VideometerLab for pharmaceutical packaging

We measure what you see – and beyond

ABOUT US

- Spectral imaging company
- Founded 1999
- Products
  - Lab instruments,
  - Turn-key in-line systems, and
  - R&D projects
- App. 700 imaging R&D projects since 2000
- In-line 24/7 spectral imaging since 2002
- Based in Copenhagen, Denmark
- Partnerships worldwide

OUR LEGACY

1999

The beginnings

Videometer was co-founded by Jens Michael Carstensen and 7-Technologies in 1999, as a spin-off from the Technical University of Denmark. The first patent application was filed.

2000

Project-based

In 2000, Videometer began its project-based activity. During these years, the company's main focus was set on custom-made vision systems for in-line and on-line quality control.

2018

A new era

In 2018, Videometer's structure underwent new developments both in terms of strategy and structure. This year marked the beginning of a new era for the company, in terms of focus on instruments.

2020s

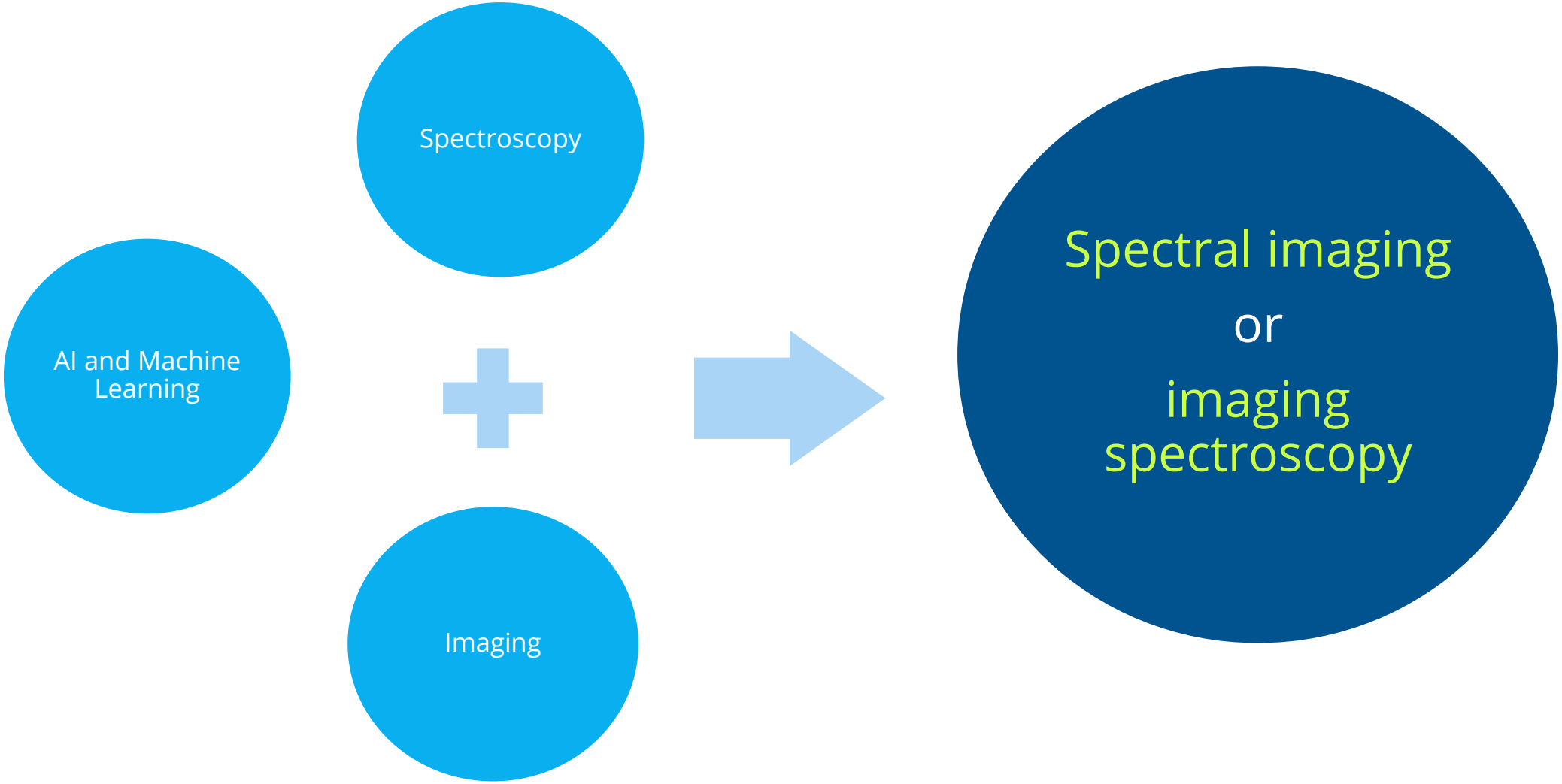
Today

Today, Videometer is a leading provider of spectral imaging solutions worldwide, selling both spectral imaging instruments and custom-made vision systems. Videometer is synonym of excellence and innovation in its field.





SPECTRAL IMAGING



WHAT COLOR IS THE CAR?

