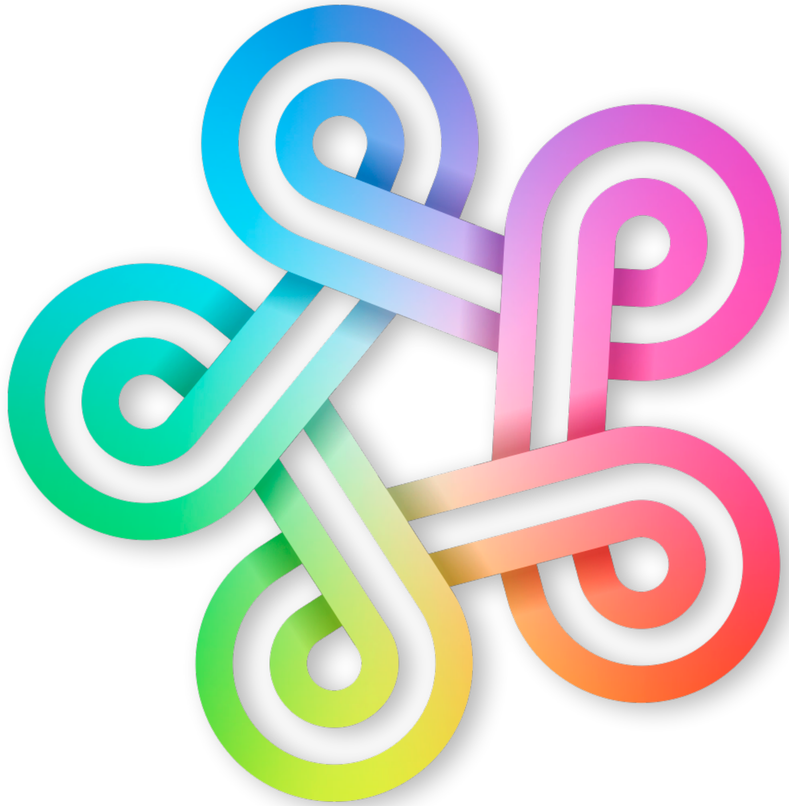


COLOR CONFORMANCE CONFERENCE ‘25

New Port Richey, FL (Tampa North)
January 28–30, 2025

COLOR CONFORMANCE
CONFERENCE ‘25

