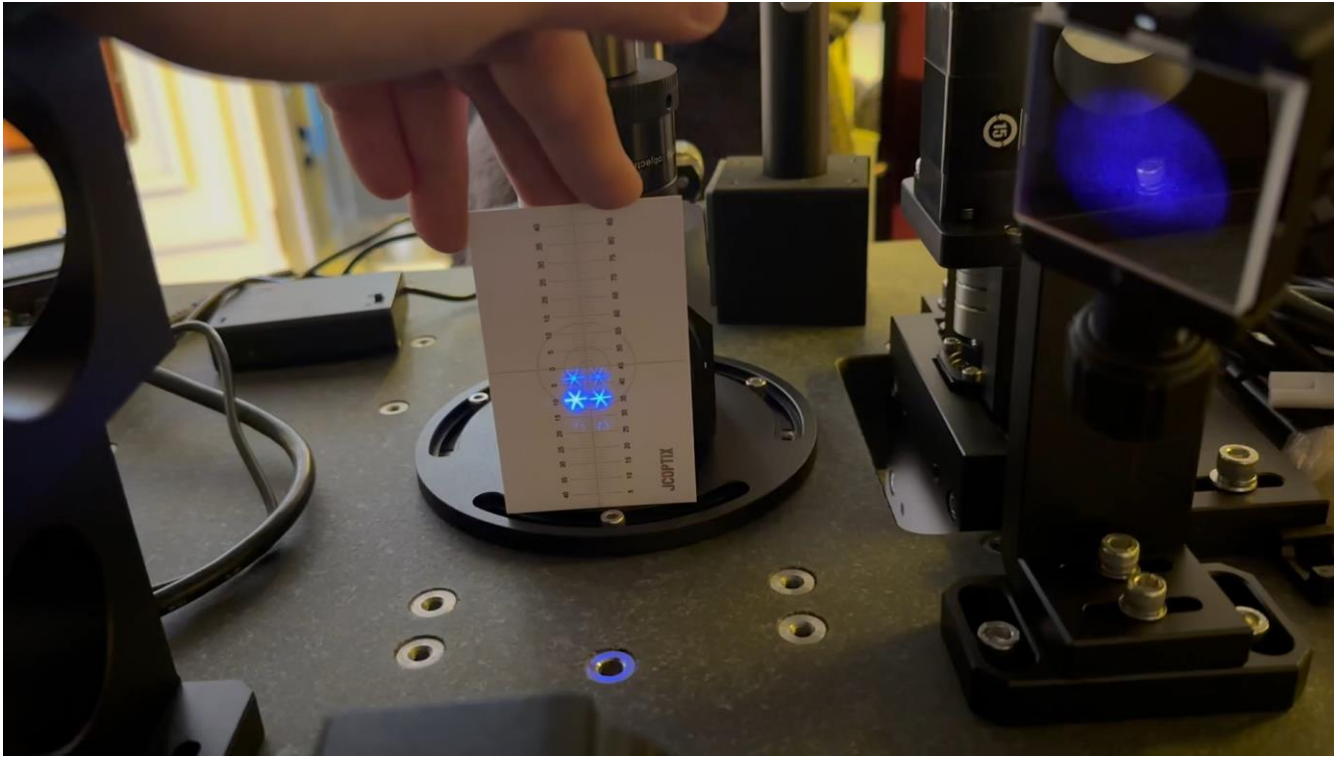


Projection pattern on the DMD surface. For the diffraction issue, we can not see this issue on the DMD surface. It means that the DMD surface is same when we project the same pattern using the good and bad DMD chip.

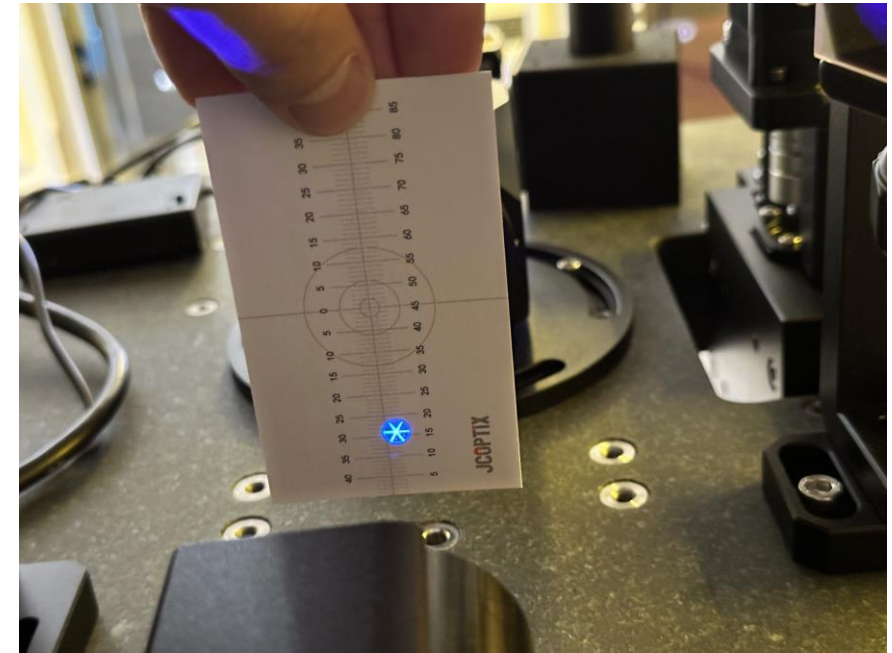


## Good DMD chip

PS: others including the controller board and optics is same except for the DMD chip.



