ObservationReport
all measures in mm

Observation-ID	**0406**	v	**01**	on 2025-08-30 22:00
Rating	********		Status	Published

StarLust.de

Main Object — **IC5070**

Common Name	Pelican Nebula
Alternate Name	LBN350
Visual Mag. | Size	8,00 80 x 70 armin
Distance	1800 ly
Object R.A. | DEC coord.	20h 51m 00s +44° 24' 17.0"
Description	Bright Nebula
Constellation	Cygnus
Other Objects	

20250830_IC5070_ASI2600_0406-01.jpg

StarImage Link	OID0406
Telescopius Link	telescopius.com_ic-5070_p
Wikipedia Link	wikipedia.org_ic-5070_Peli

Image Properties

Source Format	Photo		Optical Scale ["/px]	0,7087
Tot./Act. Frames/Pane	5	5	Picture Center R.A.	20h51m38.335s
H / V Panes	1	1	Picture Center DEC	+44°h25'm06.352"s
Exp. [s] / Frame	180		FoV measured H/V [°]	1,23 0,822
Total Time / Pane [min]	15,00	15,00	Above horizon [°]	78,5°
			View Direction	SE 125°

Camera Data — **ZWO Optical** — **ASI2600MCAir** — **ZWOASI2600**

Camera Angle [°]	199,1		Pixel Pitch [µm]	3,761
Gain or ISO	100		Camera Temp. °C	-10

Observation Site

Observation Start	2025-08-30T22:00:02 UTC+/- +1h	Observation End	2025-08-30T22:12:15
Observation Site	DE Göttingen Weende	Site Elevation / Bortle	182 4
Province	NDS	Site Coordinates	9° 56' E; 51° 34' N

Sky & Moon

Sky Index | Total Clouds	2,8	15 %	Moon Rise | Set	
SQM |Outside Temp. °C	21,07	15	Moon Age [d]	0
Moon Phase |% Illum.	1st quarter	0 %	Moon ►Target Dist.	UNKNOWN

Optical Configuration — **TS1624cASI2600CAAx067** — **TS1624cASI2600cT167R67**

Lens or Scope	TSO RC 203/1624c	Mechanical Focuser	M90 TS1624 Crayford	
Type Of Build	Ritchey-Chretien Reflector	Electronic Focuser	☐	
Brand	TS-Optics	Focuser Position	0	[mm] 46,46
Additional Optics	M48 0.67 Reducer ►	Optical Factor	0,6804	
Filter	Optolong 2" L-eNhance	FoL norm|actual [mm]	1094,7636	1094,764
Diameter [mm]	203	DawesLimitLink	2,15 Arcsec	
Aperture / f-stop	5,39			

Other Hardware & Software

Guide Scope + Camera	ASI2600 Guide Sens ASI120MM	Mount	iOptron iEQ45 Pro
GuiderHW	ASIAIR	SessionControl	ASIAIR
GuiderSW	ASIAIR	PostProcessingSW	PI-PixInsight, GraXpert, BlurXTerminator, NoiseXTerminator, PI-PCC, PI-ABE, PI-MLT

More ... (see also next page)

Work Folder	2025\20250830_0406_IC5070_WEENDE
Comment/Title	Pelican Nebula (IC5070) Test

Remarks

Test of first TS1624c with 0.67 reducer

This was a test shot to check the optical quality of the first shipped TS-Optics RC203/1624 showing fan-shaped halos around bright stars. In this case a 0.67 reducer and an Optolong 2" L-eNhance filter was used to test if this reduces the halos.

Session Results

Neither the reducer nor the filter improved the halos

Post Processing

Image selection, registration, background enhancement and color correction were done in PixInsight.

Culling
```
- NONE -
```
Alignment and Integration
```
FBPP: Fast Batch PreProcessor (Autocrop, Drizzle)
```
Linear Image Processing
```
BX: BlurXTerminator
NX: NoiseXTerminator
PCC: Phtometric Color Calibration
ABE: Automatic Bacground Extraction
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De-Linearizing the image
```
HT: Histogram Transfer
```
Improving the stretched image
```
CT: Curves Transformation
MLT: Sharpening Details with Multiscale Linear Transform
```
No further image post processing was required.

No color or hue changes were made; the final image has natural colors.

Image Keywords

ObservationID=#0406, IC5070, Pelican Nebula, ****, Constellation=Cygnus, 2025, AUG, Type=Photo, Site=Göttingen Weende, DE, Config=TS1624cASI2600CAAx067, D=203mm, f/5.4, f=1095mm, Filter=OLeN, Gain=100, Lens=TS1624c, LensName=TSO RC 203/1624c, Mount=iOptron iEQ45 Pro, n=5, OtherOptics=M48 0.67 Reducer, PanesH=1, PanesV=1, Status=Published, t=180s, ZWOASI2600, AstroSW=PI-PixInsight, AstroSW=GraXpert, AstroSW=BlurXTerminator, AstroSW=NoiseXTerminator, AstroSW=PI-PCC, AstroSW=PI-ABE