

# Focusing through Sapphire Plate ???

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Hi everybody

Focusing through Sapphire Plate

We are trying to focus an ideal converging beam through a 6 mm plane parallel plate of Sapphire. The focal point should be at the back surf of the plate.

We intend to attach to the plate a 2.5 mm thick PCX lens, made of glass with n very near the index (ordinary) of Sapphire, so that a Hemispherical immersion lens will be achieved.

Running this system both on Zmax and Synopsys, the best we could achieve is a very small spot (ordinary), concentric with a large spot (extraordinary).

The Zmax indicates that the energy in the large spot is zero, but we are not sure this is correct.

Is there a way to tackle this problem ?

TIA

Shay

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## Focusing through Sapphire Plate ? ? ?

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