

Re: 2" 90° Apparent Field Eyepieces Announced

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From: Richard (*rander3127_at_rogers.com*)

Date: 07/02/04

Date: 2 Jul 2004 14:45:31 -0700

brianc1959@aol.com (brian) wrote in message
news:<3c459ba.0407020607.68f2eaba@posting.google.com>...
> *shneor@my-deja.com* (*Shneor Sherman*) wrote in message
news:<9dedb1fb.0406300643.2e10efd6@posting.google.com>...
> > *jonisaacs@aol.com* (*Jon Isaacs*) wrote in message
news:<20040629175818.11708.00000633@mb-m11.aol.com>...
> > > *My experience with Burgess has been excellent value for the money. But*
> > > *I do wonder about the optical characteristics of this eyepiece.*
> > > >
> > > *Clear skies,*
> > > *Shneor Sherman*
> > >
> > > *Probably best to take the wait and see attitude if something isn't currently*
> > > *yet available. Burgess Optical has been somewhat optimistic in the past about*
> > > *delivery dates...*
> > >
> > > *Jon*
> > >
> > > *Here's some more info from Bill Burgess: It's a 7-element design, all*
> > > *ED glass, "broadband multicoatings on all air-to-glass surfaces", and*
> > > *pinpoint stars to the edge down to f/3.5. Availability is at least 60*
> > > *days out.*
> > >
> > > *The part about pinpoint stars to the edge of a 90° apparent field 29mm*
> > > *eyepiece sounds very attractive. Maybe some of our eyepiece design*
> > > *mavens can tell us why this is either impossible or comes at the price*
> > > *of field curvature, loss of contrast or some other desirable optical*
> > > *characteristic. Or not.*
> > >
> > > *Clear skies,*
> > > *Shneor Sherman*
> > >
> > >
> > > *Don Dilworth demonstrated that its possible to build a 90deg. eyepiece*
> > > *with extraordinary performance. See U.S. Patent 4,720,183. The*
> > > *designs published in this patent are among the highest performance*
> > > *eyepieces I've ever seen. Much better than even the published Nagler*
> > > *designs. No ED or high-index lanthanum type glasses are needed. The*

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- > *only drawback is size. A 29mm focal length would have some elements*
- > *as large as 4" in diameter. Below is the patent prescription for a*
- > *15.9mm Dilworth:*
- >
- > *Surf Radius Thickness Glass Diameter*
- > *OBJ Infinity Infinity 0*
- > *STO Infinity 16.367 3.984463*
- > *2 -46.13459 1.294 1.805180,25.430 34*
- > *3 59.64817 12.152 1.638540,55.420 39*
- > *4 -25.6419 0.4099999 39*
- > *5 104.509 14.0534 1.620410,60.320 60*
- > *6 -57.40218 24.826 60*
- > *7 50.58608 12.4375 1.620410,60.320 62*
- > *8 4353.534 0.4099999 62*
- > *9 23.4904 10.75047 1.620410,60.320 45.2*
- > *10 26.7368 11.6589 40*
- > *11 -83.8454 3.57986 1.620040,36.370 40*
- > *12 23.38768 14.06033 32*
- > *13 33.9786 5.868849 1.846660,23.830 33*
- > *14 221.1201 4.122499 33*
- > *15 -46.2614 3.39373 1.539960,59.710 33*
- > *16 56.31179 -27.43597 33*
- > *IMA Infinity 28.58338*
- >
- >
- >
- >
- > *Brian*
- > *www.caldwellphotographic.com*

Big waste of time, size and money when ED glasses can be bought now.
I can just see those poor refractor and Newtonian owners trying to balance that thing, once they had a 4" focuser that is.

-Rich
-Rich