

Fixed-focus image-converter tube for low-light integration, high-speed photography, and pulsed-light imaging systems.

GENERAL CHARACTERISTICS

BASE DESIGNATION	—	BASE PINS	—
NOMINAL HEATER	— / —	PARALLEL HEATER	— / —
HEATING	Indirect	SERIES OPERATION	Not specified
CATHODE ARRANGEMENT	Separate cathodes	SECTION CONSTRUCTION	Similar

SECTION RATINGS

SECTION1 ImageConverterIntensifier

No fixed ratings recorded.

Image-converter electron-optical structure; performance retained in parameters.

The ITT 7177 is a fixed-focus image-converter tube for low-light integration, high-speed photography and pulsed-light systems.

SOURCE OPERATING CONDITIONS

[SOURCE PDF](#)

1962 ITT

Published test conditions and operating points. Values on this page are preserved as reported by this source.

1962 ITT

Section 1 · ImageConverterIntensifier

OTHER		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Photocathode luminous sensitivity	10–20 $\mu\text{A}/\text{lm}$	—
Photocathode peak radiant sensitivity	0.0018 A/W	—
Phosphor screen luminous efficiency at 8 kV	0.12–0.19 lm/W	—
Phosphor screen radiant efficiency at 6 kV	0.066 W/W	—
Infrared conversion index at 8 kV	2.38	—
Peak radiant power gain at 8 kV	0.7 W/W	—
Radial image distortion	10 %	—
Resolving power center	20–25 lp/mm	—
Resolving power edge	10 lp/mm	—
Mean background screen brightness	1 μL	—

CHARACTERISTIC		
PARAMETER	PUBLISHED VALUE	CONDITION / NOTE
Image magnification	0.68 x	—
Useful photocathode diameter	0.658 in	—
Useful phosphor screen diameter	0.517 in	—