Custom Color Specification

Custom Lighting Condition

January 28, 2025

Presented by

Krzysztof Kućma

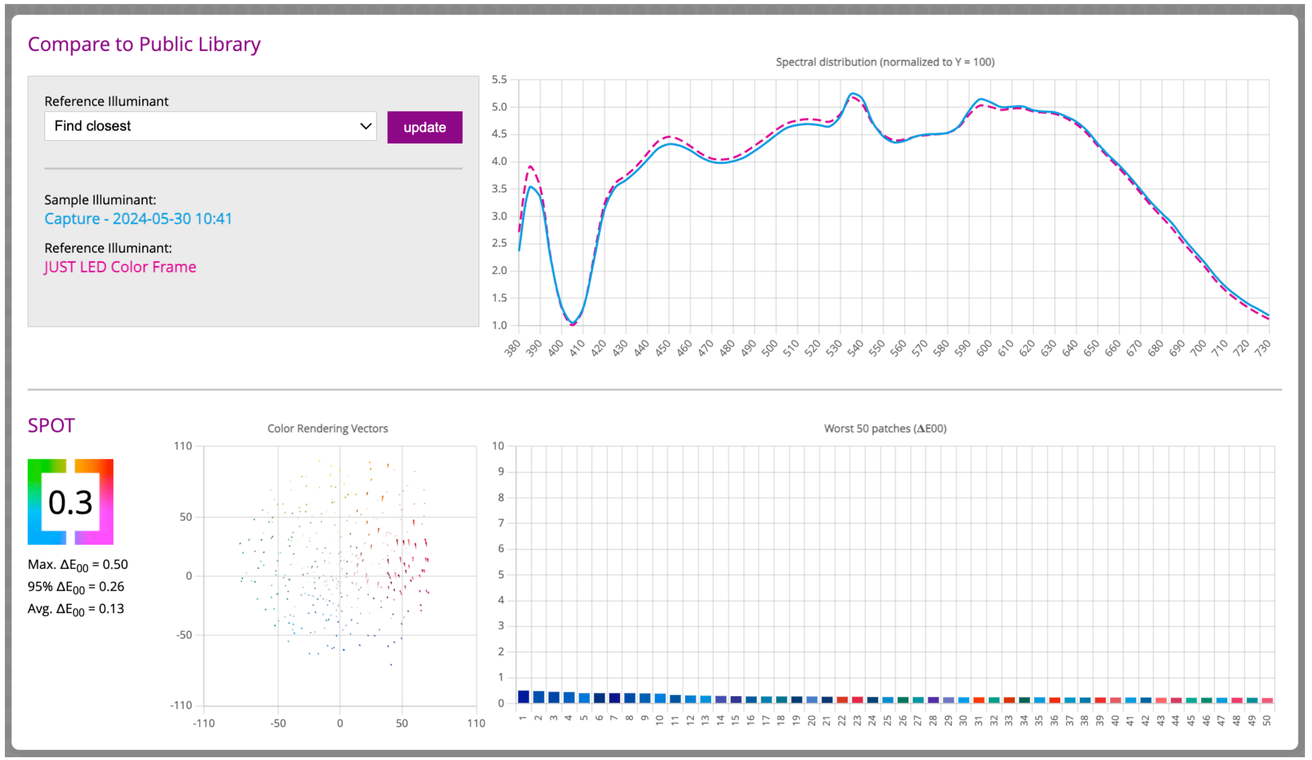
A new era in light sources.