APPEARANCE

=

CHEMISTRY

X

PHYSICS

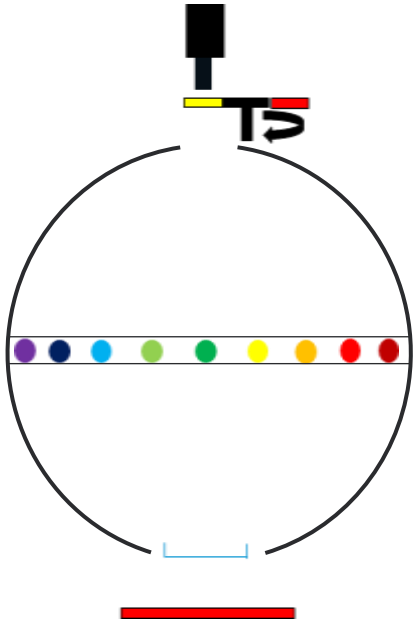
X

ENVIRONMENT

X

ILLUMINATION

LED BAND SEQUENTIAL SPECTRAL IMAGING



Camera and lens

Emission filter changer

Integrating sphere

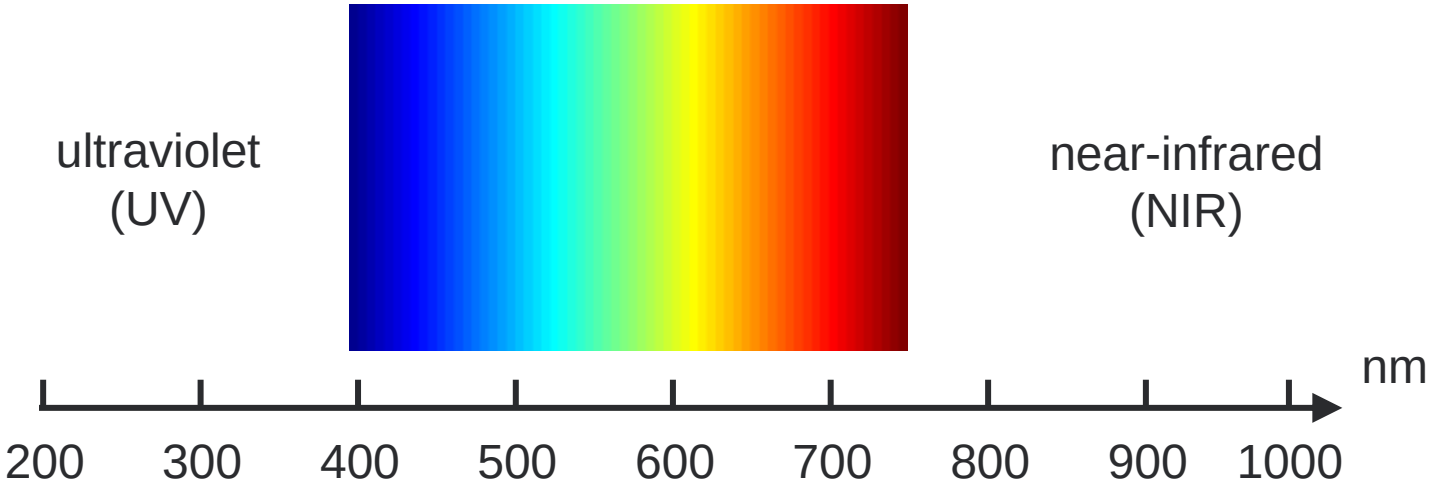
LEDs of multiple wavelengths

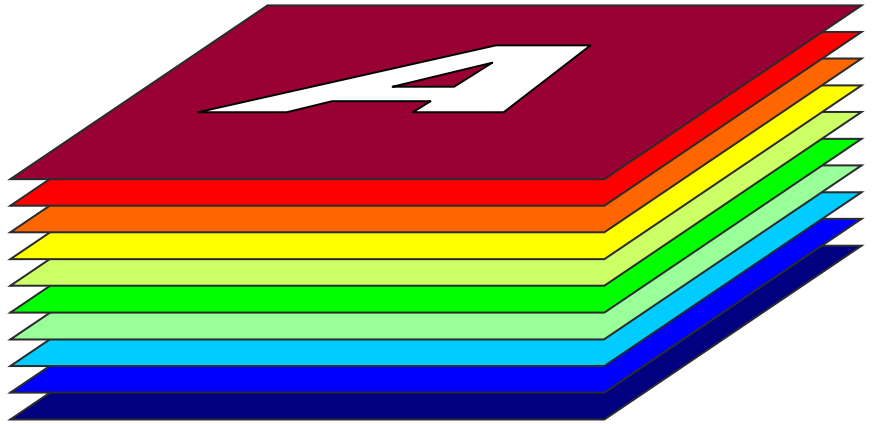
Sample is placed in target opening

Backlight or background

- LEDs: Stable, durable, large selection, rapidly developing technology
- Up to 20 different high-resolution bands acquired sequentially in 0.5-1.0 seconds
- May be combined with emission filters, backlight, and darkfield illuminant
- Combined reflectance spectral imaging and fluorescence spectral imaging possible!

