

## Re: Single or multi hole off-axis filters?

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brian@isi.edu (Brian Tung) wrote in message news:<ca89io\$88e\$1@zot.isi.edu>...

> *Jon Isaacs wrote:*

> > *So how accurately do the holes have to be cut to provide that alignment?*

>

> *Each hole creates two images, each image separated by 90 degrees from the*

> *hole, in a manner of speaking. So if the holes in a two-hole mask are*

> *separated by 150 degrees instead of 180 degrees, you end up with two*

> *pairs of images, each separated by 30 degrees.*

>

> *Since the out-of-focus images are bloated, the alignment has to be off*

> *quite a bit before you see four distinct images with a two-hole mask.*

>

snip

Thanks for the clarification.

What if the 4-hole mask were placed directly in front of the primary, as opposed to at the front of the tube? Would that in any way minimize diffraction? It would be almost exactly like having four off-axis mirrors with a single focal point. It would also minimize off-axis light hitting the mirror through each hole. (Of course, I'm presupposing a good mirror with equal correction in each direction, no zones, etc)

I'm asking because I actually used a two hole mask on an 8" f/6 Celestron dob years ago, and it did seem to give a clearer image than full aperture.

Also, how detrimental would a 4 hole mask be for a f/10 SCT?