

First fully corrected lens for the UV-VIS-NIR spectrum is introduced by Coastal Optical Systems



CoastalOpt® 60mm UV-VIS-IR 1:4 Apo Macro features:

- No focus shift from UV through IR (315nm through 1100nm)
- Excellent UV transmission
- Manual focus with automatic diaphragm
- All-metal lens barrel
- Floating element design
- Nikon F mount
- CPU for metadata transmission
- Perfect for full spectrum cameras such as the Fuji IS-Pro
- Designed for use with both 35mm film and digital formats



West Palm Beach, FL (January 17, 2008) – [Coastal Optical Systems Inc.](#) is pleased to introduce the new CoastalOpt® 60mm UV-VIS-IR 1:4 Apo Macro lens.

A first in optical design, the 60mm UV-VIS-IR 1:4 Apo Macro provides full apochromatic correction over an extraordinarily broad waveband ranging from the onset of atmospheric ultraviolet transparency at 315nm to the limit of CCD/CMOS sensitivity at 1100nm in the infrared.

Ordinary quartz-fluorite lenses cannot be color corrected into the infrared due to limitations inherent in these optical materials. The 60mm UV-VIS-IR 1:4 Apo Macro lens achieves unprecedented correction from UV through IR by combining fluorite and quartz with elements made from carefully selected high transmission glasses.

An advanced floating element optical formula, including 5 elements made from calcium fluoride crystal, ensures stunning performance under all conditions. Ghosts and hotspots are eliminated by a combination of optical design and advanced ultra-broadband AR coatings.

The product of a technological partnership between Coastal Optical Systems and Caldwell Photographic Inc., this lens is ideal for forensics, crime scene documentation, medicine, science, and fine art photography.

Full lens [performance data brochure](#) is available for download from www.coastalopt.com.

Specifications

Focal Length:	60mm
Aperture Range:	f/4 - f/45
No. of Elements/Groups:	10/9
Maximum Format Size:	24 x 36mm
Transmission Waveband:	290 – 1500nm
Apochromatic Waveband:	315 – 1100nm
Focus Range:	264mm (10.4in) – Infinity
Maximum Magnification:	1:1.5
Mounting Flange:	Nikon F Mount
Filter Mount:	52mm thread (M 52 x 0.75)
Weight:	535g (1.18lb)
Length:	73.4mm (2.8in)
Diameter:	68.4mm (2.7in)



About Coastal Optical Systems, Inc. (www.coastalopt.com)

Coastal Optical Systems, Inc., founded in 1991, designs and manufactures custom precision lens assemblies for biophotonic, aerospace, defense & security, digital imaging & projection and machine vision & metrology markets. Coastal is a subsidiary of JENOPTIK Laser, Optik, Systeme GmbH (Jena, Germany).

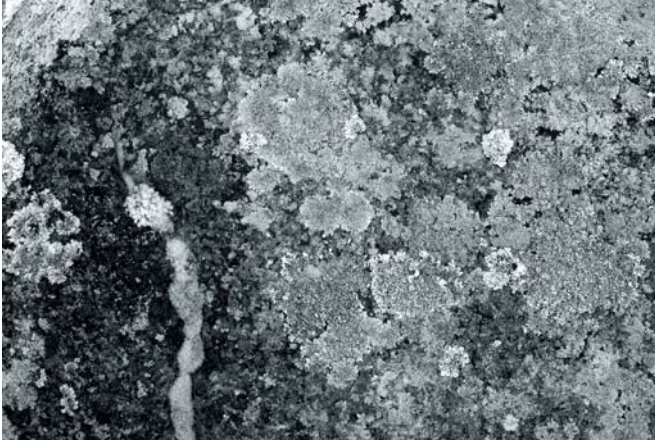
Contact Ray Malcom at ray.malcom@coastalopt.com for additional information.

About Caldwell Photographic Inc.

Caldwell Photographic Inc. specializes in innovative lens design, opto-mechanical product development, precision optical engineering, and consulting services.