SPECTRAL IMAGE

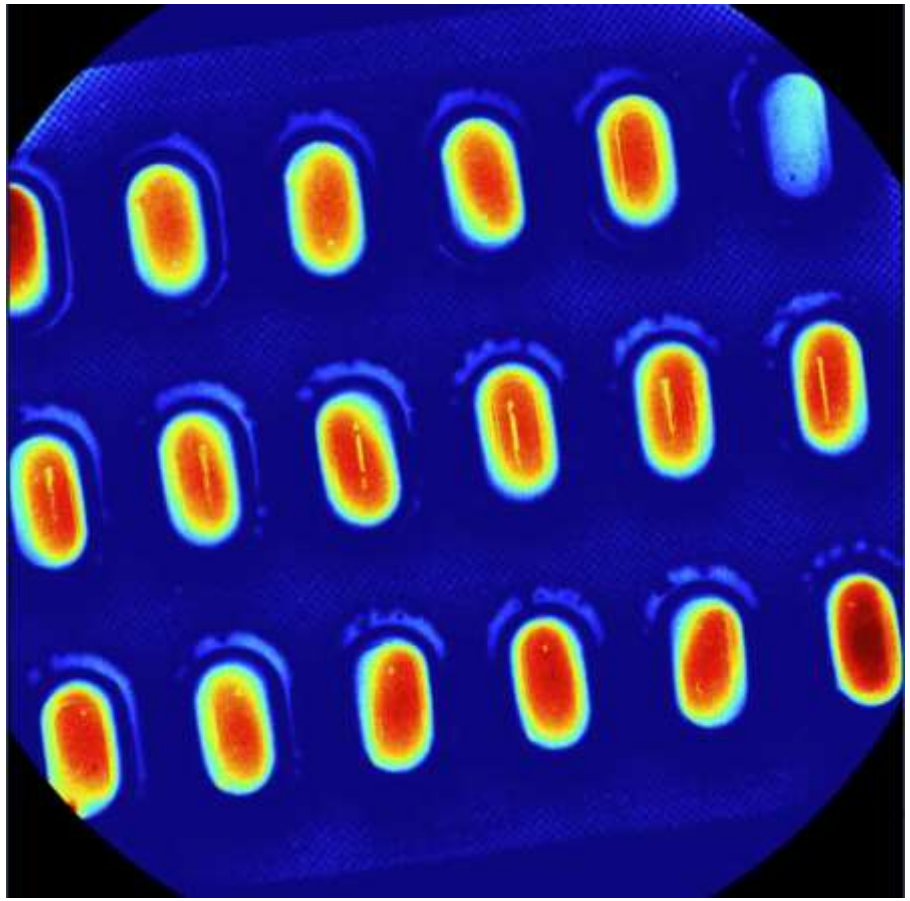




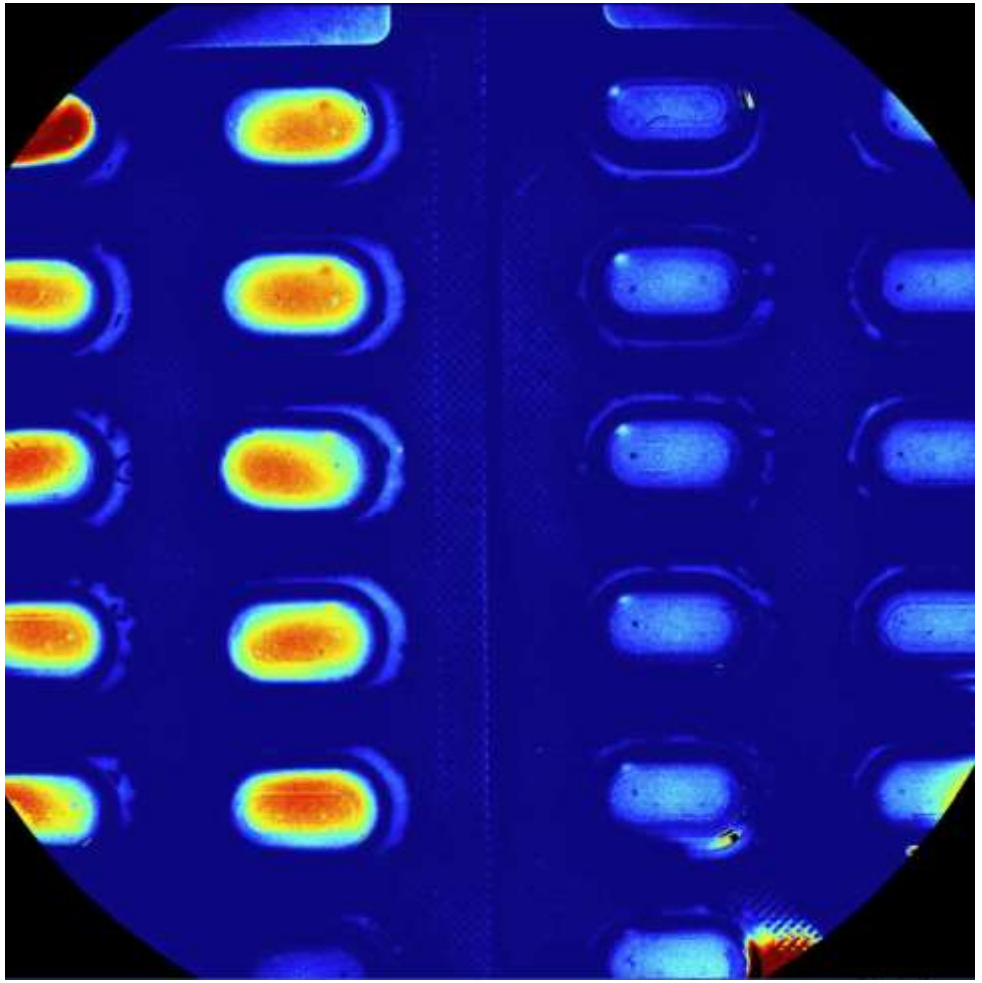
N images obtained at N wavelengths

Microbial and plant metabolites	Accurate color assessment and pigment concentration	Pigment baseline, moisture, fat, etc.	Spectral image is typically a large data structure of 100 MB to 10 GB

