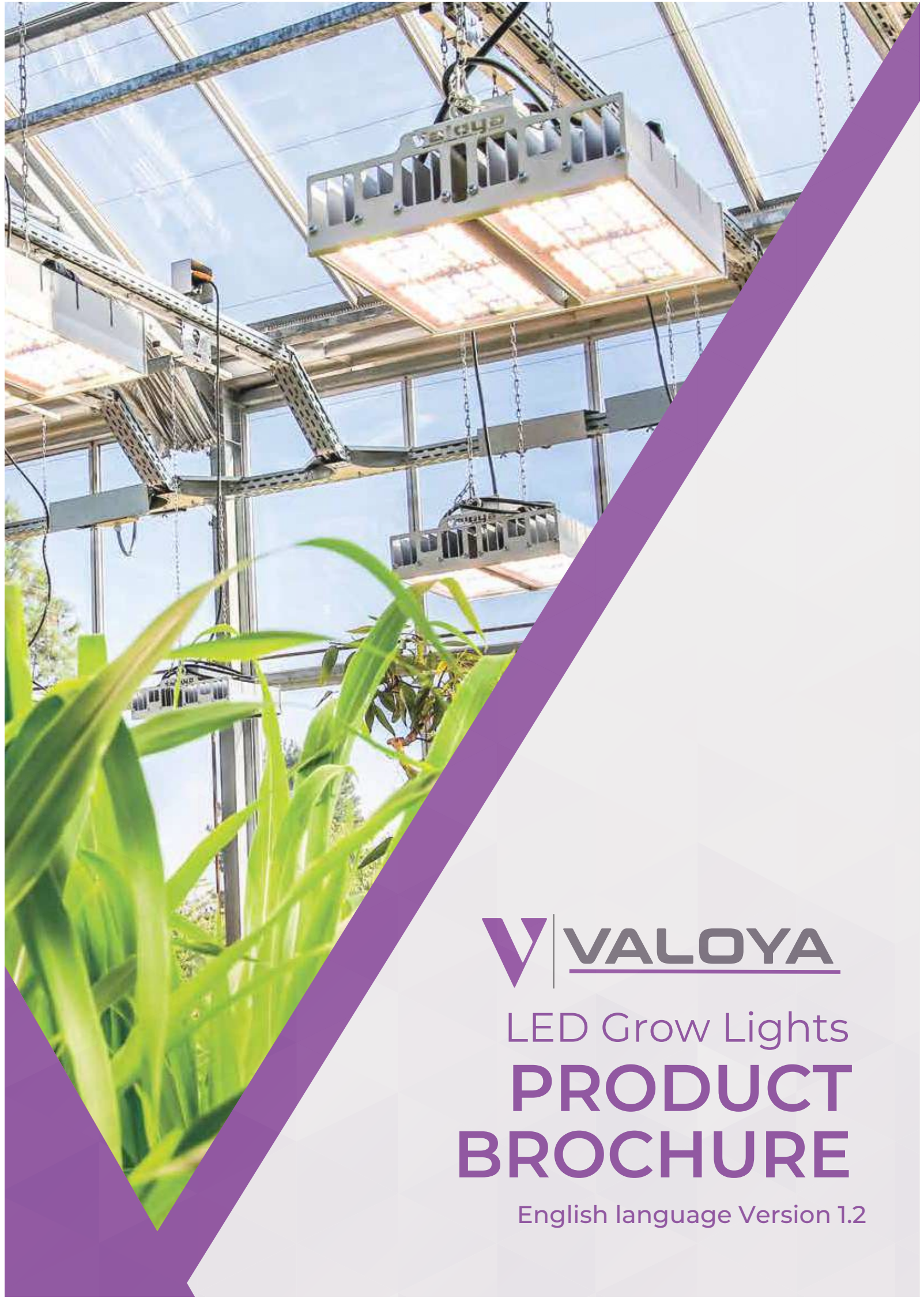




LED Grow Lights
**PRODUCT
BROCHURE**

English language Version 1.2



15 Years of Excellence

Valoya, a Finnish horticultural LED lighting manufacturer, has been dedicated to creating the best LED grow lights on the market, since 2009, for various applications such as crop science, crop productions, medicinal cannabis, vertical farming, and others. Our solutions empower growers to enhance their yields, quality, and energy efficiency across a set of diverse applications.

With one of the largest patent portfolios in the horticultural lighting industry, we are at the forefront of high-quality LED grow light solutions. Our research team rigorously tests all our spectra and fixtures in our in-house chambers and with 3rd party customers externally to ensure they meet the specific needs of growers and deliver the best results across various plant species.

Valoya technology is trusted by hundreds of clients, growers, and research institutes worldwide. As our customer, you will benefit from the expertise and support of our photobiologists, comprehensive seed-to-sale service, and our global sales team. Our in-house production facility allows us to manufacture products with the highest quality and sustainability standards.

-The Valoya Team



650+ Plant trials
conducted



60+ Spectra
tested



50+ Countries
sold to so far



100+ Patents
granted

VALOYA

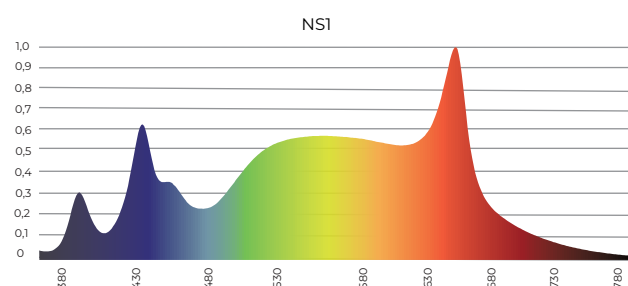
SPECTRA FAMILIES

DAYLIGHT SPECTRA

These spectra produce plant growth responses similar to the responses in natural sunlight. They are all broad spectra containing wavelengths across the spectrum including far-red, and most of them also containing UV-A, used in some the world's largest universities and research institutions, as well as those for medicinal plants.

