

OrthoChromatic Film Dosimetry

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OCI proprietary technology



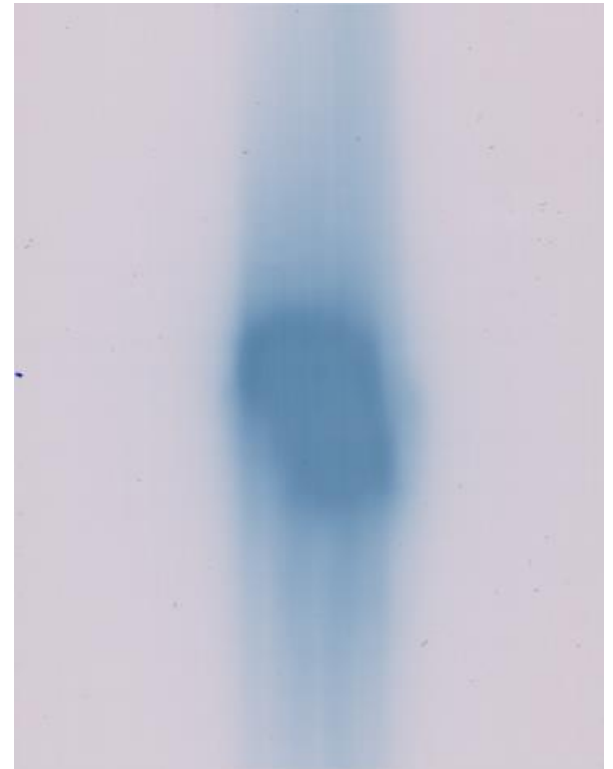
May 2020
www.OrthoChromatic.com

OrthoChrome Inc.

