

NEWPORT PRECISION OPTICS CUSTOM FABRICATION CAPABILITIES MATRIX

CUSTOM OPTIC TYPE	FABRICATION TECHNIQUE	SPECTRAL REGION		MATERIAL TYPE	FINISHED	RADIUS OF	SPECIFICATION							
							Surface Irregularity		Cosmetic Quality (Scratch-Dig)		Wedge	Surface		
							Typical	Best	Typical	Best				
SPHERICAL LENSES	CNC, MRF, PL	VUV	120 nm - 220 nm	CaF2, FS	12mm - 250mm	15mm - infinity	Lambda/10	Lambda/20	10:05	05:01	30"	<3A		
		DUV	193 nm - 220 nm						40:20	10:05		<5A		
		UV	220 nm - 400 nm											
		VISIBLE	400 nm - 700 nm	ALL					80:50	40:20		<8A		
		NIR	700 nm - 1.5 microns											
	SPDT, CNC, MRF, PL	MWIR	5 - 3 microns	Ge, ZnSe, FLIR ZnS, multi-spectral					80:50	40:20		<40A		
LWIR	12 - 5 microns													
ASPHERIC LENSES	CNC, MRF	VUV	120 nm - 220 nm	CaF2, FS	10mm-250mm	15mm-infinity	Lambda/20 Surface Flatness	Lambda/40 Surface Flatness	10:05	05:01	10"	<3A		
		DUV	193 nm - 220 nm	FS					40:20	10:05			<8A	
		UV	220 nm - 400 nm											
		VISIBLE	400 nm - 700 nm	ALL					80:50	40:20		<40A		
		NIR	700 nm - 1.5 microns											
	SPDT	MWIR	5 - 3 microns	Ge, ZnSe, FLIR ZnS, multi-spectral ZnS, Si					80:50	40:20		<40A		
LWIR	12 - 5 microns													
MIRRORS	MRF, PL	VUV	120 nm - 220 nm	CaF2, FS	10mm-250mm	15mm-infinity	Lambda/20 Surface Flatness	Lambda/40 Surface Flatness	10:05	05:01	10"	<3A		
		DUV	193 nm - 220 nm	FS					40:20	10:05			<8A	
		UV	220 nm - 400 nm											
		VISIBLE	400 nm - 700 nm	ALL					80:50	40:20		<40A		
		NIR	700 nm - 1.5 microns											
	SPDT, PL	MWIR	5 - 3 microns	Si, Ni-plated Al, Ni-plated Be, Al					80:50	40:20		30"	<10A	
SPDT, PL	LWIR	12 - 5 microns												
CYLINDRICAL LENSES	CNC, PL	VUV	120 nm - 220 nm	CaF2, FS	10mm-200mm	10mm-infinity	Lambda/4	Lambda/10	40:20	20:10	TBA	<5A		
		DUV	193 nm - 220 nm						60:40				<40A	
		UV	220 nm - 400 nm											
		VISIBLE	400 nm - 700 nm	ALL					80:50			40:20	30"	<40A
		NIR	700 nm - 1.5 microns											
	SPDT	MWIR	5 - 3 microns	Ge, ZnSe, FLIR ZnS, multi-spectral ZnS, Si					80:50			40:20	30"	<40A
SPDT	LWIR	12 - 5 microns												