- The previous standard illuminants were group D - daylight and group F - lighting based on fluorescent lamps. This is a record of history
- Today, fluorescent lamps have probably remained only above the consoles of printing machines... in our homes, shops, public spaces, artificial light mainly uses LED technology
- The progress in development is enormous, these sources are very different and it is difficult to distinguish standards
- They offer different parameters of white point, color rendering indexes.
- New methods of measuring and evaluating them have been created for LED sources.

NO-UV

- LED sources do not produce UV as a side effect, they can do so but only on demand.
- UV radiation itself is essentially harmful - it is not produced where it is not necessary.
- A new standard D50noUV is being developed.
- No UV deactivates OBAs

CC Lighting Library

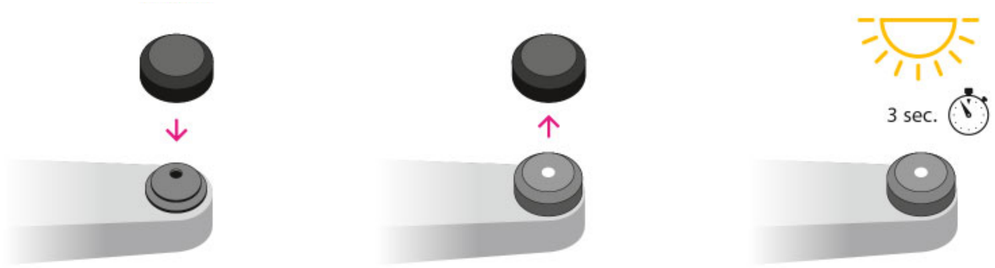


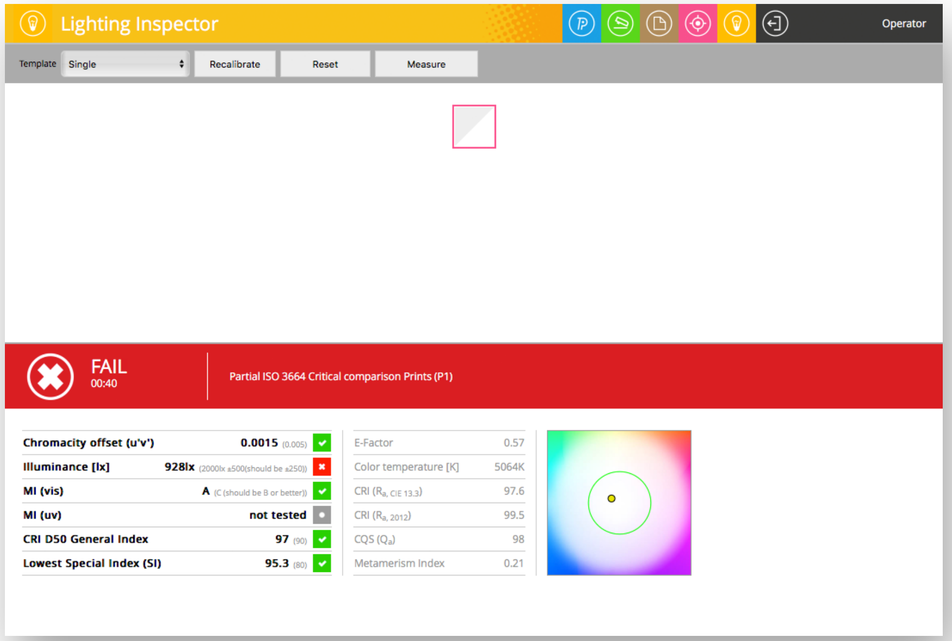
- Chromachecker started to collect sources of the light
- We add an auto-recognition feature, the Lighting Inspector, which is looking for the closest sample.

Use Case - Match a color in a given custom Lighting Condition

Measure Custom Lighting

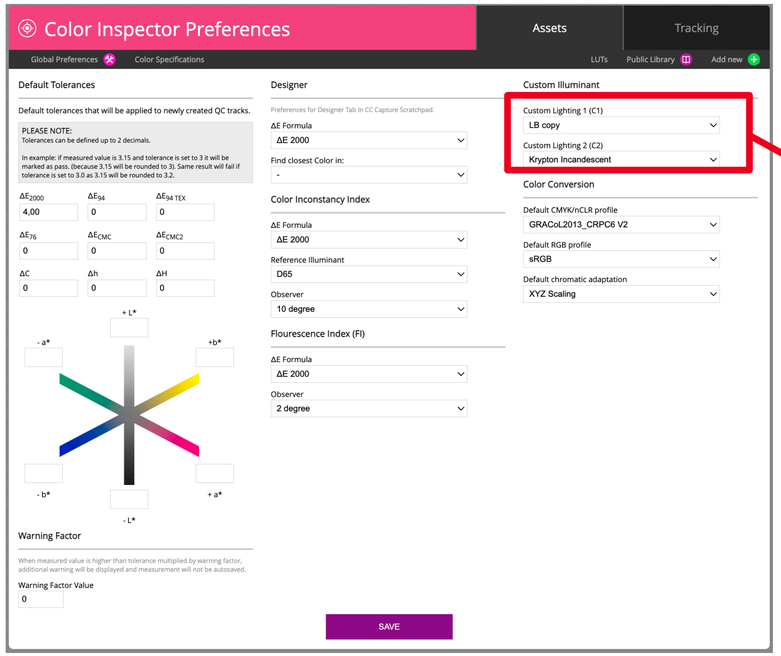
- Connect one of supported instruments:
  - i1Pro
  - Myiro-1
  - Calibrate ColorChecker Studio
- Measure

