

## 5 Output FN system

The output FN system consists of a single lens, mechanically pressed on the slit plate (using index matching gel in between).

Optical parameters of the rod lens:

Lens material	LAL18
Lens thickness	5.78503 mm
Lens front radius	- 5.0
Lens rear radius	0.
Paraxial Magnification	1.95691

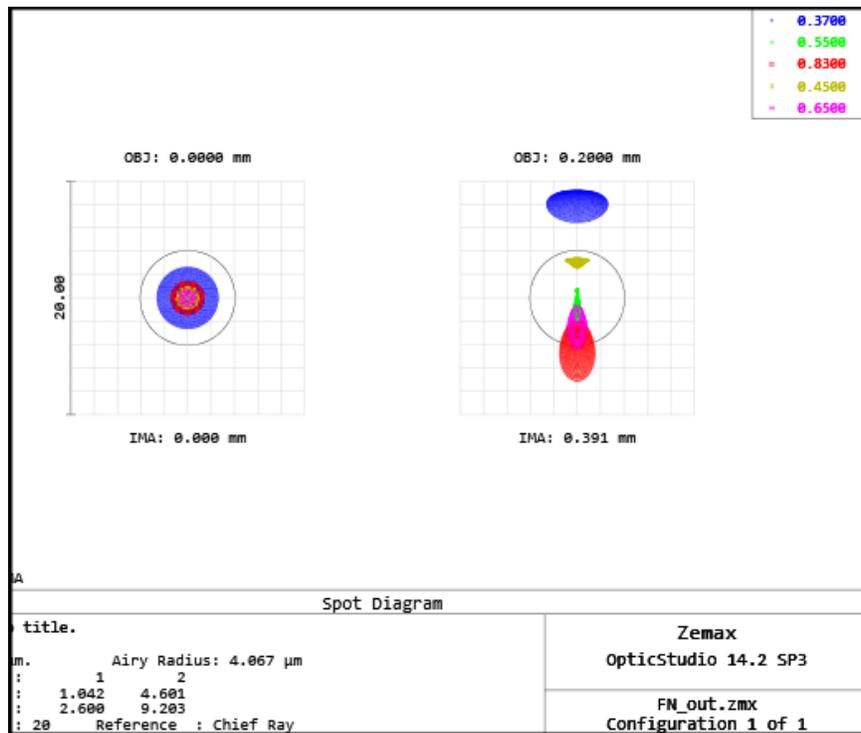


Illustration 6: Spot diagram of the FN output system

The lens magnifies the fibers by a factor of  $\sim 1.95$ , therefore preserving the current resolutions of FIES of 25000, 47000 and 67000 for the low-, mid- and high-resolution respectively.

The grating is still slightly overfilled – a necessary compromise to maintain resolution.