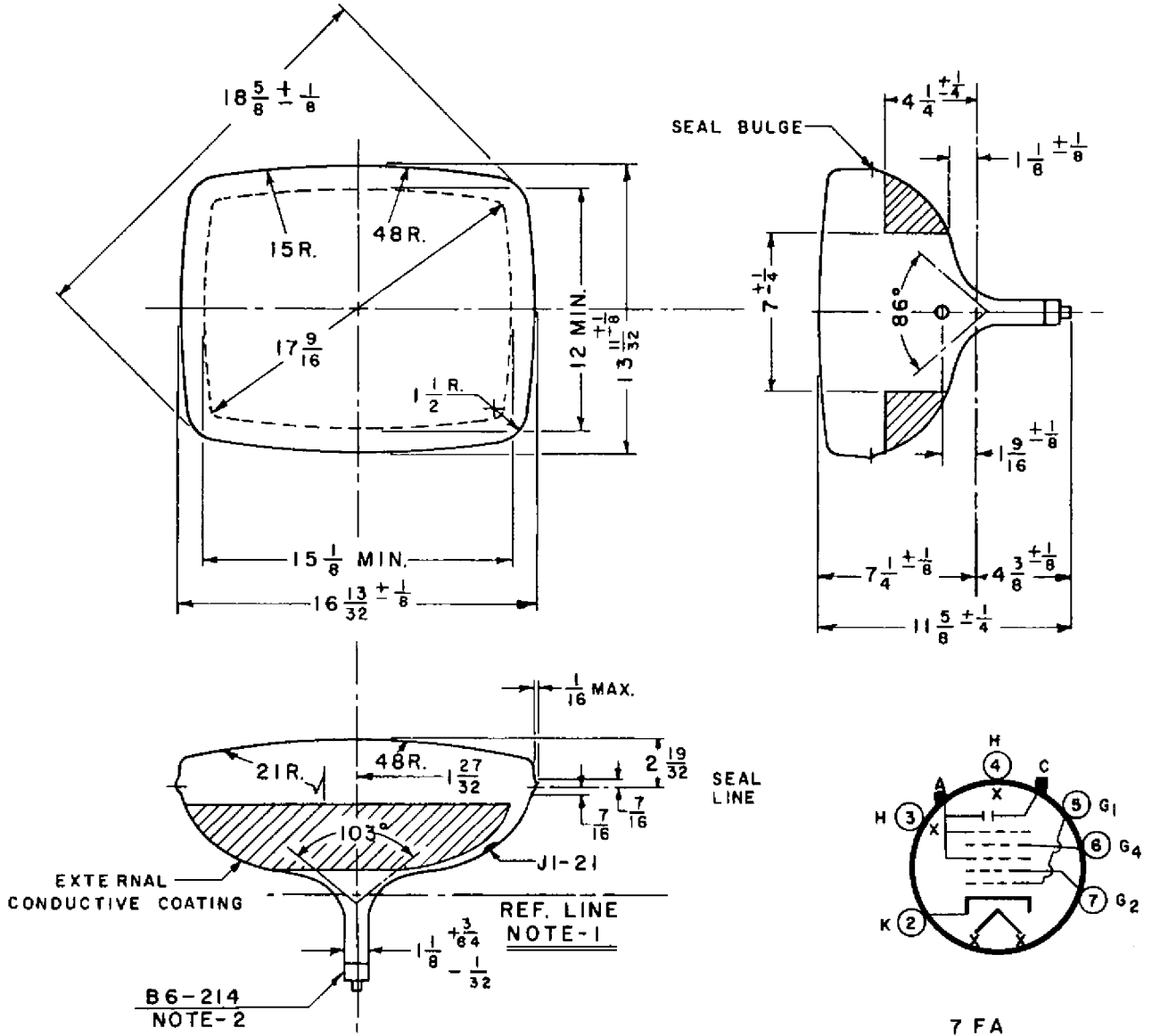
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NOTE:

1. REFERENCE LINE AS DETERMINED BY PLANE C-C' OF J.E.D.E.C. REFERENCE LINE GAUGE NO. 126
2. BASE PIN NO.7 ALIGNS WITH ANODE CONTACT WITHIN 30°