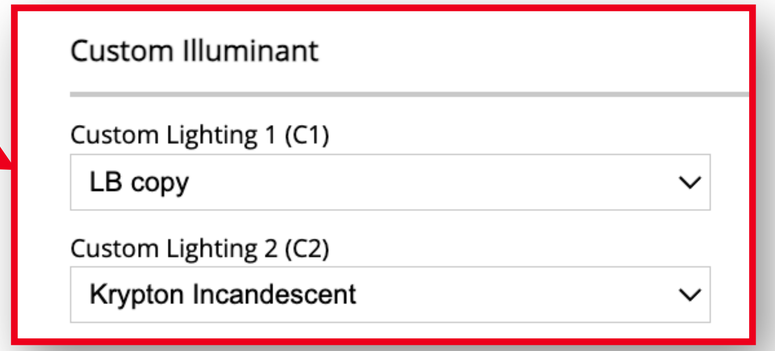




Custom Illuminants C1, C2

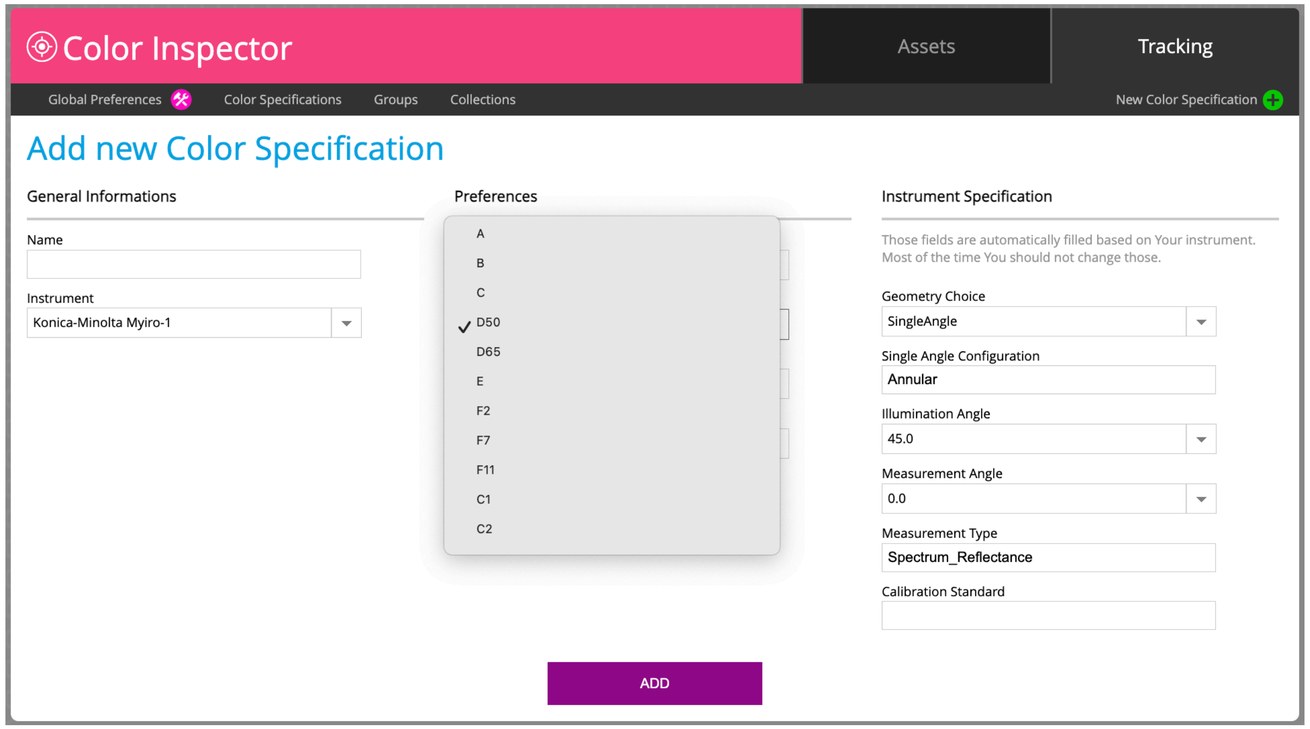
- ChromaChecker support two user-define illuminants named C1 and C2
- The user can assign any custom lighting in Color Inspector Global Preferences





