Issued with: -

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Test Spec. No.

MINISTRY OF AIRCRAFT PRODUCTION
DIRECTORATE OF COMMUNICATIONS DEVELOPMENT.

Date

CATHODE RAY TUBE VCR515 REF. NO. 10E/13026

Associated Drawings

D.C.D., W. T. 1353 Issue No. 2.	17. 9. 42.				D.C.D.	, W.T.1400
and the state of the		<u> </u>			- Indiana Calabania (Cara	
TYPE OF DEFLECTION: Ele SUIB: Internally coa- coating SCREEN: Blue or Green COMMERCIAL PROTOTYPE:	MARKING VCR. 515 10E/13026					
RATING			Noted.	BASE	No. W.	• See Drg. T.27468 of , W.T.
esirable Spot Size (m) 1 oltage 1 kV) n) 1	•0 •05 •2		CONNE	1400 SIONS AN CTIONS	D BASE
X" Plate Sensitivity Y" Plate Sensitivity		80/Va2 00/Va2		-	See Page	3 4.
ypical Operating Cond second Anode Voltage (Virst Anode Voltage (V	kV) 1	•2 15				
CAPACITANCES POF		4				
ach "X" plate to all electrodes ach "Y" plate to all	1.5	•5				
electrodes Frid to all other electone "X" plate to one "		• 5 • 005				
NOTES						
		1				: : :

TESTS.

CATHODE RAY TUBE VCR515.

To be performed in addition to those applicable in D.C.D., W.T. 1400

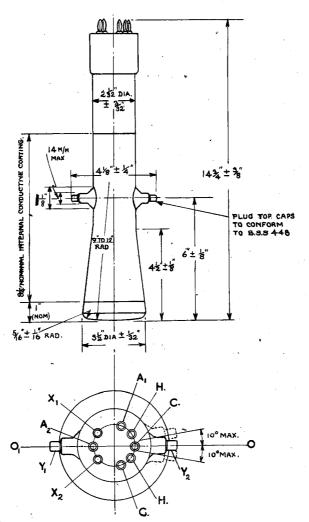
use	Test Conditions				Test	Limits		No.		
Clause	Vh Va2		Va1	· Vg		Min.	Max.	Tested		
a.					Direct inter-elect- rode capacitances (ppF) 1. Each X plate to		15	5%(5)		
				•	all other electrodes 2. Each Y plate to all other electrodes	-	8	5%(5)		
					3. Grid to all other electrodes	-	15	5%(5)		
					4. One X plate to one Y plate.	-	0.2	5%(5)		
b•	Cathode	e 50 volts	positive t	o heater	Heater-cathode current (microamps)	-	200	100%		
C.	4.0	o	0.	0	Heater-current (amps)	0.8	1.3	100%		
đ.	to give that of length	e <mark>spot bri</mark> f standard	ptimum focu lliance equ tube on a the X and Y	al to line of	1. The line width shall not be greater than that of standard tube 2. Focusing voltage Va1 (volts)	180 250		100% 100%		
c.	that of voltage 60 mm, and in	Adjust Val for optimum focus and Vg to give spot brilliance equal to that of standard tube. Deflection voltages to give raster of 60 mm by 60 mm, 50 cycles in one direction, and in the other, number of lines such that they cannot be resolved.			Grid Voltage Vg	Shall not be positive with respect to cathode, value to be noted.		be positive with respect to cathode, value to		100%
f.	4⊷0 Raste	1200	as in test (a) st (e)	adjusted to give cut-off	1. Grid voltage Vg (volts) 2. Increase in negative value of Vg compared with value noted in test (e)	- 25	-60 40	100% 100%		
g•	See Clar	1200 ended meth use 4.4.2 1 megohm.	as in test (d) od:- of D.C.D.,	Within working range W.T. 1400	Grid Insulation Leakage current (microamps) Increase in volt- meter reading.		40 100%	100%		

TESTS (CONTD.).

CV-1-5 1 5 cathode ray tube VCR515.

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	Clause	Test Conditions				Test	Limits		No.
e.	덩	Vh	Va2	Va1	√g		Min.	Mex.	Tested
 →	h.	4•0	1200	as in test (d)	Any convenient value	1. X deflection plate sensitivity (mm per volt)	410 Va2	550 Va2	10% (10) 10%
						2. Y deflection plate sensitivity (mm per volt)	340 Va2	460 Va2	(10)
>	j.	4.0	1200	as in test (a)	any con- venient value	Deviation of spot from centre of screen (mm)	-	12	100%
→	k•	stated			any con- venient value	Useful screen area Diameter (mm)	70	-	100%
→	1.			as in test (d) elative to ax org. No. W.T.		Orientation of axes of deflect- ion Y axis	-10°	+10 ⁰	
\rightarrow	m•	4•0	1200	as in test (d)	any con- venient value	Angle between X axis and Y axis	880	92°	100%
	n	4•0	1500	See clause D.C.D.,W.T		Over Voltage Test			100%

CATHODE RAY TUBE TYPE V.C.R. 515.



ENLARGED VIEW IN DIRECTION OF ARROW SHOWING BASE CONNECTIONS.

WHEN VIEWING THE SCREEN WITH THE TUBE POSITIONED SUCH THAT THE TERMINAL A2 IS DOWNWARDS, A POSITIVE VOLTAGE APPLIED TO THE TERMINAL X1 SHALL DEFLECT THE SPOT TO THE RIGHT AND A POSITIVE VOLTAGE APPLIED TO THE TERMINAL Y1, SHALL DEFLECT THE SPOT DOWNWARDS.