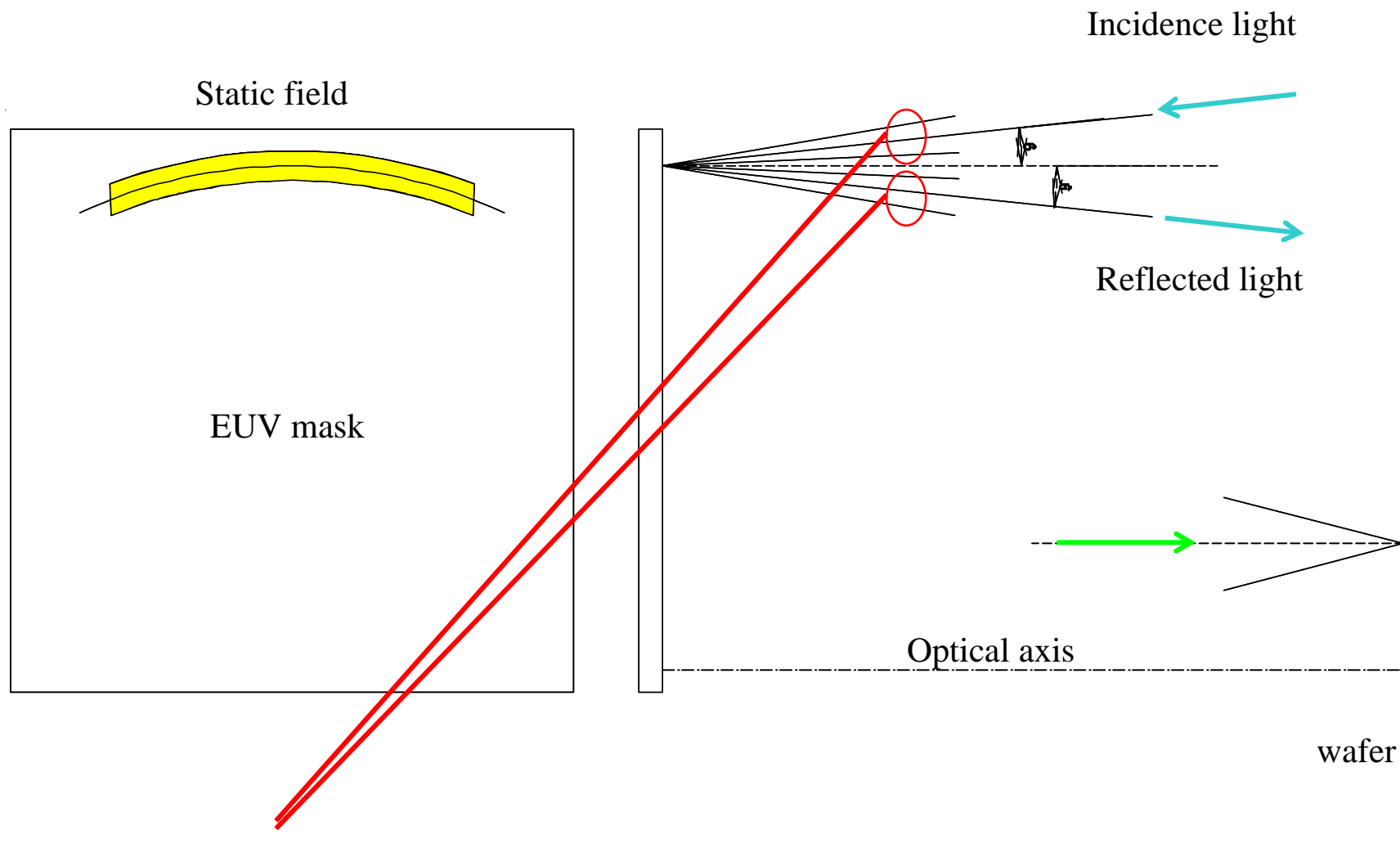


# Incidence angle to EUV mask

**2nd Development Dept.  
Development Headquarters  
Precision Equipment Company  
Nikon corporation**



# 1. Incidence angle relation



Incidence light and reflected light should be separated sufficiently to avoid obstructions. Therefore higher NA leads to larger angle of incidence.

## 2.NA trend

- EUV1( NA0.25)

: Early process development

- EUV2( NA0.25) 2009~2011

: Process development, production tool verification

- EUV3( NA>0.3) 2012~2013

: HVM