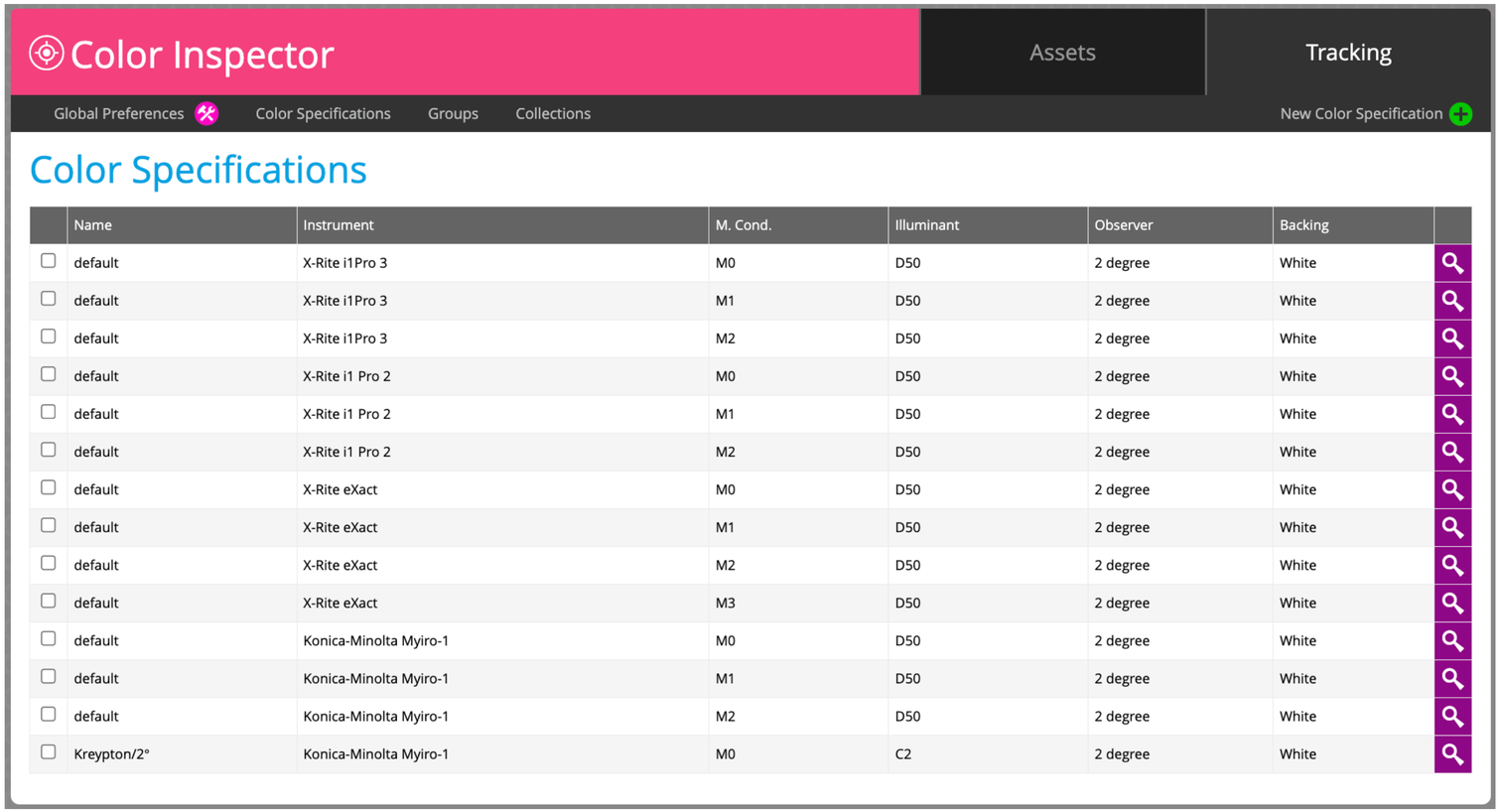
Add New Color Specification

- List of illuminant contains C1 and C2



