

PRODUCT REVIEW

by Alan Dyer

A MATTER OF DEGREES

The new UWAN eyepieces from William Optics all offer 82-degree apparent fields of view, identical to the highly reputed Tele Vue Nagler eyepieces.

The UWAN line includes, from left to right, the 28mm, 16mm, 7mm and 4mm models.



Challenging Naglers?

A new series of ultra-wide-angle eyepieces takes a stab at knocking the legendary Nagler line off its leadership pedestal

EVER SINCE THE NAGLER LINE OF EYEPIECES, MARKETED BY TELE VUE OPTICS, hit the market in the early 1980s, other manufacturers have attempted to usurp Tele Vue's lead in producing first-class extreme-wide-angle eyepieces. The Nagler series provides panoramic fields of view without sacrificing image sharpness. Named for optical designer and Tele Vue owner Al Nagler, the eyepiece line has long set the standard of performance, becoming the most coveted of eyepiece nameplates. Trouble is, even one Nagler can set you back several hundred dollars. A careful can be a lifetime investment.

The latest challenger to the Nagler throne is the series of "Ultra Wide Angle" UWAN eyepieces from Taiwan-based William Optics, an up-and-coming name in fine optics. The series features four models. The 4mm, 7mm and 16mm eyepieces are all of modest size and weight, with standard 1.25-inch barrels and 7 lens elements. However, the monster 28mm eyepiece, with a 2-inch barrel and 6 lens elements, tips the scales at just under 2 1/2 pounds, identical in weight and size to the Nagler 31mm eyepiece, its main competition.

All four UWANs easily reached focus on each of the telescopes I tried, including refractors and Newtonians with limited focus travel. However, the 28mm will pose a balance problem on lightly mounted

telescopes or on any Dobsonian or altazimuth telescope sensitive to correct balance.

The real challenge came in star tests on a variety of telescopes. Are the UWANs as good as Naglers? Almost.

In an f/6 refractor, stars appeared very sharp across most of the expansive field of all the UWANs but did begin to distort into flared seagull shapes in the periphery of the field. In a faster focal-ratio f/4.5 reflector, the UWANs exhibited a larger degree of edge

aberrations, as expected, since the steeper light cone of a fast telescope is more difficult for any eyepiece to handle. By comparison, similar focal-length Naglers showed nearly pinpoint stars right up to the edge in both telescopes.

In a Schmidt-Cassegrain telescope,

with its more forgiving f/10 focal ratio, the UWANs' sharpness across the field improved markedly, though still didn't quite match the Naglers. The higher-powered Naglers also have 2mm to 4mm more eye relief than the highest-power UWANs, providing a more relaxed view. But the eye relief of the 7mm and 4mm UWANs, measured at 10mm, is still longer than most eyepieces of that focal length and proved sufficient for a comfortable view.

For a quarter of a century now, no eyepiece could match the performance of the Naglers. However, the UWANs come closer than any other Nagler wannabes I've seen of late, and there has been no shortage of challengers. The 4mm and 7mm models showed the least amount of edge aberrations while suppressing any internal ghost images or lens flares. The 28mm and 16mm models exhibited greater off-axis aberrations, with stars starting to distort about 60 percent from the centre to the edge in the worst-case scenario of the f/4.5 reflector but never reaching an objectionable level. Both the 16mm and 28mm feature long, comfortable eye relief. The 16mm deserves mention as a superb all-purpose performer, while the amazing



EASY ON THE EYES The UWAN eyepieces feature excellent mechanical quality and finish and include comfortable twist-up rubber eyecups. The eyecup of the 28mm is so large, it feels as if it swallows half your face!

field of the 28mm UWAN is a sight to behold and wonderful for wide-field scanning of big nebulas and star fields.

The UWANs are certainly not inexpensive. But they are up to 35 percent less than equivalent Naglers, while providing equal mechanical quality and 75 to 85 percent of the Naglers' optical performance. Is that enough to claim the Nagler crown? For many buyers, the answer will be yes. ■

UWAN 82° ULTRAWIDE EYEPIECES

William Optics (www.william-optics.com)

Overall rating: ★★★★★ out of five
Available at select Canadian dealers.
Approximate Canadian prices:

7mm & 4mm: \$240

16mm: \$290

28mm: \$540