diffraction pattern(video and not in focal plane)

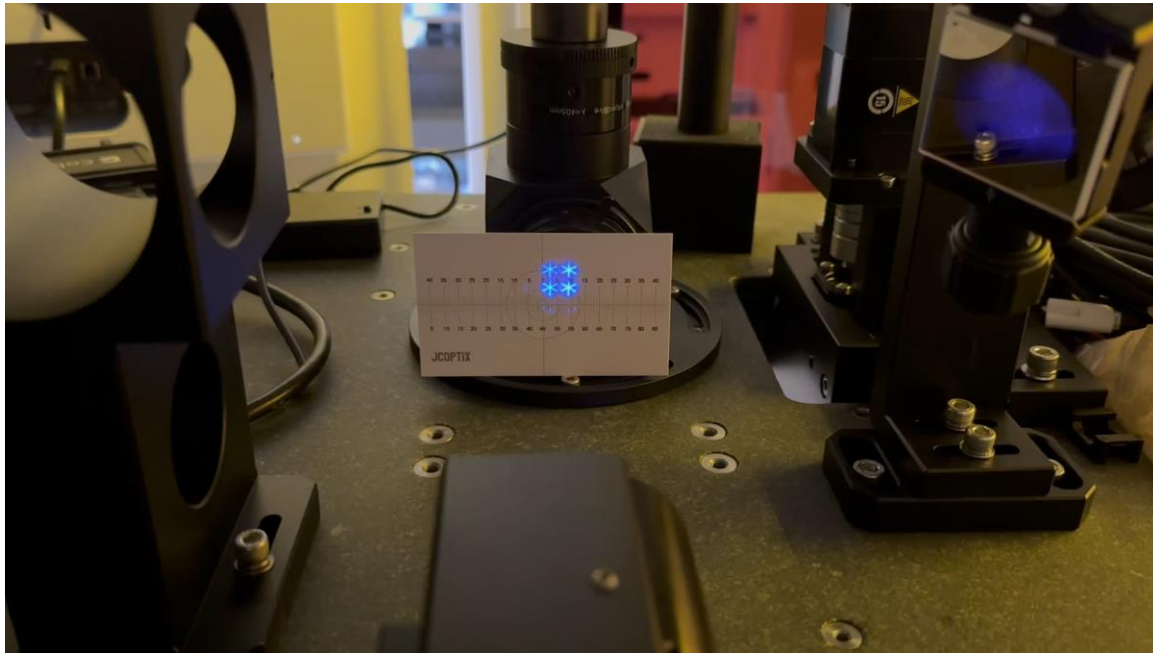


projection pattern(in focal plane)

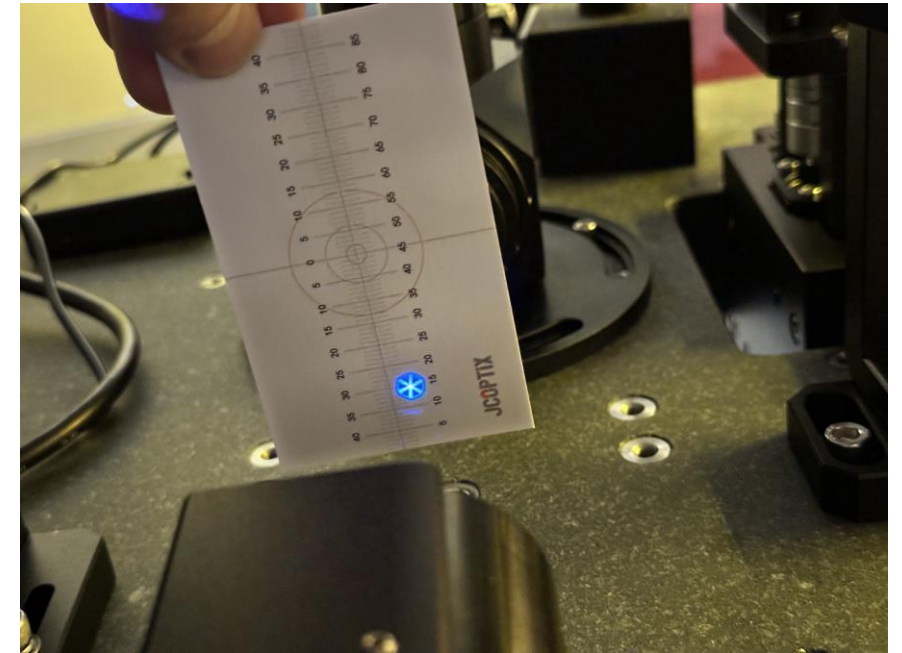
For the good DMD chip, there is one diffraction order have the largest energy. It is much obvious for the energy difference if we use the eye not the camera.

## Bad DMD chip

PS: others including the controller board and optics is same except for the DMD chip.



diffraction pattern(video and not in focal plane)



projection pattern(in focal plane)

For this bad DMD chip, every diffraction pattern have the similar energy. If I compare it with the good DMD chip, it is very obvious when I use the eye to see. As this video is taken by camera, it is not much obvious. However, it can explain the issue clearly.