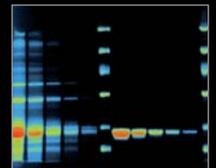
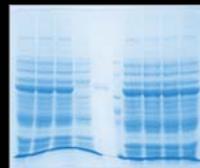
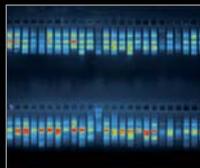
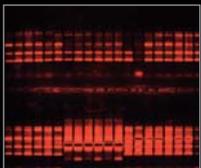




ULTRAVIOLET INSTRUMENTS
FLUORESCENCE | IRRADIATION | MEASURE
TRANSILLUMINATORS

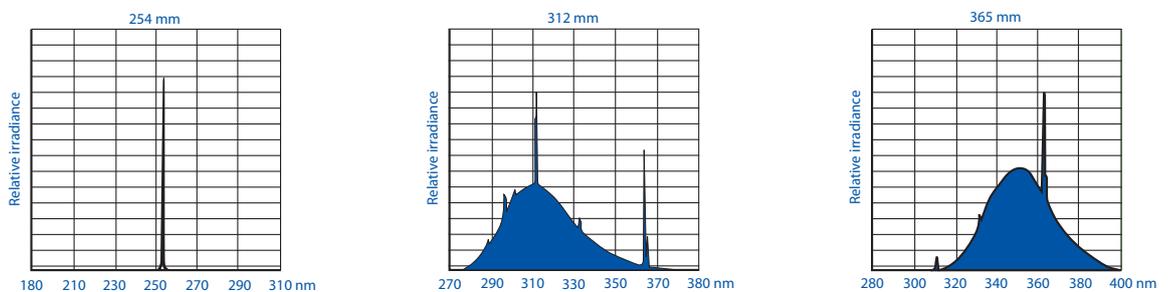


ULTRAVIOLETS LIGHT

ULTRAVIOLETS INSTRUMENTS

Ultraviolet light (UV) forms a part of the invisible radiation which borders on the visible light spectrum. Ultraviolet starts beyond violet, where detection by the human eye ends. Ultraviolet is located at shorter wavelengths compared to visible light radiation and produced high energy potential. The ultraviolet spectrum extends from 180 to 380 nanometers (nm) and is divided into three categories.

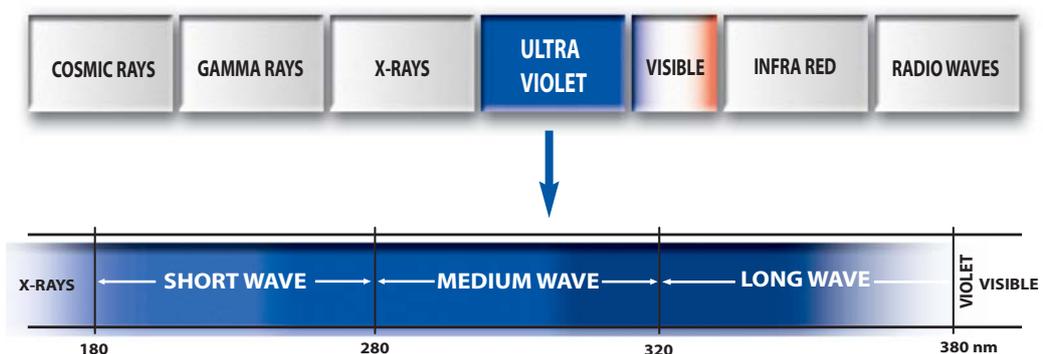
- Short wave band is also called UV-C. It extends from 180 to 280 nm with an energy peak at 254 nm. The UV-C light has a high bactericidal power and is then appropriate for germicidal applications.
- Medium wave (UV-B) runs from 280 to 320 nm with an energy peak at 312 nm ideal for DNA/RNA electrophoresis visualization and for mineralogy.
- Long wave UV light (UV-A) extends from 320 to 380nm with an energy peak at 365 nm. Long wave is also called “black light” or “wood light”. Fluorescence detection or visualization, dermatology or polymer curing are its main applications.



