

ELECTRONIC VALVE SPECIFICATIONS
SPECIFICATION CV337 ISSUE 5 DATED 9.7.57
AMENDMENT NO. 1

Page 2 Amend the specified test clauses as follows:-

Test clause "b" Amend the Minimum Limit to read 8.2. $\mu\text{A}/\text{Lumen}$ in place of 7.5 $\mu\text{A}/\text{Lumen}$.

Test clauses 'd' and 'e' In column headed Light Flux, Lumens Amend 2.5×10^{-5} to read 1.0×10^{-5}

Test clause 'd' Amend the Minimum Limit of 112.5 to read 49.5 μA

April, 1961.

N.56730/D

The Director,
Royal Aircraft Establishment

MINISTRY OF SUPPLY - D.L.R.D.(A)/R.A.E.

Specification MOSA/CV337 Issue 5 Dated 9.7.57. To be read in conjunction with K.1001	<u>SECURITY</u>	
	<u>Specification</u> UNCLASSIFIED	<u>Valve</u> UNCLASSIFIED

—————> Indicates a change

TYPE OF VALVE - Electron Multiplier Photo cell			<u>MARKING</u> See K.1001/4.1.	
ENVELOPE - Glass			<u>BASE</u> Small Shell Submagnal 11 pin	
PROTOTYPE - VX.6046				
<u>RATINGS</u>			<u>CONNECTIONS</u>	
		Note		
Max. H.T. Supply	(V)	1100	Pin	Electrode
Max. Voltage between Anode and Dynode No. 9	(V)	250	1	Dynode No. 1
Max. Anode Current	(mA)	2.5	2	Dynode No. 2
Max. Ambient Temperature	(°C)	70	3	Dynode No. 3
Max. Anode Dissipation	(W)	0.5	4	Dynode No. 4
			5	Dynode No. 5
			6	Dynode No. 6
			7	Dynode No. 7
			8	Dynode No. 8
			9	Dynode No. 9
			10	Anode
			11	Cathode
			<u>DIMENSIONS</u> See Drawing Page 3.	

NOTES

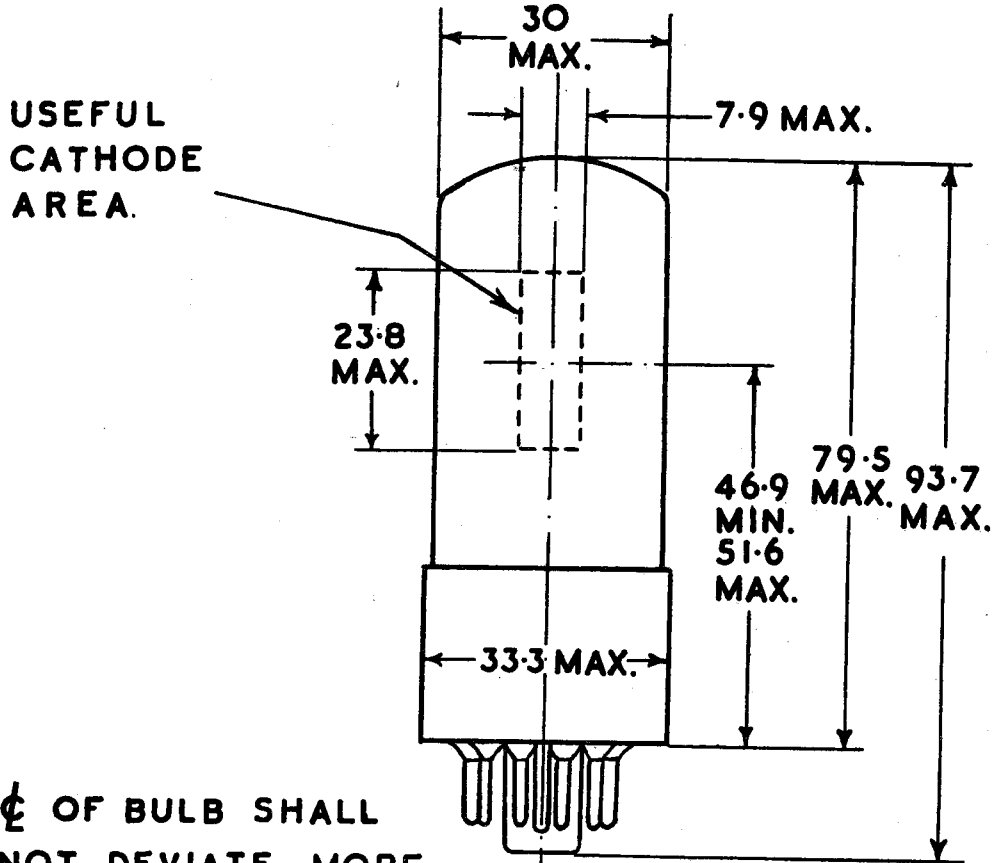
- A. An anode load resistance of at least 10,000 ohms is recommended for a protective resistance.
- B. The spectral response is blue sensitive.

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

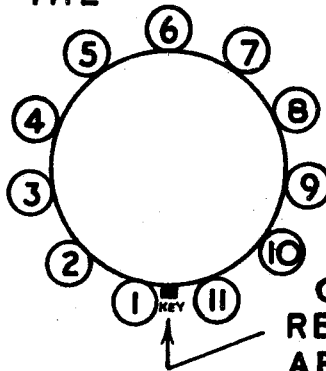
Test Conditions			Test	Limits		No. Tested	Note	
				Min.	Max.			
a			<u>CAPACITANCES (pF)</u> 1. Anode to Dynode 9 2. Anode to Rest	2.0 3.5	6.0 9.5	6 per week		
b	V _{ht} (kV)	V _{a-dy 9} (V)	Light Flux Lumens					
	100V between cathode and all other pins tied together.		0.1	Sensitivity (μ A/Lumen)	7.5	-	100%	2
c	1.0 through 10K ohms	100	0	<u>Dark Currents</u> 1. I _c (μ A) 2. I _a (μ A)	- -	5.0 0.25	100% 100%	
d	1.0 through 10K ohms	100	2.5×10^{-5}	I _a (μ A)	112.5	-	100%	2,3
e	1.0 through 10K ohms	100	2.5×10^{-5}	μ	75,000	-	100%	4

NOTES

1. The voltage steps from cathode to dynode No. 1 and from each dynode to the next in sequence shall be equal.
2. The light flux shall be incident on an aperture 20 mm x 5 mm centred on the centre of the cathode.
3. The tube position shall be adjusted to give maximum sensitivity.
4. μ in this test is the ratio of overall sensitivity (deduced from clause d) to primary sensitivity (measured in clause b).



∠ OF BULB SHALL NOT DEVIATE MORE THAN 2° IN ANY DIRECTION FROM THE PERPENDICULAR ERECTED AT CENTRE OF BOTTOM OF BASE.



ALL DIMENSIONS IN MILLIMETRES.

DIRECTION OF LIGHT WITH RESPECT TO PIN ARRANGEMENT.