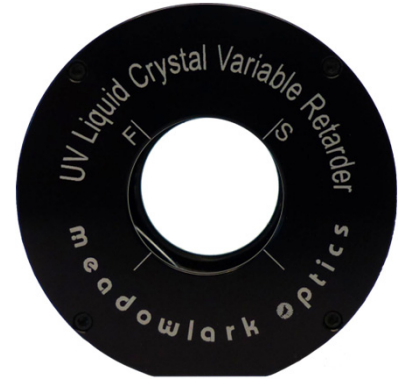
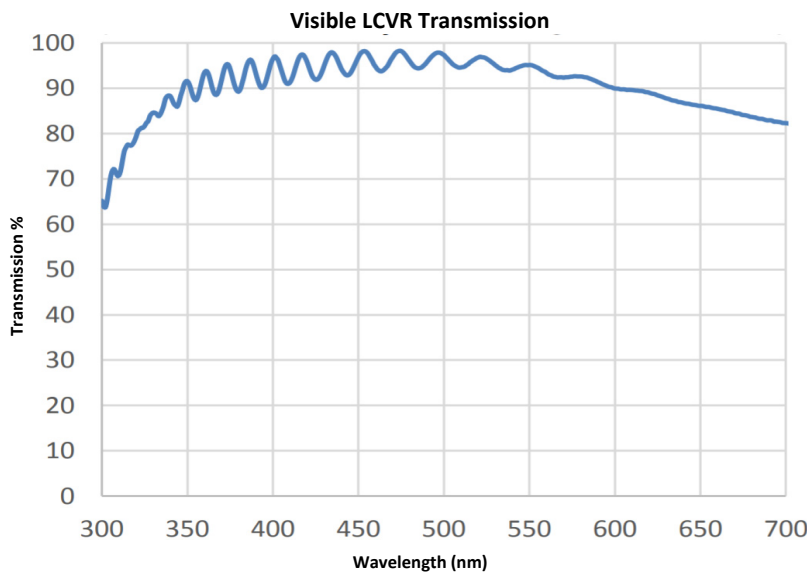
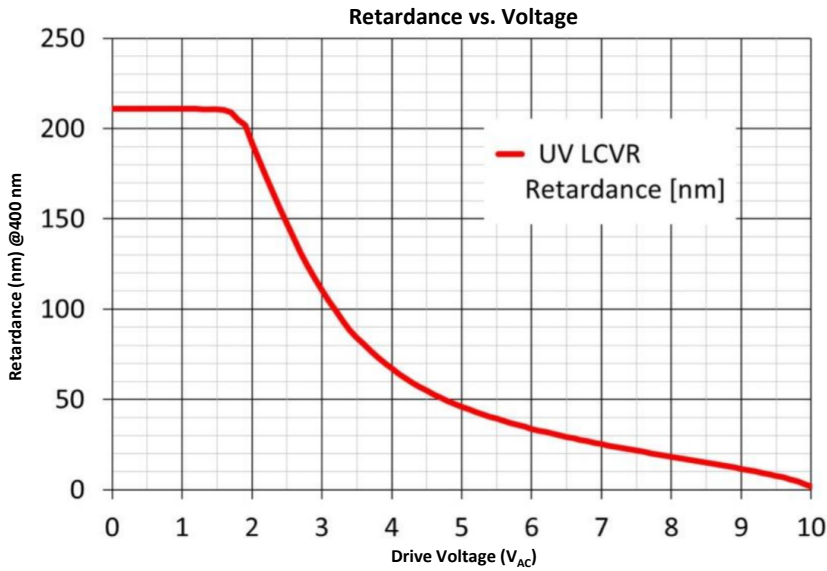


## UV Liquid Crystal Variable Retarder

Liquid crystal technology for polarization control now extends into the ultraviolet. While standard LC materials are susceptible to UV light damage below 450 nm, Meadowlark has designed a new UV resistant LCVR material capable of operating at lower wavelengths (as low as 350 nm). These parts can be custom configured for use as variable attenuators or polarization rotators and are compatible with our standard line of liquid crystal controllers.



### Key Features

• • •

Phase or Amplitude modulation of UV spectrum

Analog modulation

Non-mechanical polarization control

Low absorption

High UV tolerance LC

### Liquid Crystal Suite

• • •

#### Variable Retarders

Liquid Crystal Variable Retarder

UV Variable Retarder

MWIR Variable Retarder

OEM LCVR

#### Rotators

Achromatic High Speed Rotator

Binary Rotator

Polarization Rotator

#### Shutters / Attenuators

Achromatic High Speed Shutter

High Contrast Shutter

Variable Attenuator

#### Controllers

Analog Controller

FLC Controller

LC Digital Interface Controller

Temperature Controller

Two Channel High Voltage Controller



## SPECIFICATIONS

<b>Retarder Material</b>	Nematic liquid crystal
<b>Substrate Material</b>	UV grade fused silica
<b>Wavelength Range</b>	350 – 450 nm (please specify)
<b>Maximum Retardance</b>	$1/2 \lambda$ at 400 nm
<b>Minimum Retardance</b>	$0.06 \lambda$ at 400 nm (at 10 V)
<b>Transmitted Wavefront Distortion</b>	$\lambda/4$ (P-V @ 633) $\lambda/16$ (RMS @ 633)
<b>Surface Quality</b>	40 – 20 scratch-dig
<b>Beam Deviation</b>	2 arc min
<b>Reflectance*</b>	AR Coatings are available
<b>Diameter Tolerance</b>	$\pm 0.010$ in.
<b>Temperature Range</b>	0°C to + 50°C (Operating)

*Custom configurations available.*

## ORDERING INFORMATION

<b>Diameter in. (mm)</b>	<b>Clear Aperture in. (mm)</b>	<b>Thickness in. (mm)</b>	<b>Part Number</b>
1.00 (25.4 mm)	0.37 (9.4 mm)	1.23 (31.24 mm)	LVR – 100 – UV
2.00 (50.8 mm)	0.70 (17.8 mm)	0.75 (19.05 mm)	LVR – 200 – UV