1. Resolution: 1920×1080
2. Visual angle: 100°(H) × 68°(V)
3. Refreshing rate: 120 Hz
4. Light adapted state: 100 cd/m2
5. **White during the inter-trial intervals**
6. Recording one eye only, sample rete 1kHz
7. The near plane for the camera: **distance to the screen**; far plane for the camera: 150cm
8. Dot density: 1000 dots/m3; roughly 3500 dots viewable at any time.
9. Dots: white square, ~0.1°, ~~unchanged dot size~~ (I have discussed with Dr. Gu, we will use perspective size)
10. Background: **black** (0.78 cd/m2)
11. **Translation speed (heading): 50 cm/s; We should need a value/function to convert physical length to pixel and the coordinate system.**
12. Pursuit dots: **red, 0.25°** of visual angle, move independently
13. Fixation window: **1.75°**; pursuit window: **2°.** Trial is **aborted** if the gaze point is outside the window.
14. Fixation period: **~500ms**, star field appear: **-200ms**, moving initial (**heading only**): 0ms, pursuit point initial (**heading, in necessary trials with camera rotation**): **+400ms**
15. In the trials fixation needs moving, Fixation points locate on ±4°, then moving from **-5° to +5°**, or **+5° to -5°**
16. May need compatibility for different heading
17. We may need to test the lag time in human