SPECTRAL CURVES OF THE  VILBER LOURMAT UV TUBES

UV TERMS

- Black light (BL): lamp producing 365 nm ultraviolet light with visible light.
- Black light blue (BLB): lamp with a special deep blue filter emitting 365nm without visible light.
- Fluorescence: emission of light produced by certain substances when excited by ultraviolet energy. The emission ends when UV source is removed.
- Germicidal: sterilization action of short wave ultraviolet light. UV light, in the range of 254 nm, penetrates the cell membrane of living cells and disrupts the DNA molecules, preventing cell replication.
- Luminescence: emission of light produced by the absorption of short wave radiation (such as ultraviolet).
- Phosphorescence: emission of light which continues after the excitation source is removed.



ELECTROMAGNETIC SPECTRUM (Enlargement of ultraviolet region)

ULTRAVIOLETS LIGHT

ULTRAVIOLETS INSTRUMENTS



Exclusive UV Master® filters

UNIQUE UV MASTER® TECHNOLOGY

Vilber Lourmat is the UV fluorescence expert since 1951. Our own UV lamps emit highly concentrated UV radiation. This output is reinforced with the use of our exclusive Ondulex® reflector, especially polished to reflect the maximum of the light to the outside. Combined with our innovative range of special UV filters, our unique fluorescence sources dramatically improve the quality of gel visualization and documentation and create unrivalled application capabilities.

- Long life filters. The Vilber Lourmat filters are designed to transmit specific ultraviolet rays and to absorb most of the visible light produced by the UV tubes. They provide the maximum UV transmittance all over their surface. Filters have an unlimited life expectancy for 312 nm and 365 nm.
- Ondulex® reflector is located behind the UV tubes to reflect the maximum of the light to the outside. The UV intensity of the whole instrument is dramatically increased, as well as its performance.
- Vilber Lourmat UV tubes. Our original UV tubes emit highly concentrated UV radiation. They use special ultraviolet ray glasses which efficiency transmit the ultraviolet rays. Their spectral energy distribution provide an optimum output for a large number of applications in the life science such as fluorescence or germicidal effect. A large selection is available from 4-watt to 40-watt and the most appropriate one can be selected according to the purpose.

ISO 9001

Vilber Lourmat has been approved for registration to ISO 9001:2000. This is an indication of Vilber Lourmat's commitment towards continuous process improvements and adopting the best practices to consistently exceed customer expectations. An independent registrar ensures that ISO standards are consistently met from year to year and conducts periodic surveillance audits. With several years of ISO compliance and experience, Vilber Lourmat is proud of his achievement – but never satisfied.



SUPER-BRIGHT MX

UV TRANSILLUMINATOR

MULTI-APPLICATIONS

The Super-Bright UV table is a multi-applications transilluminator which works for an extended range of dyes including SYBR-Green®, Ethidium bromide, SYBR Gold®, SYBR Safe®, Sypro Orange®, Sypro Ruby®, Gel Star®...

The innovative Super-Bright filter stops all the visible light emitted by the tubes, making the transilluminator simply perfect for a large number of applications.

ENHANCED RESULTS

As the UV tubes are no more visible, the Super-Bright improves dramatically the quality of gel visualization and documentation. By contrast, your eyes can easily see the very faint bands.

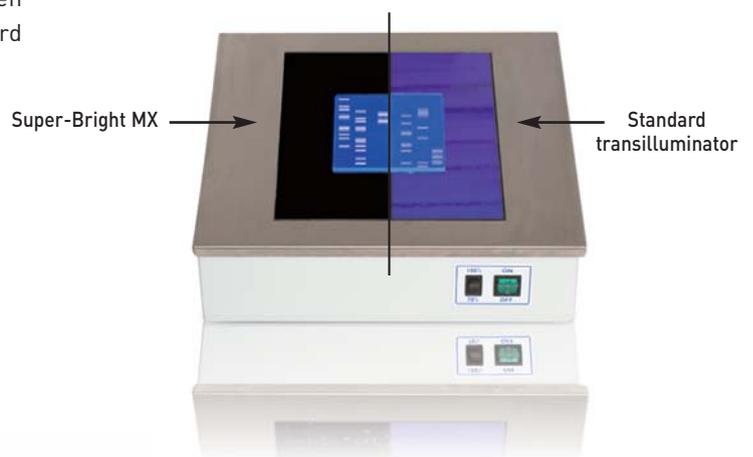
The Super-Bright excitation light is far-off the sample fluorescence. This ensures the total transmission of the SYBR-Green® or ethidium bromide signal if combined with our unique F440 camera filter. For SYBR-Green®, the signal is then 25% higher compared to a standard configuration.



