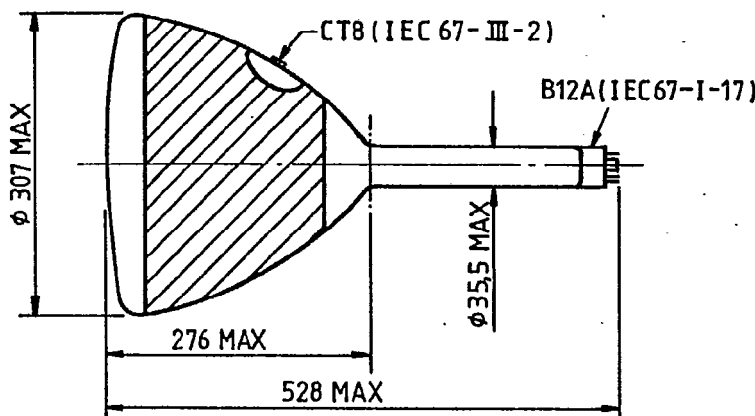


BRITISH STANDARDS INSTITUTION 2, PARK STREET, LONDON W1A 2BS.		BS CECC 11 001-022	
SPECIFICATION AVAILABLE FROM: AS SHOWN IN PD 9002, CECC 00 200, AND RANK BRIMAR LIMITED, GREENSIDE WAY, MIDDLETON, MANCHESTER M24 1SN. TELE: 061-681-7072 TELEX: 665326		ISSUE 2 MAY 1986. Page 1 of 15 Pages	
ELECTRONIC COMPONENTS OF ASSESSED QUALITY: DETAIL SPECIFICATION IN ACCORDANCE WITH CECC 11 000: 1980		MANUFACTURER'S TYPE NUMBER 31E/50576L (Previously R3137-L2) NATO Stock No. 5960-99-0381970 SEE PD 9002 and CECC 00 200 For ordering information see Clause 4.	
Outline and dimensions  All dimensions in mm For detail dimensions and base connections see Appendix B. Marking information see Clause 3.		RADAR DISPLAY CATHODE RAY TUBE DEFLECTION : MAGNETIC (50° total angle) FOCUS : ELECTROSTATIC SCREEN : 265 mm DIA. PHOSPHOR : L (JEDEC P33) (COLOUR : ORANGE) (x 0.559 y 0.440) PERSISTENCE: VERY LONG	
		FULL ASSESSMENT (ADDITIONAL)	
1. <u>DATA</u> (not for inspection purposes)			
<u>Mechanical</u>			
Mounting position: Restricted (see additional information)			
Mass (weight) 7.0 kg max.			
<u>Environmental</u>			
Not applicable			
<u>Electrical</u> - Limiting values (absolute maximum rating system - IEC 134)			
	Min.	Max.	Units
Heater voltage	5.7	6.9	V
Heater to cathode, positive voltage		150	V
Heater to cathode, negative voltage		150	V
Intensity modulator electrode negative voltage	1	200	-V
Intensity modulator electrode positive voltage	Must never become positive		V
Final anode voltage	9	18	kV
Focus anode voltage	-300	1000	V
Second grid voltage	400	800	V
Refer to Qualified Products List PD 9002 and/or CECC 00 200 for details of manufacturers approved to this specification.			

5. RELATED DOCUMENTS (cont'd)

- IEC 100 Methods for the measurement of direct interelectrode capacitances of electronic tubes and valves.
- IEC 134 Rating systems for electronic tubes and valves and analogous semiconductor devices.
- PD 9002 BS 9000 Component Selection Guide.

