

Criteria	TIR	RTIR
Projection Lens BWD	Smallest, but lens shift may require longer BWD to avoid interference with input prism. Big Impact to Projector Height.	Small (bottom illumination), beware lens shift interference with package. Thinnest Projector Height.
Air gap	Air gap in projection path, effects get larger with smaller pixel. High flux thermal issues may close air gap = TIR failure?	Air gap in illumination path, no image quality issues. Large gap (~0.5mm) OK, no thermal issues.
Assembly	Precision assembly for air gap; can wick moisture	No need to assemble with input prism; gap can be large
Material Cost	Can use BK7 for any f/#, but makes input prism larger (potential lens shift interference issue)	Higher index glass required at any f/#; beware blue absorption
Offstate/Flatstate light control (Contrast)	Easier	Can be managed
DMD alignment to Lens	Very little effect	Right angle fold tolerances
Coatings	High angle coating in air gap	High angle coating in air gap