PVC BLISTER PACK WITH ONE EMPTY BLISTER

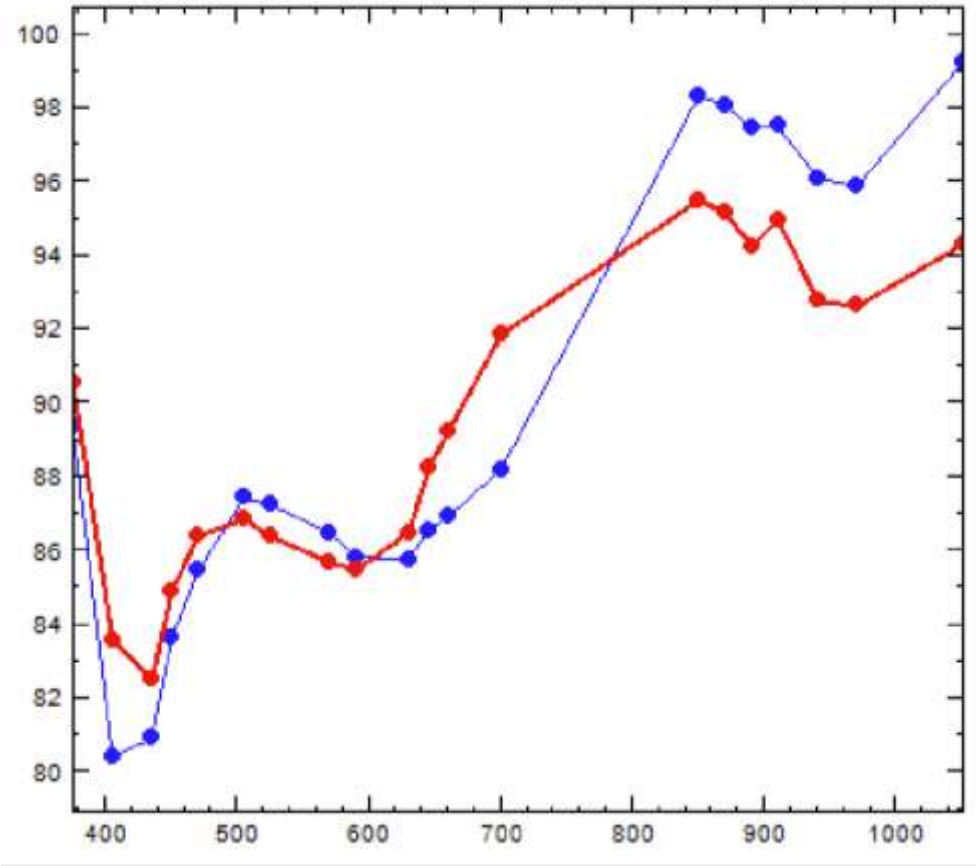


FULL AND EMPTY WHITE PVC BLISTER PACK



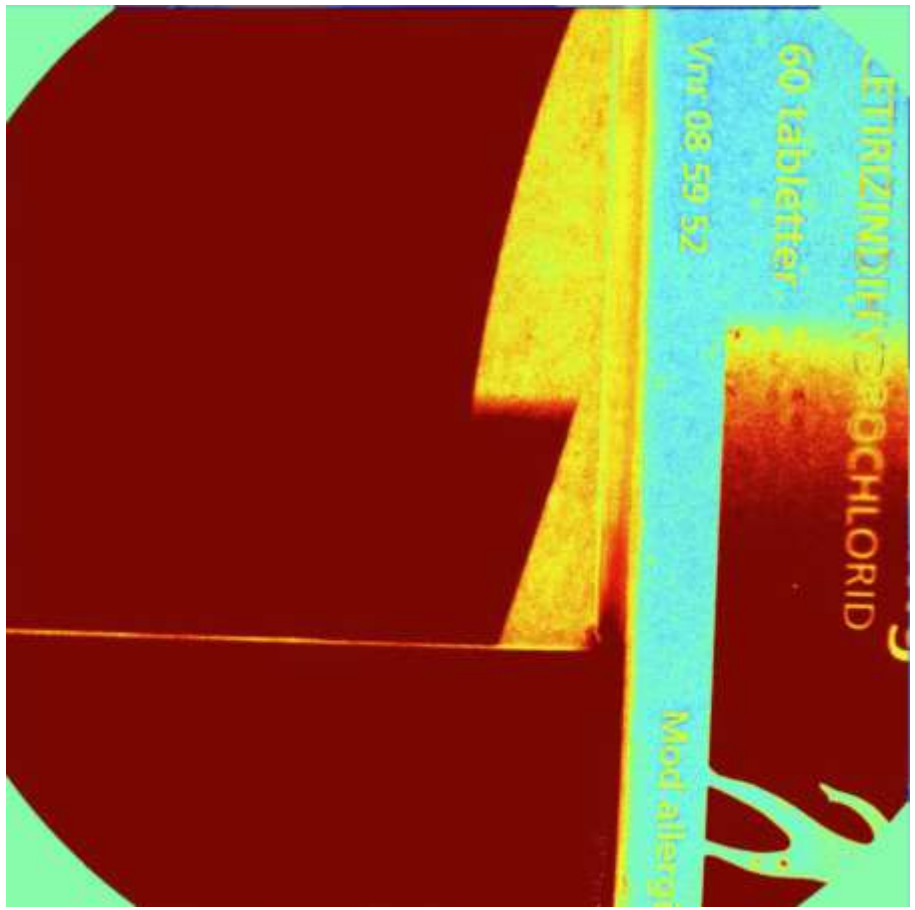
