

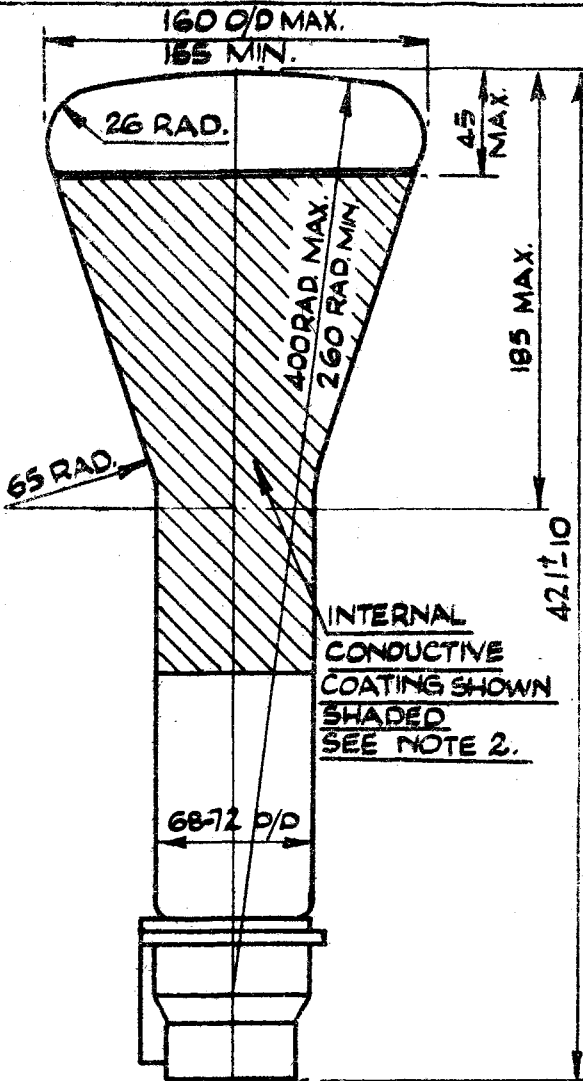
Specification MOS/CV960/Issue 6 Dated:- 1.11.51. To be read in conjunction with K1003		<u>SECURITY</u> Specification C.R.T. Unclassified Unclassified	
<u>TYPE OF VALVE:-</u> Cathode Ray Tube <u>TYPE OF DEFLECTION:-</u> Electrostatic asymmetrical <u>TYPE OF FOCUS:-</u> Electrostatic <u>BULB:-</u> Glass. Internally coated with conductive coatg. <u>SCREEN:-</u> GGN		<u>MARKING</u> See K1001/4 <u>BASE</u> B12D See K1001/A4/D15	
		Contact	Electrode
<u>RATING</u> Heater voltage (V) 4.0 Heater current (A) 1.0 Max. Va1 (KV) 2.5 Max. Va2 (KV) 1.08 Max. Va3 (KV) 6.0 Sensitivity, X Plates (mm/V) $\frac{625}{Va3}$ Sensitivity, Y Plates (mm/V) $\frac{1175}{Va3}$		1 2 3 4 5 6 7 8 9 10 11 12	Grid C H H A1 A2 Internal Coatg. Y2 X2 A3 X1 Y1
<u>TYPICAL OPERATING CONDITIONS</u> Va1 (KV) 1.8 Va2 (KV) 0.8 Va3 (KV) 5.0 Beam current (uA) 5		<u>DIMENSIONS</u> See drawing, page 4	
		<u>PACKAGING</u> See K1005	
<u>NOTES</u> A. The suitability of the tube for asymmetrical deflection will be checked at Type Approval. During the tests, symmetrical deflection may be employed. B. Screen blemishes which impair the operation of the tube must not appear within a rectangular area of width 25 mm symmetrical about the X axis and length 115 mm. symmetrical about the Y axis. D. The tube must be adequately free from Microphony, Deflection Defocus and Astigmatism. These tests will be covered by Type Approval.			

To be performed in addition to those applicable in K1003

	Test Conditions	Tests	Limits		No Tested
			Min.	Max.	
a		<u>Capacitances</u> (pf) 1. Each X and Y plate to all other electrodes 2. Grid to all other electrodes 3. Each X plate to each Y plate	-	25	6
			-	25	per week
			-	3	
FOR ALL TESTS GIVEN BELOW $V_h = 4.0V$					
b		I_a (A)	0.8	1.3	100%
c	Cathode 100 volts positive to heater	Heater Cathode Current (uA)	-	100	100%
FOR ALL TESTS GIVEN BELOW $V_{a1} = 1.8 KV$, $V_{a3} = 5.0 KV$					
d	With a raster scan of 120 mm in the X direction and 80 mm in the Y direction, or with raster of approved size, adjust V_{a2} for optimum focus and V_g for a light intensity of 0.15 candela.	1. $-V_g$ (V) 2. Useful screen area (mm) X direction Y direction 3. V_{a2} (V)	5	-	100%
			120	-	100%
			80	-	
			700	900	100%
e	With a line scan of length 100 mm in the X and Y directions successively, V_{a2} and V_g as in "d".	Line width at centre of trace (mm)	-	0.7	100%
f	V_g adjusted for cut off and V_{a2} as in "d". See K1003/5.9	1. V_g 2. Increase in negative value of V_g compared with value noted in test d.1.	25	70	100%
			-	30	100%
g	See K1003/5.4.2. (a) $V_g -80v$. (b) Alternative method Resistor 5 meg Ω .	<u>Grid Insulation</u> Leakage Current (uA) Increase in voltmeter reading	-	16	100%
			-	100%	

CV960

	Test Conditions	Tests	Limits		No. Tested
			Min.	Max.	
h		<u>Deflection Sensitivities</u>			10%
		1. X plates (mm/V)	$\frac{550}{V_{a3}}$	$\frac{700}{V_{a3}}$	
		2. Y plates (mm/V)	$\frac{1000}{V_{a3}}$	$\frac{1350}{V_{a3}}$	
j	See K1003/5.10	Deviation of spot from centre of screen (mm)	-	10	100%
k		<u>Orientation of Deflection Axes</u>			100%
		1. Orientation of X axis of deflection relative to 00' on drawing	80°	100°	
		2. Angle between X and Y axes of deflection	85°	95°	



ALL DIMENSIONS ARE IN MILLIMETRES.

NOTES.

1. THE TUBE WILL NORMALLY BE OPERATED WITH A3 & CONDUCTIVE COATING TIED IF A MANUFACTURER SO DESIRES THESE ELECTRODES MAY BE STRAPPED INTERNALLY.
2. INTERNAL CONDUCTIVE COATING SHALL BE OF SUCH DIMENSIONS THAT IT FUNCTIONS EFFECTIVELY BUT DOES NOT OBSCURE THE USEFUL SCREEN AREA.
3. LOOKING AT SCREEN WITH THE TUBE POSITIONED SUCH THAT THE BASE SPIGOT IS UPPERMOST A POSITIVE VOLTAGE APPLIED TO THE TERMINAL X1 SHALL DEFLECT THE SPOT TO THE LEFT & A POSITIVE VOLTAGE APPLIED TO THE TERMINAL Y1 SHALL DEFLECT THE SPOT UPWARDS.

