



EMR DIVISION OF WESTON INSTRUMENTS, INC • A SCHLUMBERGER COMPANY

PRODUCT SPECIFICATION - MODEL 549-109

ELECTROSTATIC IMAGE DISSECTOR

I. PHYSICAL CHARACTERISTICS

Focusing:	Electrostatic
Deflection:	Electrostatic
Dynodes:	14; focussed, CuBe
Overall length (unpotted):	(See Figure 4) 5 5/8 inches
Major diameter (unpotted):	(See Figure 4) 1 5/8 inches
Photocathode (area):	7/8 inch diameter
Window material:	Fiber optic, 15 μ diameter N.A. 1.0 typical
Cathode type:	Semitransparent, bi-alkali
Aperture size:	To be determined (note 1)
Typical weight (unpotted):	250 grams

II. PHOTOCATHODE CHARACTERISTICS

Quantum efficiency (Q) at
4100 \AA

Typical spectral response

Cathode uniformity

Note	Minimum	Typical	Maximum	Units
2				
	10	14		% See Fig 1
11		25		%
		750		V
3		.001		in/V
4		1.05		%
6		.035		Inches
9		1900	2200	V
5,7		5.0×10^{-12}	1×10^{-11}	A
8		30		%

III. OPERATING CHARACTERISTICS

Accelerating voltage

Deflection sensitivity

Linearity distortion

Cathode separation for a
rejection ratio of: 200

Multiplier voltage for a
gain of 10^6

Anode dark current
(DC) at 10^6 gain

Anode Uniformity

APP'VD. ENG. <i>M. M. M.</i>	DATE 8-6-70	APP'VD. PROD.	DATE	CLASSIFICATION EXPERIMENTAL SPECIFICATION
APP'VD. MARK'TG. <i>M. M. M.</i>	DATE 12 Aug 70	ORIG. BY J. J. H.	DATE 8/6/70	EMR SPEC. NO. PAGE 1 OF 7 REV.