TWO PHARMACEUTICAL PACKAGES

COMPARISON OF WHITE BASE COLOR



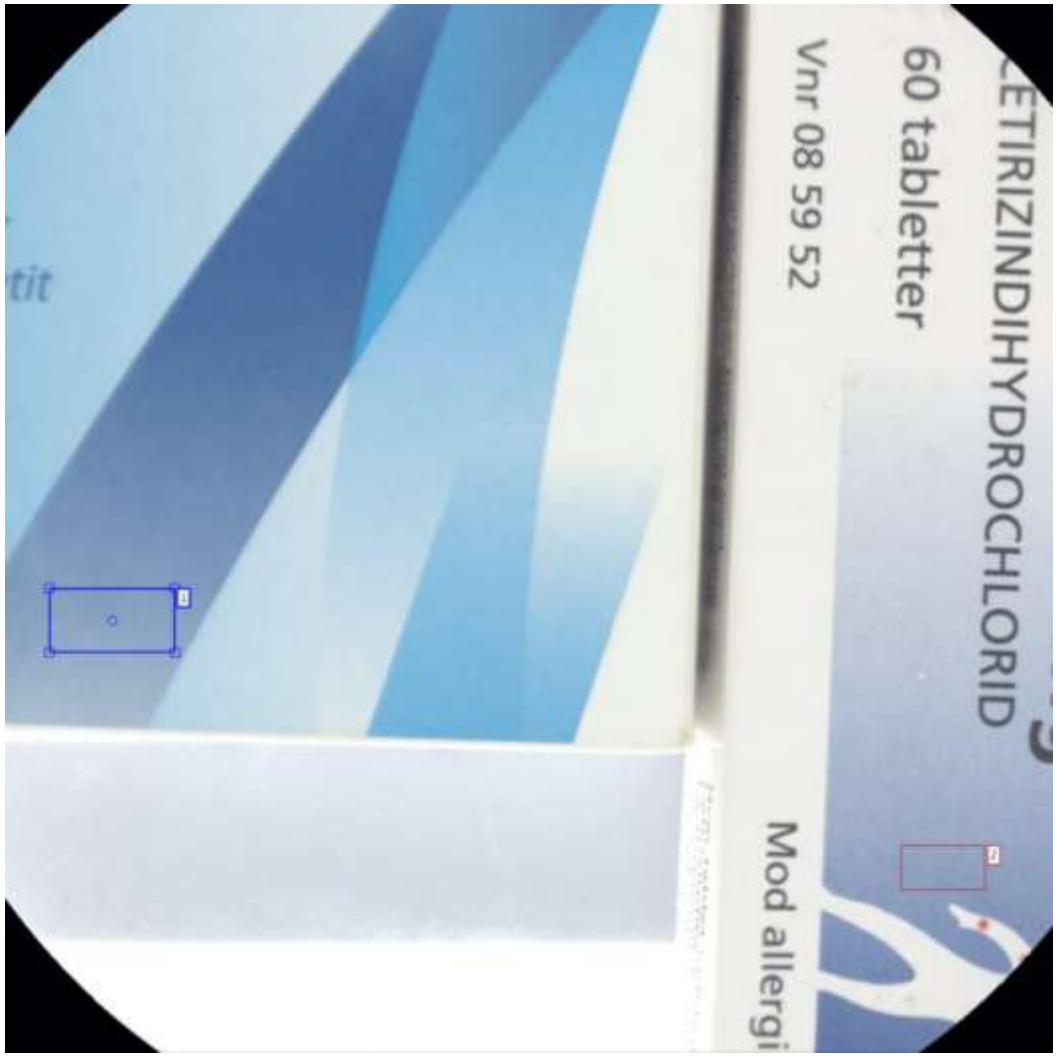
Two versions of white with separate spectrum

