

LENS OB-SPACE – F222.45/3

GENERAL DESCRIPTION

THIS NEW GENERATION OF HIGH PERFORMING LENSES ARE REDESIGNING THE WORLD OF SPACE READY OPTICS AT A GLOBAL LEVEL, ENSURING DETAILS NEVER SEEN BEFORE, BOTH LOOKING AT INFINITY AND AT CLOSER WORKING DISTANCES.

INTERNAL RESEARCH HAS BROUGHT IN OUR PRODUCT PORTFOLIO SPACE COMPLIANT MATERIAL AND A NEW LIST OF RAD-HARD GLASSES, ALLOWING TO OUR OPTICAL DESIGNERS NEW DEGREES OF FREEDOM IN OBTAINING BLEEDING EDGE PERFORMING SYSTEMS.

ALL OUR LENSES ARE ASSEMBLED IN ISO5 ENVIRONMENT.

LET US BE YOUR EYES IN THE SPACE!!!

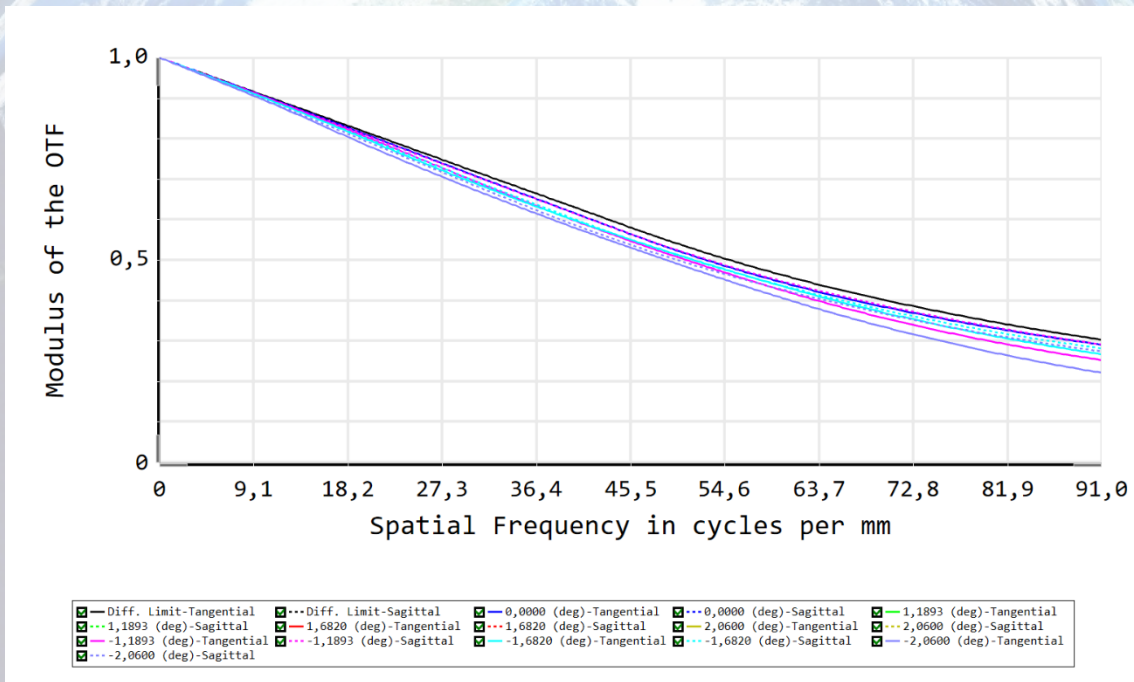
OPTICAL AND MECHANICAL PARAMETERS			
FOCAL LENGTH@	222.45 MM	OPTICAL LAYOUT	CATA-DIOPTRIC
F/N	3	FOCUS	FIXED
IMAGE FORMAT	15.94MM	N. OF ELEMENTS	5
F.O.V.	±2.06° (ON DIAGONAL)	WAVELENGTH RANGE	VIS-NIR (450-900 NM)
BACK FOCAL LENGTH	17.92MM	AR COATING	R<0.6%@400-1000NM
RESOLUTION	DIFFRACTION LIMIT	FLANGE FOCAL LENGTH	CUSTOMIZED
DISTORTION	<1%	DIMENSIONS	120 x 84 x 84 MM
VIGNETTING	<10%	WEIGHT	0,637 KG
WORKING DISTANCE RANGE	INFINITY – 25KM	QUALIFICATION LEVEL	NASA GEVS
TRANSMISSION	>87%	ATHERMALIZATION	UPON REQUEST
RAD HARD	UPON REQUEST	MOTORIZED FOCUS	UPON REQUEST
SUN EXCLUSION ANGLE	15°	OTHER MOUNT TYPE	UPON REQUEST
STRAY LIGHT	10 ⁻⁴	CAMERA INTERFACE	CUSTOM DESIGN
		CUSTOMIZATION	UPON REQUEST

$$\text{Ground resolution} = \frac{WD \cdot \text{pixel_size}}{\text{Focal length}}$$

$$\text{Area framed on the ground} = \frac{WD \cdot \text{sensor_linear_dimension}}{\text{Focal length}}$$

Where WD is the quote.

THE CALCULATED MTF VALUES ARE DISPLAYED BELOW AND ARE VERIFIED AT THE MAXIMUM F/N AND THE BEST FOCUS PLANE.
 THE COLORED LINES REPRESENT THE F.O.V. STARTING FROM THE CENTER (0%) TO THE CORNER (100%).



Polychromatic Diffraction MTF	
Lens has no title. 12/09/2019 Data for 0,4000 to 0,9000 μm . Surface: Image Legend items refer to Field positions	Optec S.p.A. Optical & Optoelectronic Systems C1934_001_000.zmx Configuration 1 of 6

MORE DETAILS ARE AVAILABLE UPON REQUEST AND TECHNICAL DRAWINGS ARE OPEN FOR THE CUSTOMERS AND THEIR NEEDS.