

# CALCIUM FLUORIDE(CaF<sub>2</sub>) PLANO-CONCAVE LENSES

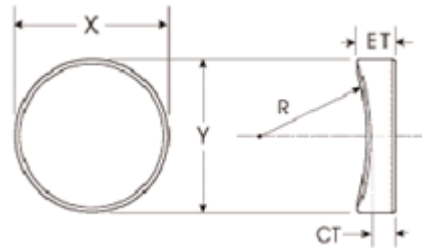
Calcium Fluoride is often used in spectroscopic windows and lenses due to its high transmission from 250nm to 7µm. Calcium Fluoride is also commonly found in cryogenically cooled thermal imaging systems.

Its low absorption and high damage threshold makes it a popular choice for excimer laser optics. Calcium Fluoride's low refractive index allows it to be used without an antireflective coating

AR coated products are available as well.

## Standard Specifications:

<b>Optical Material:</b>	Optical Quality CaF <sub>2</sub> Single Crystal
<b>Diameter Tolerance:</b>	+0.0, -0.15mm
<b>Design Wavelength:</b>	1.500µm
<b>Design Index:</b>	1.425 at 1.5µm
<b>Paraxial Focal Length:</b>	±2%
<b>Centration:</b>	3 arc minutes
<b>Clear Aperture:</b>	>85%
<b>Surface Quality:</b>	80-50 scratch and dig
<b>Wavefront Distortion:</b>	lambda at 632.8nm
<b>Bevel:</b>	<0.25mm X 45°
<b>Coating:</b>	available upon request



## Standard CaF<sub>2</sub> Plano-Concave Lenses:

Dia(mm)	f(mm)	R1(mm)	te(mm)	tc(mm)	Fb(mm)	Product Number
25.4	-50.0	21.25	6.2	2.0	-45.6	UQT-PLCXC0301
25.4	-100.0	42.50	3.9	2.0	-97.3	UQT-PLCXC0302
25.4	-150.0	63.75	3.3	2.0	-147.7	UQT-PLCXC0303
25.4	-200.0	85.00	3.0	2.0	-197.9	UQT-PLCXC0304
25.4	-300.0	127.50	2.6	2.0	-298.2	UQT-PLCXC0305
25.4	-500.0	212.50	2.4	2.0	-498.3	UQT-PLCXC0306
25.4	-1000.0	425.00	2.2	2.0	-998.5	UQT-PLCXC0307
50.0	-100.0	42.50	11.1	3.0	-92.2	UQT-PLCXC0308
50.0	-150.0	63.75	8.1	3.0	-144.3	UQT-PLCXC0309
50.0	-200.0	85.00	6.8	3.0	-195.2	UQT-PLCXC0310
50.0	-500.0	212.50	4.5	3.0	-496.8	UQT-PLCXC0311

Please Contact [ultiQuest](#) for other dimensions in prototype and production quantities.

## NOTES!

- ➔ The edge thicknesses are theoretical values not including chamfer.
- ➔ Be sure to wear laser safety goggles when checking optical path and adjusting optical axis.