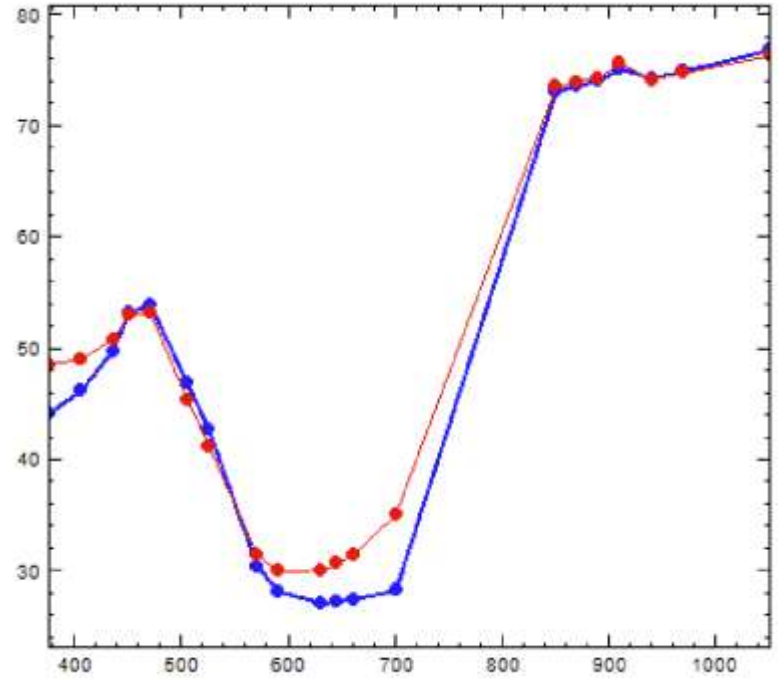
COMPARISON OF WHITE BASE COLOR



Mapping the distance to white base color of right sample

COMPARISON OF VISUALLY SIMILAR BLUES





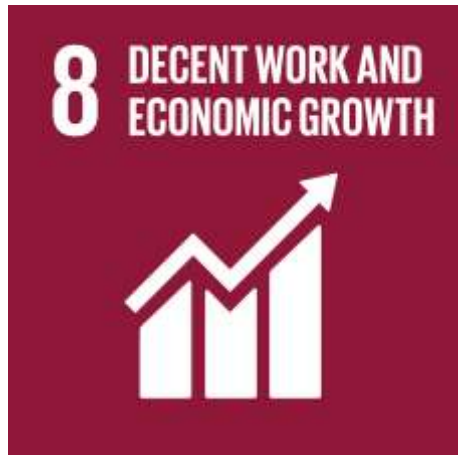
CONCLUSION

- Colors with visually similar color, but different spectrum can easily be discriminated
- Color differences may be mapped in many different ways and some options are illustrated here
- Any color difference shown may also be quantified in a few number

OUR VALUES

Zero Hunger and
Food Security

Good Health and
Well-Being



Decent Work and
Economic Growth

Responsible Consumption
and Production

Life Below Water

Partnership for
the Goals

THANK YOU!

Address

Hørkær 12B
DK-2730
Herlev

Email

mail@videometer.com

www.videometer.com

Phone

+45 4576 1077