

# PHOTONIS

Image Intensifier specification  
18 millimetre micro-channel wafer

184-7072A1

**XW0051C**

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OPERATING CONDITIONS

	<u>Minimum</u>	<u>Nominal</u>	<u>Maximum</u>	<u>Unit</u>
Ambient temperature	-20	+20	+40	°C
Supply voltage	2.0	2.7	3.4	VDC

SPECIFICATION (at nominal operating conditions)

Phosphor : P45  
Input window : Glass  
Output window : Non-Inverting fibre-optic

	<u>Minimal</u>	<u>Maximal</u>	<u>UNIT</u>
FOM		1600	
Signal to noise ratio (Photocathode illuminance 108 µlx)	12		
Gain at 2.10 <sup>-5</sup> lx	3000	8000	cd/m <sup>2</sup> /lx
Maximum Output Brightness	4	8	cd/m <sup>2</sup>
Limiting resolution at centre	32		lp/mm
E.B.I.		0.9	µlx
Shear distortion		75	µm
Gross distortion		90	µm
Useful cathode diameter	14		mm
Output uniformity over Ø14.0 mm at 2850K		5:1	
Fixed Pattern Noise at 2mlx (mean luminance deviations)	-15	+15	%
Mass		95	Gram

Spots:

Maximum number of dark spots will be according to the following table:

SPOTS DIAMETER IN MICROMETERS	ZONE 1 dia. 5.6mm	ZONE 2 dia. 5.6mm-14.7mm	ZONE 3 dia 14.7mm-17.5mm
>300	0	0	n.a.
230 – 300	0	2	n.a.
150 – 230	1	4	n.a.
75 – 150	2	7	n.a.

In case the assembly has more numerous dark spots of smaller dimension within a zone, the total quantity of dark spots in the zone should be within the total quantity of dark spots in the considered zone as specified in the above table. For example, if a tube is showing [8 Ø75-150µm + 5 Ø150-230µm] dark spots in zone 2 instead of the [7 Ø75-150µm + 4 Ø150-230µm + 2 Ø230-300µm] specified ones, the tube will be considered to be compliant with the specification.

Date  
09.02.2018

Signed  
BJE

Checked  
OR

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