Contact Brian Caldwell at brianc1959@aol.com for more information.

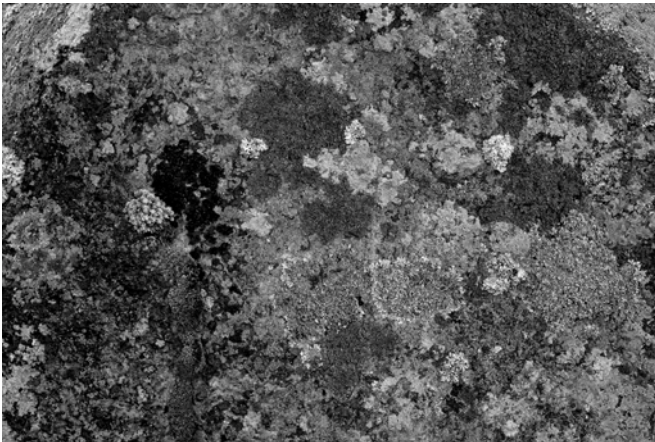
LICHENS



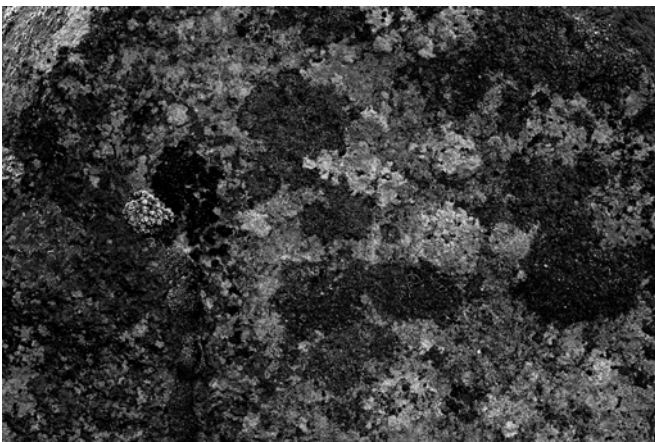
IR



Composite UV-VIS-IR with false color



VIS



UV

Images to the left were made in a single set up after change of filter for the three wavebands. No adjustment or compensation required for focus and imaging in the 3 bands.

The composite image above was obtained by assigning IR to the red channel, VIS to the green channel and UV to the blue channel before combining images.

Images by Bjørn Rørslett (www.naturfotograf.com; Oslo, Norway)

INTRAORAL PHOTOGRAPHY

Image taken using the CoastalOpt® 60mm UV-VIS-IR 1:4 Apo Macro lens and Fuji Finepix S3 Pro UVIR DSLR camera along with VIS blocking, UV transmitting filter to reveal surface condition of teeth.

No focus adjustment required to compensate for VIS vs. UV imaging.

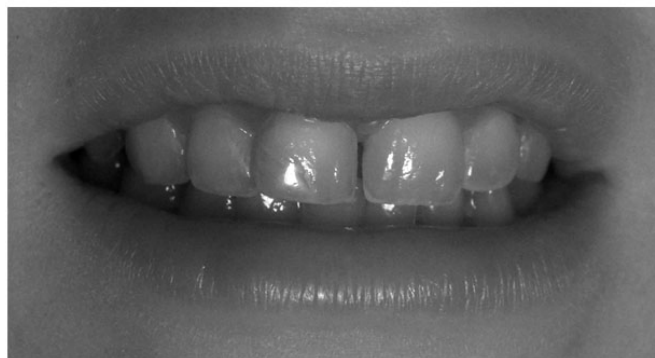
Images by Chris Palermi; Coastal Optical Systems



VISIBLE LIGHT- FUJI S3 Pro IR/UV & CoastalOpt 60mm APO lens with Baader IR/UV Blocking Filter



UV - FUJI S3 Pro IR/UV & CoastalOpt 60mm APO lens with Baader U- Filter 2"



IR - FUJI S3 Pro IR/UV & CoastalOpt 60mm APO lens with B&W 093 IR Filter