OrthoChromic Film OC-1

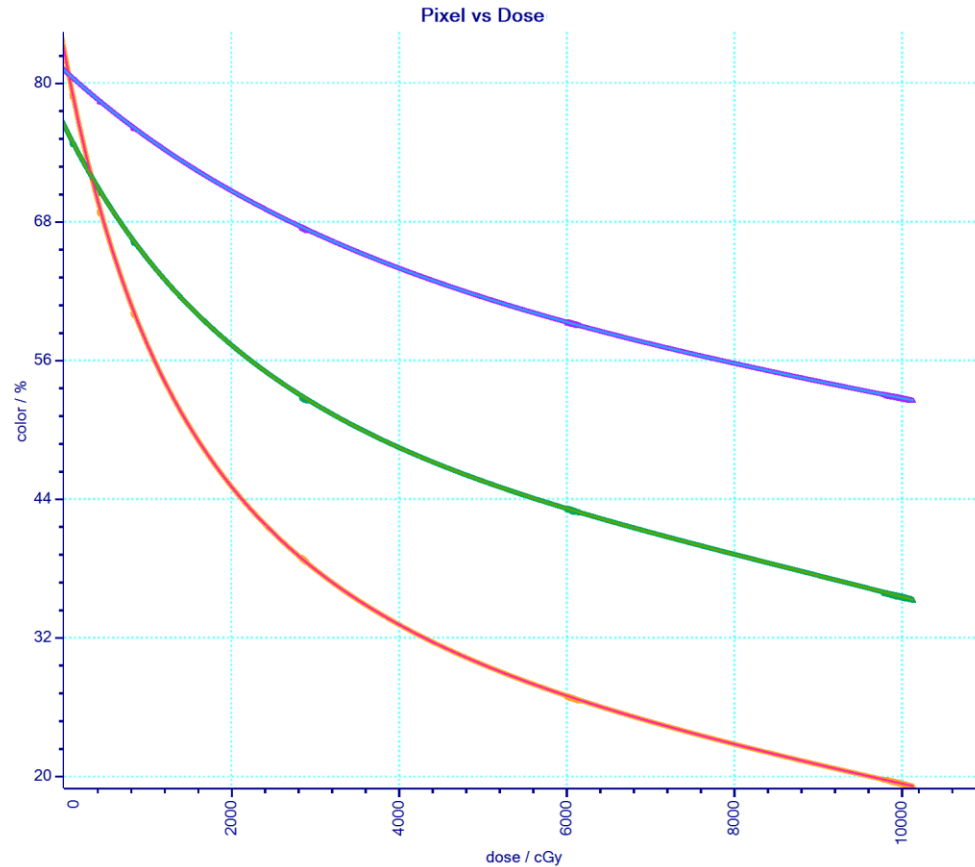
Base Properties

- Super wide dynamic dose range
 - Accurate dose measurement 10 cGy - 100 Gy
 - Suppressed lateral scanner effect
 - Use of full color range of scanner
- Highly stable and versatile
 - Heat stability up to 120°C
 - Water proof, safe use in water tank
- Desired energy dose response
 - Tissue equivalent
 - Energy independent
 - Dose rate and fractionation independent



OrthoChromic Film OC-1

Color Density Response



OC-1 super wide dynamic dose range 10 cGy – 100 Gy



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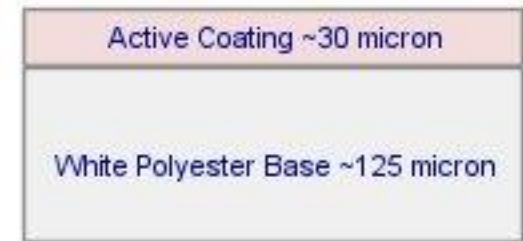
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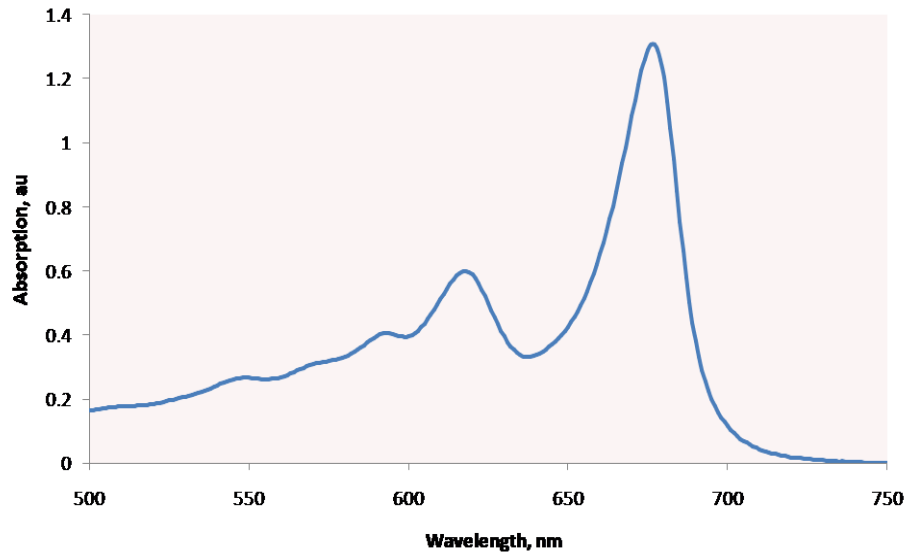
Structure

➤ Opaque, flexible film

- Reflective mode scanning
- Scan involves only 2 surfaces
- Enables use in phantoms of all shapes and curvatures