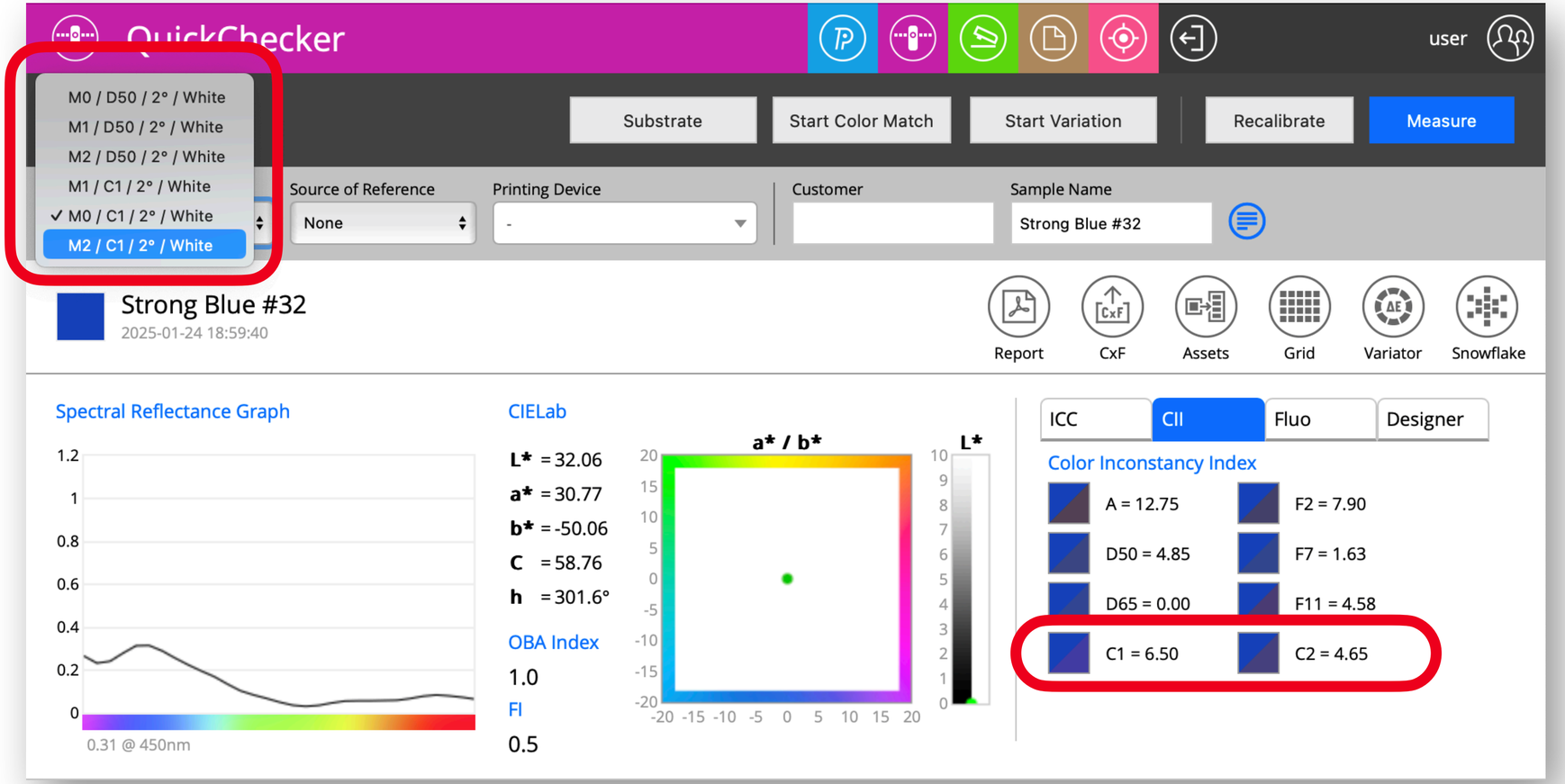
Color Specifications

- Elements:
  - Instrument
  - M-conditions
  - Illuminat
  - Observer
  - Backing

