

# FSQ-130ED

## Optical Specs

### Primary Focus

Aperture : 130mm

Focal length : 650mm

Focal ratio : F/5

Optical design : Flat field Super low dispersion Quintuplet apochromat

Coting : Broadband multi-layer anti-reflection coatings

Image circle : 110mm diameter (illumination60%)

### Optical performance :

Off-axis distance (mm)	0	15	22	32	44	55
RMS-spot diameter (micron)	2.0	3.0	4.0	4.5	8.0	17
Relative illumination (%)	100	99	97	92	78	60

### With New 645 Reducer 0.7x

Focal length : 455mm

Focal ratio : F/3.5

Image circle : 70mm diameter (illumination60%)

### Optical performance :

Off-axis distance (mm)	0	15	22	32
RMS-spot diameter (micron)	2.5	3.0	4.0	5.0
Relative illumination (%)	100	96	90	60

### With RD-QE0.73X

Focal length : 474mm

Focal ratio : F/3.6

Image circle : 44mm diameter (illumination60%)

### Optical performance :

Off-axis distance (mm)	0	15	22
RMS-spot diameter (micron)	3.0	5.0	14
Relative illumination (%)	100	90	65

With EX-ED1.5X

Focal length : 982mm

Focal ratio : F/7.5

Image circle : 44mm diameter (illumination 60%)

Optical performance :

Off-axis distance (mm)	0	15	22
RMS-spot diameter (micron)	2.0	15	30
Relative illumination (%)	100	80	65

With EXQ-1.6X

Focal length : 1043mm

Focal ratio : F/8

Image circle : 44mm diameter (illumination 60%)

Optical performance :

Off-axis distance (mm)	0	15	22
RMS-spot diameter (micron)	4.0	8.0	10
Relative illumination (%)	100	75	58