6. STRUCTURAL SIMILARITY

Not applicable

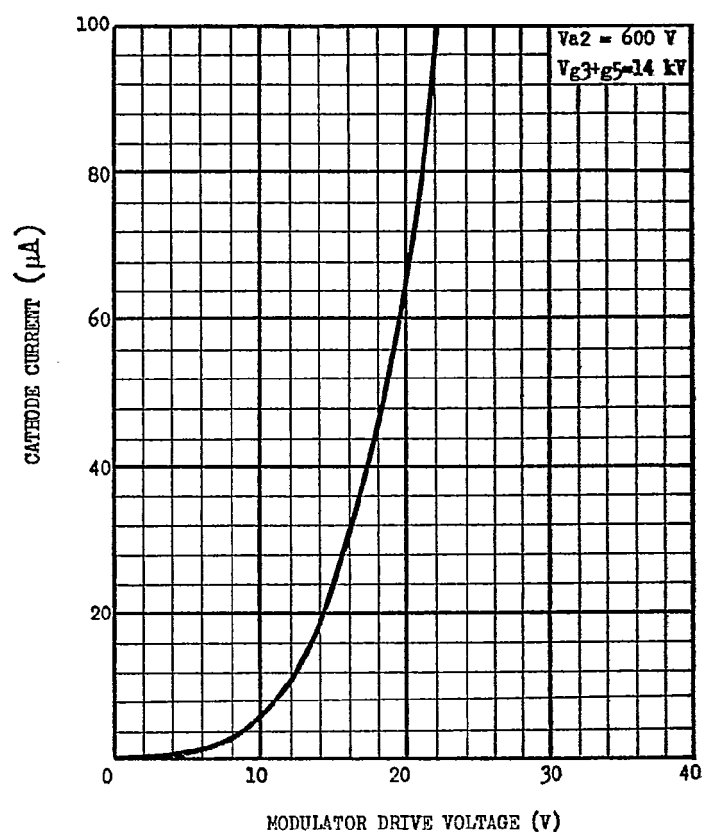
7. X-RADIATION

If this tube is operated at voltages in excess of 16 kV., X-ray shielding is advisable to give protection against the possible danger of personal injury arising from prolonged exposure at close range.

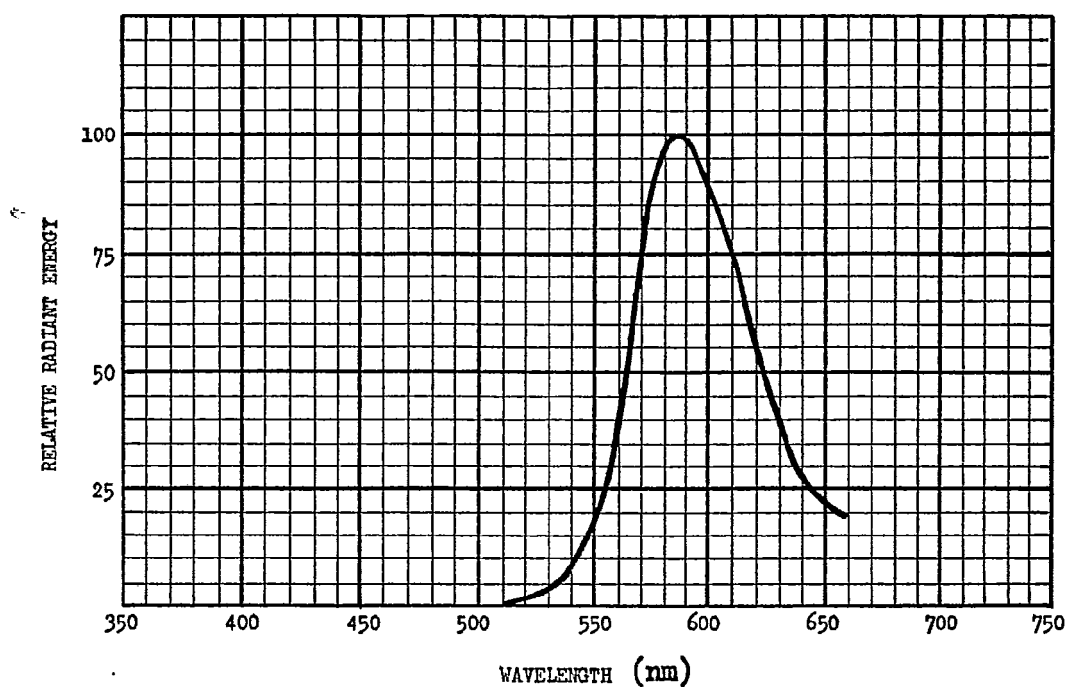
8. ADDITIONAL INFORMATION

- 8.1 The precautions taken in manufacture reduce the possibility of spontaneous implosion to a minimum, but any additional stress due to mishandling considerably increase the risk of implosion; such implosion may occur immediately or be delayed. Particular care should be taken not to scratch any part of the tube envelope especially the faceplate and the area where the faceplate and side-walls meet as this will appreciably weaken the glass and may lead to implosion of the tube.
- 8.2 The tube should be operated at its minimum useful brightness in order to prevent damage to the screen material. There is a possibility of a rapid burn on the screen if the spot is allowed to remain stationary.
- 8.3 The tube mounting should ensure that the main support is near the faceplate, and so arranged that no stresses exist between the glass envelope and the neck. Under no circumstances is the base socket to be used to support the tube.
- 8.4 The tube may be mounted in any position except with the screen down and the neck of the tube making an angle of less than 20° with the vertical.
- 8.5 The tube should be shielded from magnetic fields which can be detrimental to its performance.
- 8.6 In systems where high frequency character writing is required, the deflector coil assembly should not extend over the metallic electrodes, supports, or getters, otherwise there may be undesirable interaction with the tube gun.
- 8.7 The external conductive coating of this tube should be connected to chassis. The capacitance of this coating to final anode, typical value 1200 pF may be used to provide smoothing for the e.h.t. supply.

TYPICAL MODULATOR DRIVE CHARACTERISTIC



TYPICAL RELATIVE SPECTRAL ENERGY DISTRIBUTION CURVE



TYPICAL PERSISTENCE CHARACTERISTIC