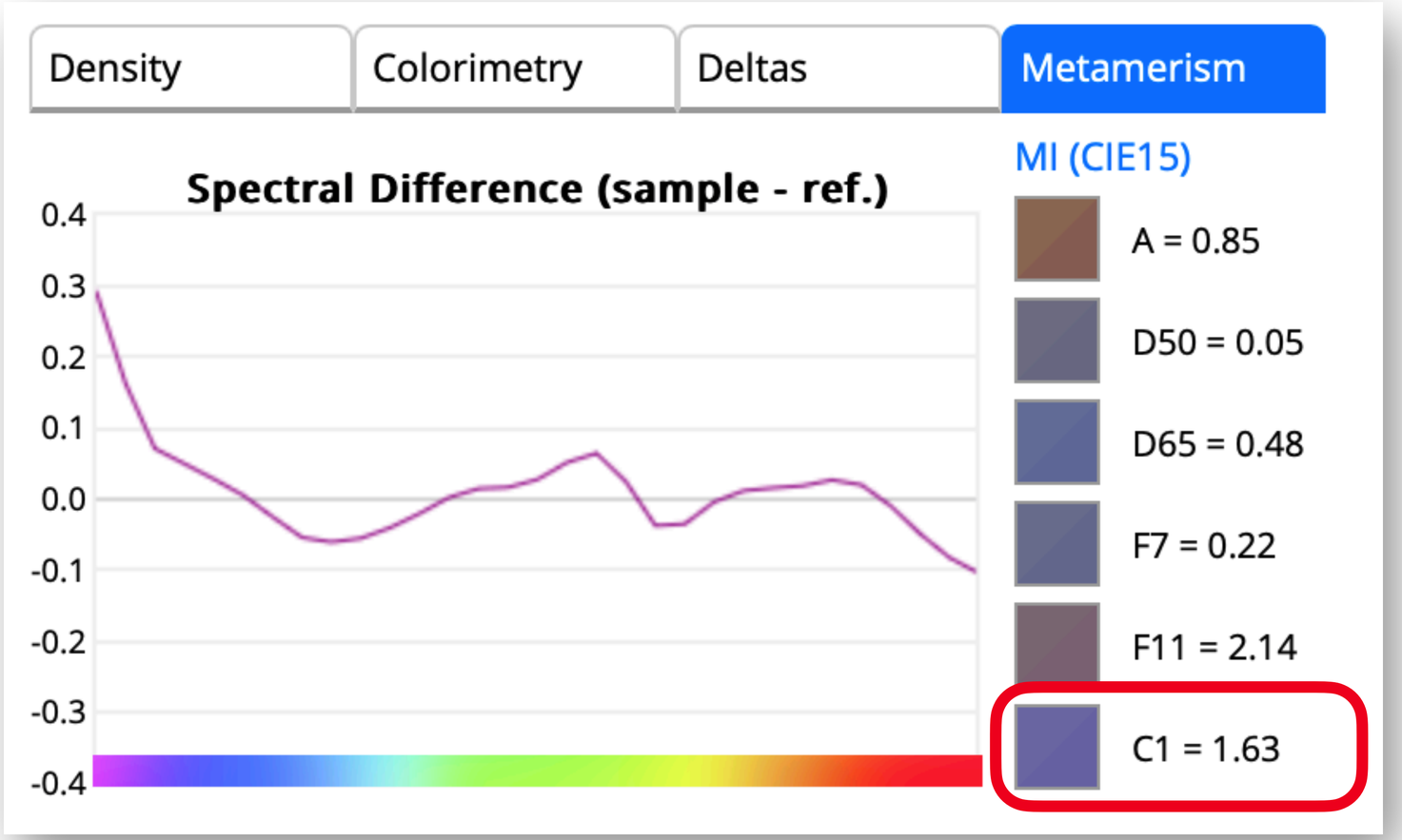


	Name	Instrument	M. Cond.	Illuminant	Observer	Backing	
☐	default	X-Rite i1Pro 3	M0	D50	2 degree	White	
☐	default	X-Rite i1Pro 3	M1	D50	2 degree	White	
☐	default	X-Rite i1Pro 3	M2	D50	2 degree	White	
☐	default	X-Rite i1 Pro 2	M0	D50	2 degree	White	
☐	default	X-Rite i1 Pro 2	M1	D50	2 degree	White	
☐	default	X-Rite i1 Pro 2	M2	D50	2 degree	White	
☐	default	X-Rite eXact	M0	D50	2 degree	White	
☐	default	X-Rite eXact	M1	D50	2 degree	White	
☐	default	X-Rite eXact	M2	D50	2 degree	White	
☐	default	X-Rite eXact	M3	D50	2 degree	White	
☐	default	Konica-Minolta Myiro-1	M0	D50	2 degree	White	
☐	default	Konica-Minolta Myiro-1	M1	D50	2 degree	White	
☐	default	Konica-Minolta Myiro-1	M2	D50	2 degree	White	
☐	Kreypton/2°	Konica-Minolta Myiro-1	M0	C2	2 degree	White	

Custom CS in practice



Custom CS in practice



CS Roadmap

- **Project Inspector implementation.**

The CC development team plans to expand the project definition to include custom lighting and color specifications. We believe that upcoming changes will require significantly better support for modern LED lighting.

Official standards do not keep up with the evolving technology of new light sources.

Chroma Checker joined the Fogra project to develop a new D50noUV standard, but this standard does not adequately describe reality.

Resources – Thank You

Helpful links

- PDF version of this presentation
- krzysztof@chromachecker.com +48 607.628.995