

## Re: Kohler illumination question...

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- *From:* Andy Resnick <[andy.resnick@xxxxxxxxxxxx](mailto:andy.resnick@xxxxxxxxxxxx)>
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Aaron wrote:

I believe the problem originates with the design of the source lamp itself. The ideal light source should be a flat surface emitting uniform amounts of light from every point.

That's not really true. What matters is the coherence of the light coming off the source, not the shape of the source. But, I can see why you would say what you did- I suspect you tend to use critical illumination rather than Kohler (see below)

<snip>

Without the

frosted diffuser, it becomes necessary to fuss with lighting for each objective to eliminate the image of the coils in the field background.

That's true if you are using critical illumination rather than Kohler. In any case, it's possible to perform image subtraction to eliminate the image of the filament.

What is potentially interesting to investigate is that for Kohler illumination, the source is imaged at the pupil plane of the condenser lens, where phase contrast filters (and DIC prisms, etc) exist. I wonder what the effect is of non-uniform illumination of these filters. Probably not much. But maybe not....

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Andrew Resnick, Ph.D.

Re: Kohler illumination question...

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