➤ OC-1 Absorption Spectrum



OrthoChromic Protocol

Basics

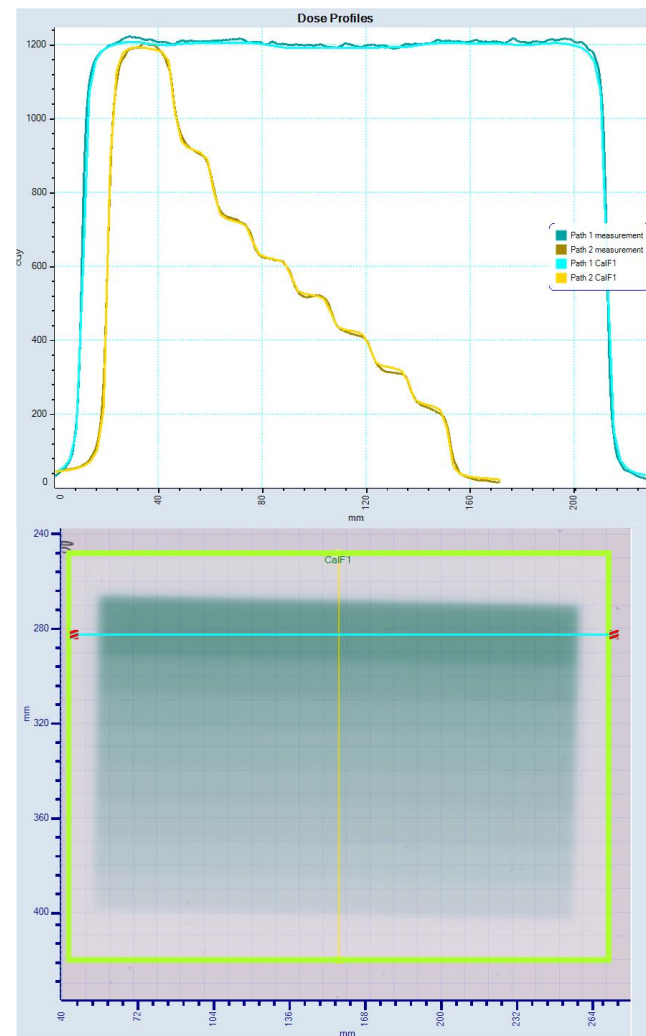
- Requires merely 2 film pieces
- Entire analysis involves 1 scan only
- Single Exposure Calibration
- Calibration and dose map determined in same step



OrthoChromic Protocol

Single Exposure Calibration

- Calibration based on 100000's of pixel/dose pairs (vs. 3 - 10 value pairs traditionally)
- Continuous dose distribution for evenly distributed dose accuracy
- All calibration data on same piece of film
- No secondary calibration data required

