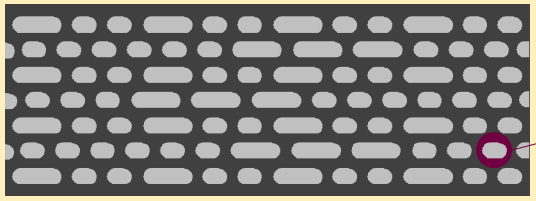
LASER SPOT SIZE

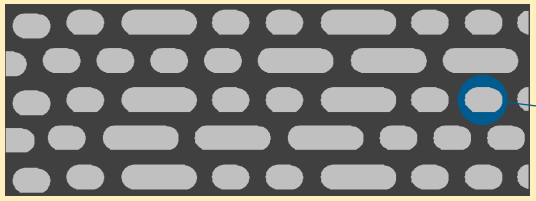
Shorter-wavelength lasers, such as blue and ultraviolet, reduce the distance between the tracks and the sizes of the pits on CDs, achieving greater storage density than red lasers. The Sony/Philips and Toshiba digital video disk formats each use a 635-nanometer red laser.

Ultraviolet laser



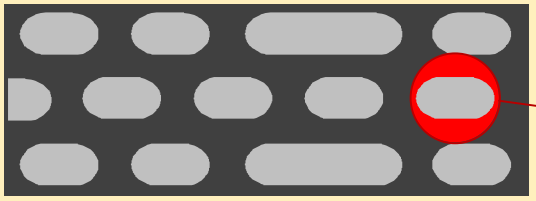
Wavelength: 240 nanometers
Diameter: 0.65 microns

Blue laser



Wavelength: 450 nanometers
Diameter: 1.2 microns

Red laser



Wavelength: 780 nanometers
Diameter: 2.1 microns

Source: Boston University Center for Photonics Research.