ECX-F26.MX

KEY FEATURES

- Multi-applications transilluminator
- Invisible UV tubes - No background light
- Enhanced signal imaging & contrast visualization of the faint bands
- Adjustable dual intensity selector (100%-70%)
- Unlimited filter life expectancy
- Adjustable UV safety screen
- Ondulex® reflector for higher UV output
- 100/115/230 volt, 50/60 Hz



SPECIFICATIONS

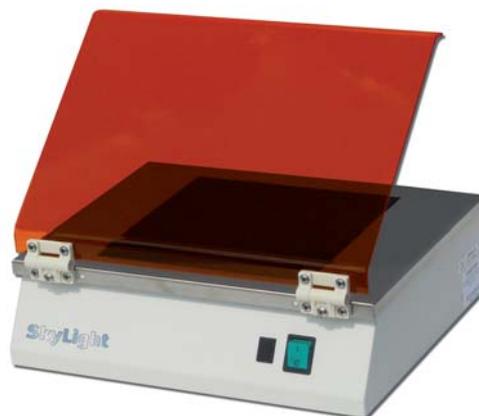
Models	Description	nm	Filter (mm)	Tubes	Intensity ($\mu\text{W}/\text{cm}^2$)
ECX-F26.MX	High / Low intensity	312	210 x 260	6 x 8-watt	9 000
ETX-F26.MX	High / Low intensity	312	210 x 260	6 x 15-watt	10 000

SKYLIGHT SUPER-BLUE

SKYLIGHT TECHNOLOGY

TECHNOLOGY

The SKYLIGHT SUPER-BLUE table is based on the latest blue LED technology for an unparalleled light uniformity. The table incorporates 270 Light Emitting Devices in an optimized array to give consistent intensity across the table. This uniform light is then filtered with a narrow excitation filter to obtain an excitation peak at 470nm and to eliminate light interference on the resulting image. On the surface, the protection glass allows you to cut the gel without damaging the table.



ADVANTAGES

The new Vilber SKYLIGHT SUPER-BLUE transilluminator eliminates the damage caused by UV light on DNA and RNA gels. It also improves cloning efficiency dramatically by eliminating the effects of UV-induced nicking or crosslinking, often encountered during the purification of DNA from gels for further use.



APPLICATIONS

The Vilber SKYLIGHT SUPER-BLUE is a new technology ideal for Sybr Safe®, Gel-Red®, Sypro Ruby®, Gel-Star®, Sypro Orange®, Sybr Gold®, Sybr Green® I & II and eGFP®, amongst others.

SPECIFICATIONS

Model	Filter (mm)	Description	Light device
ECX-F20. Blue	200 x200	SkyLight technology	Led technology

ECX COMPACT

UV TRANSILLUMINATOR

THE UV STANDARD

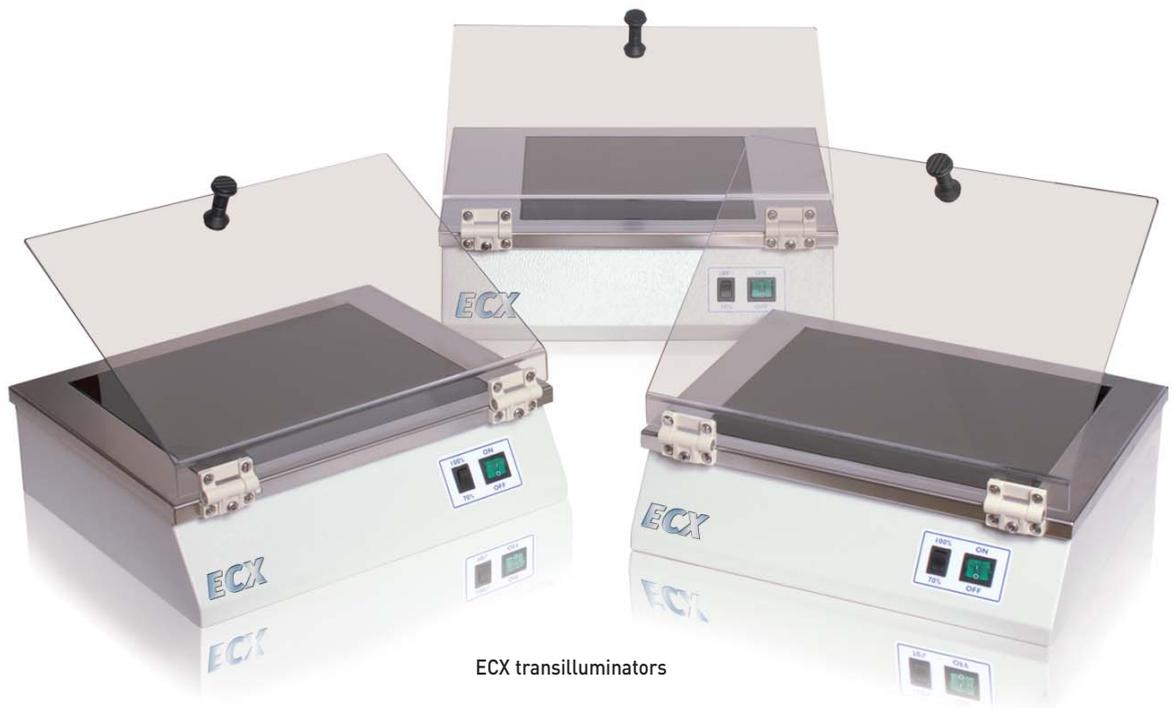
The ECX transilluminator is both compact and economical for laboratories with budget in mind.