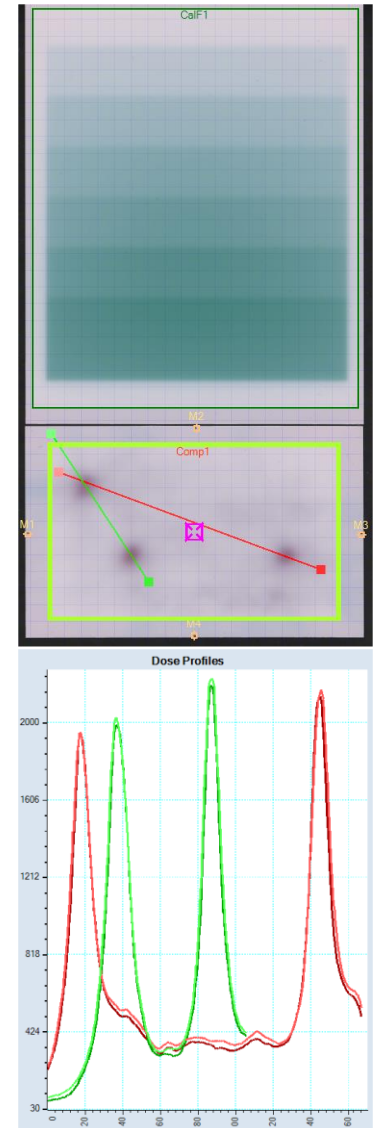


OrthoChrome Pro Software

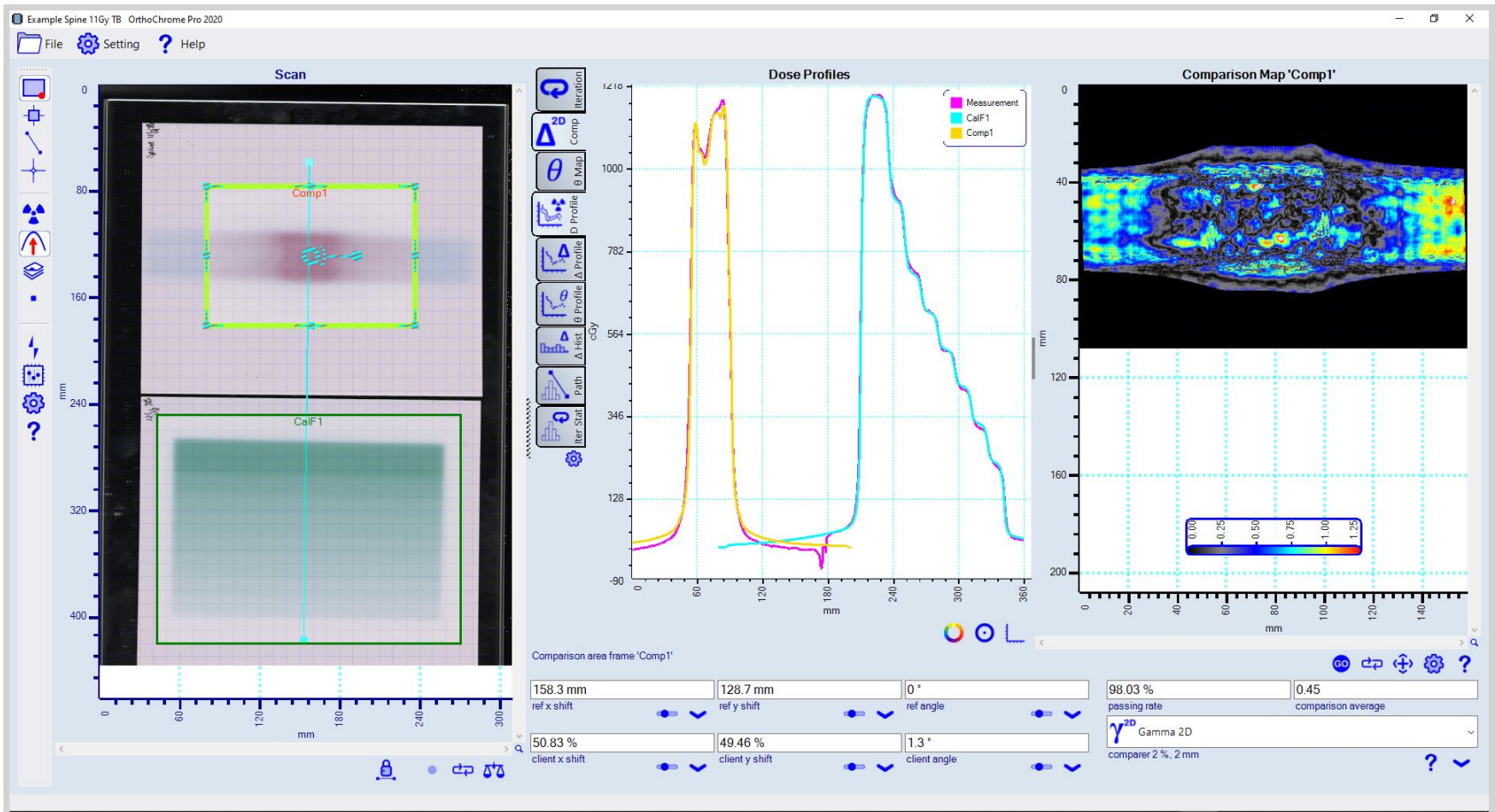
Reliable, easy Protocol

Automated analysis in three simple steps:

1. Scan films with treatment and calibration fields
2. Assign calibration plan to calibration field area (auto registration)
3. Assign treatment plan to treatment field area (auto registration)



OrthoChrome Pro Software



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