

**KPAO High-level Performance Requirements Summary:  
(based on AOWG 11/12/02 strategic plan report & KAON 237)**

<b>Parameter</b>	<b>Requirement</b>	<b>Notes</b>
High IR Strehl ratios	rms wavefront error = 120 or 180 nm (cases to be evaluated)	On-axis (LGS & NGS) case under median seeing conditions, < 45° zenith angle, NGS V < 17 mag. Includes atmospheric, telescope, AO & science instrument contributions.
High Strehl stability	rms wavefront error maintained to ± 15 nm	
Moderate field of view	Science: 60" WF sensor: 60" TT sensor: 120"	Diameter. For sensing this is field of regard.
Sky coverage	Near complete	
PSF	Good knowledge	Requires well calibrated real-time diagnostics
Wavelength coverage	Science: 0.45 to 14 μm	
Class	Facility-class	