The fully adjustable UV safety screen can be positioned to suit the operator's viewing angle against exposure to harmful UV rays.

The High/Low intensity selection is ideal to switch from short gel visualization to longer preparative work.

KEY FEATURES

- UV Master® technology
- Stainless steel frame
- Adjustable UV safety screen
- Ondulex® reflector for higher UV output
- Unlimited filter life expectancy for 312 and 365nm
- Adjustable dual intensity selector (100%-70%)
- 100/115/230 volt, 50/60 Hz



ECX transilluminators

SPECIFICATIONS

Models	Description	nm	Filter (mm)	Tubes	Intensity ($\mu\text{W}/\text{cm}^2$)
ECX-F15.M	High / Low intensity	312	150 x 150	4 x 8-watt	10 000
ECX-F15.C	High / Low intensity	254	150 x 150	4 x 8-watt	7 000
ECX-F20.M	High / Low intensity	312	200 x 200	6 x 8-watt	10 000
ECX-F20.C	High / Low intensity	254	200 x 200	6 x 8-watt	7 000
ECX-F20.L	High / Low intensity	365	200 x 200	6 x 8-watt	7 000
ECX-F26.M	High / Low intensity	312	210 x 260	6 x 8-watt	10 000
ECX-F26.C	High / Low intensity	254	210 x 260	6 x 8-watt	7 000

ETX HIGH INTENSITY

UV TRANSILLUMINATOR

SUPER HIGH SIGNAL

The ETX 15-watt transilluminator has very high UV output to obtain more signal compared to a standard 8-watt transilluminator.

This model has been specifically designed to meet demand for analytical and preparative DNA electrophoresis. The ETX model is available in 254nm, 312 nm and 365nm.



KEY FEATURES

- Dual intensity selector (100%-70%)
- 6 x 15W UV tube
- UV safety screen
- Air cooling fan



KEY FEATURES

- UV Master® technology
- Powerful UV output ideal for the visualisation of faint bands.
- Adjustable dual intensity selector (100%-70%)
- Stainless steel frame
- Adjustable UV safety screen
- Ondulex® reflector for higher UV output
- Unlimited filter life expectancy for 312 and 365nm
- 100/115/230 volt, 50/60 Hz

SPECIFICATIONS

Models	Description	nm	Filter (mm)	Tubes	Intensity ($\mu\text{W}/\text{cm}^2$)
ETX-F20.M	High / Low intensity	312	200 x 200	6 x 15-watt	10 600
ETX-F20.C	High / Low intensity	254	200 x 200	6 x 15-watt	7 800
ETX-F20.L	High / Low intensity	365	200 x 200	6 x 15-watt	7 000
ETX-F26.M	High / Low intensity	312	210 x 260	6 x 15-watt	10 600
ETX-F26.C	High / Low intensity	254	210 x 260	6 x 15-watt	7 800
ETX-F36.M	High / Low intensity	312	250 x 350	6 x 15-watt	10 600
ETX-F36.C	High / Low intensity	254	250 x 350	6 x 15-watt	7 800

