MINISTRY OF AIRCRAFT PRODUCTION
DIRECTORATE OF COMMUNICATIONS DEVELOPMENT.

VALVE TYPE C.V.44.

Test Spec. No.	Date.	Associated Drawings.	Issued with:-
D.C.D. W.T. 1310 Issue 2 D.I.S. No. 958.	9/4/42	W.T.26927	W.T. Board Specification K.1001, ignoring clauses 5.2, 5.8.

TYPE OF VALVE : Tetrode.
CATHODE : Indirectly heated.
ENVELOPE : Metal-glass construction.
COMMERCIAL PROTOTYPE : E.1155.

MARKING.

CV.44

RATING.

		Note.
Filament voltage (volts).	8.0	A
Filament current (amps.)	6.0	
Maximum anode voltage (kV.)	12.0	
Maximum screen voltage (kV.)	2.0	
Maximum anode dissipation (watts).	60.0	B
Maximum screen dissipation (watts).	10.0	

CAPACITANCES (μμF).

Anode to all other electrodes	9.25
Control grid to all other electrodes.	26.5
Anode to control grid.	1.0

BASE.

Dimensions:- See Fig. 7 Appendix I of K.1001.

Connections:- See Drg. WT.26927

DIMENSIONS.

See Drg. WT.26927

PACKING.

See Clause 7.3 of K.1001.

NOTES.

A. The filament voltage should always be run up slowly to the final value of 8.0 volts.

B. With assisted convection cooling.

→ Indicates a change.

NOTE : There may exist a later issue of the specification of which this page is a facsimile. Intending users of this valve should, therefore, consult the issuing Authority to ensure that they have the latest information.

VALVE TYPE C.V.44.

TESTS.

To be performed in addition to those applicable in K.1001.

Clause	Test Conditions.						Test.	Limits		No. Tested
	V_f	V_{g1}	V_{g2}	Va	Ig2	Ia		Min.	Max.	
(a)	8.5	Strapped		Raised slowly to 18kV and maintained till flashing ceases.	-	1.0 mA	Anode Hot Flash Process. Anode voltage to be maintained at 18 kV. for a period of one minute without further flashing See Note 1.			100%
(b)	8.5	-	Strapped. Applied volts raised slowly to 3.5 kV. and maintained till flashing ceases.		$I_a + I_{g2}$ = 2 mA.		Grid Hot Flash Process. Anode voltage to be maintained at 3.5 kV. for a period of one minute without further flashing See Note 1.			100%
(c)	8.0	0	0	0	-	-	Filament current (amps.)	5.45	6.65	100%
(d)	8.0	-	Strapped. 400V. applied. Conditions maintained for 5 minutes.		$I_a + I_{g2}$ = 150 mA.		Reverse Control Grid Current (μA) at end of 5 minute period.	-	150	100%
(e)	8.0	Varied from -80 to 0	Strapped. Applied voltage adjusted to maintain required Ia + I_{g2}.		Ia + I_{g2} = 100 mA.		Amplification Factor.	3.5	5.5	100%
(f)	8.0	-	2 kV.	12 kV	-	1.0 mA.	Control grid voltage (volts)	-	-1100	See Note 2.
(g)	8.0	0	Strapped. See Note 3		-	-	Peak Emission (amps.)	12.0	-	100%
	See Appendix V. of K.1001.									

Note 1 :- Clauses (a) and (b) are to be applied before any of the other tests, and once the conditions specified have been met, the test conditions need not be repeated for acceptance testing. For these hot flash processes there shall be a 5000 ohm resistor in series with the applied volts, and a capacitance of 0.25 μF. in parallel with the supply volts on the supply side of the resistor.

Note 2 :- This test shall be applied only to those valves whose amplification factor, as measured in test clause (e) is less than 4.5.

Note 3 :- Pulse of peak value 3 kV., half sine wave shape, duration 2 μsecs. and recurrence frequency 50 c.p.s. to be applied.