SPECIAL TRANSILLUMINATOR

UV TRANSILLUMINATOR

UV / WHITE LIGHT TRANSILLUMINATOR

Two models in one! The UV / white light tables feature two 200 x 200 mm illumination areas. The UV side is ideal for RNA and DNA visualization. The white light side can be used for protein gels, autoradiograms or microtitration plates



Models	Description	Sample surface (mm)	UV Tubes	WL Tubes	UV Intensity ($\mu\text{W}/\text{cm}^2$)
TFP-M/WL	312nm / white light	2 (200 x 200)	6 x 8-watt	2 x 8-watt	10 000
TFP-C/WL	254nm / white light	2 (200 x 200)	6 x 8-watt	2 x 8-watt	7 000
TFP-L/WL	365nm / white light	2 (200 x 200)	6 x 8-watt	2 x 8-watt	7 000

MULTIBAND TRANSILLUMINATOR

The multiband transilluminator accommodates two UV wavelengths in one single transilluminator. This versatile model is ideal for a wide range of applications requiring different wavelengths. It can be used for both visualization and documentation.



Models	Description	Sample surface (mm)	Tubes	Intensity ($\mu\text{W}/\text{cm}^2$)
TCP-20.LC	365nm / 254nm - 8-watt	200 x 200	(6 x 365nm) + (5 x 254nm)	7 600 / 5 200
TCP-20.LM	365nm / 312nm - 8-watt	200 x 200	(6 x 365nm) + (5 x 312nm)	5 400 / 6 400
TCP-20.MC	312nm / 254nm - 8-watt	200 x 200	(6 x 312nm) + (5 x 254nm)	8 400 / 5 200
TCP-26.LC	365nm / 254nm - 8-watt	210 x 260	(6 x 365nm) + (5 x 254nm)	5 400 / 5 200
TCP-26.LM	365nm / 312nm - 8-watt	210 x 260	(6 x 365nm) + (5 x 312nm)	7 600 / 6 400
TCP-26.MC	312nm / 254nm - 8-watt	210 x 260	(6 x 312nm) + (5 x 254nm)	8 500 / 5 200
TFX-20.LC	365 / 254 - 15-watt- Hi/Lo selector	200 x 200	(6 x 365nm) + (6 x 254nm)	5 900 / 6 400
TFX-20.LM	365 / 312 - 15-watt- Hi/Lo selector	200 x 200	(6 x 365nm) + (6 x 312nm)	4 400 / 8 500
TFX-20.MC	312 / 254 - 15-watt- Hi/Lo selector	200 x 200	(6 x 312nm) + (6 x 254nm)	9 000 / 5 900
TFX-26.LC	365 / 254 - 15-watt- Hi/Lo selector	210 x 260	(6 x 365nm) + (6 x 254nm)	6 900 / 6 400
TFX-26.LM	365 / 312 - 15-watt- Hi/Lo selector	210 x 260	(6 x 365nm) + (6 x 312nm)	3 800 / 8 000
TFX-26.MC	312 / 254 - 15-watt- Hi/Lo selector	210 x 260	(6 x 312nm) + (6 x 254nm)	8 000 / 5 900

WHITE LIGHT TRANSILLUMINATOR

White light transilluminators offer uniform light diffusion and variable intensity control. They are designed for protein stained gels, autoradiographs, x-ray film and microtitration plates.



Models	Description	Sample surface (mm)	Tubes	Intensity ($\mu\text{W}/\text{cm}^2$)
TFX-35.WL	Hi/Lo intensity selector	200 x 350	(2 x 15-watt) + (2 x 6-watt)	NA

Vilber Lourmat is the leading European provider of molecular imaging systems, analysis software and UV fluorescence equipment. Founded over 50 years ago to serve the research, Vilber Lourmat has pioneered the post electrophoresis market and introduced breakthrough products such as stand alone gel-documentation, Bio-1D imaging software, Super-Bright UV technology, dedicated chemiluminescence imaging system and 3D approach to 1D gel analysis.

Through a network of owned subsidiary offices and local distributors located in over 60 countries around the world, Vilber Lourmat offers a broad range of products:

-> Gel documentation systems*
-> Chemiluminescence imaging systems*
-> Image analysis software*
-> UV instruments for molecular biology such as transilluminators, crosslinkers and UV lamps.*

For more information about Vilber Lourmat, visit our website at www.vilber.com



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