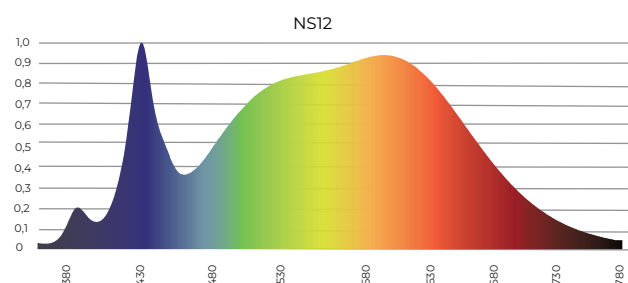
NS1/ NS12

Sun-like broad spectra are essential for research and biotechnology applications, illuminating chambers and greenhouses. These spectra have been featured in numerous scientific publications, providing the highest quality light for research purposes. Ensuring reliable protocols and consistent experimental results, it makes them invaluable for scientific work.



UV	B	G	R	FR	PAR
1%	21%	36%	38%	4%	95%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
4800	90	0.6	0.6	9.1	10.4

*Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)*



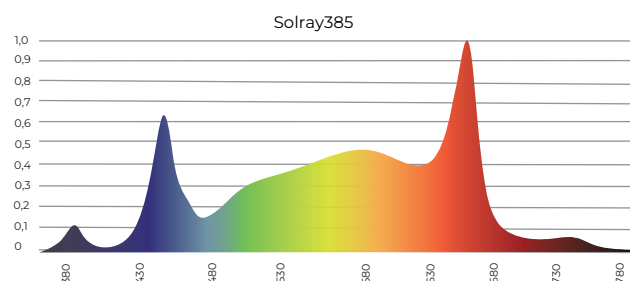
UV	B	G	R	FR	PAR
~1%	20%	38%	36%	6%	94%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
4500	90	0.5	0.6	6.1	4.3

*Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)*

Please contact sales@greenlux.com to inquire about customized spectra.

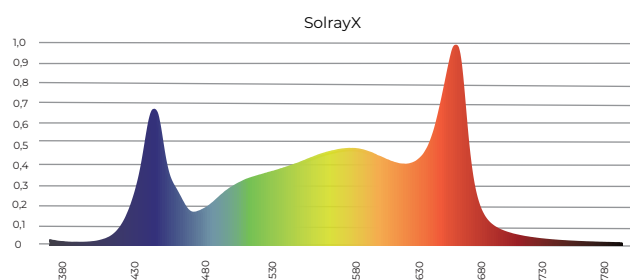
SolrayX/ Solray385

These spectra are optimized versions of sunlight for commercial horticulture and research applications with a balanced range of wavelengths from UV to FR. They are suitable for all growth stages and are designed to boost metabolite production resulting in consistent growth on most plant species worldwide.



UV	B	G	R	FR	PAR
2%	19%	36%	40%	3%	95%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
4500	95	0.5	0.5	12.9	13.0

*Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
R:sFRs (Sellaro et. al. 2010)*



UV	B	G	R	FR	PAR
0%	19%	37%	42%	2%	98%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
4500	95	0.5	0.5	26	37.6

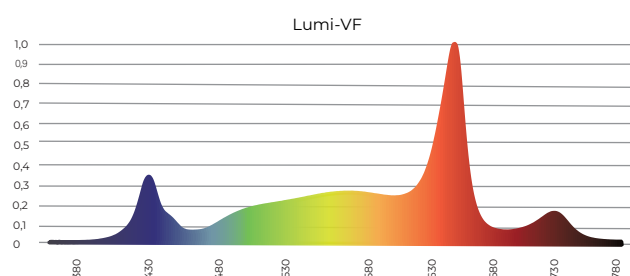
*Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
R:sFRs (Sellaro et. al. 2010)*

WHITE GROW LIGHTS

Our white grow lights offer highly efficient growth solutions for applications such as vertical farms and serve as an effective replacement for fluorescent tubes and superior alternatives to HPS lights in crop science and greenhouse production.

Lumi-VF

An efficient white grow light with additional far-red for boosting and accelerating vegetative growth with 30% increase in biomass compared to the competitors.



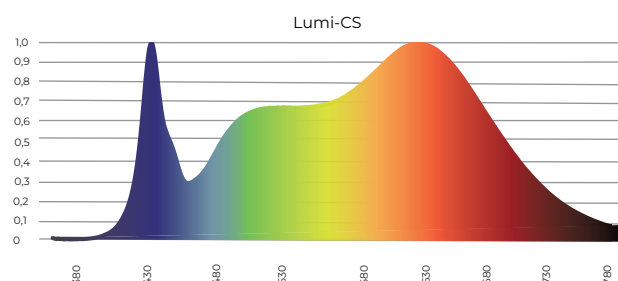
UV	B	G	R	FR	PAR
0%	14%	30%	49%	8%	92%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
3700	90	0.5	0.3	6.5	6

*Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
R:sFRs (Sellaro et. al. 2010)*

Please contact sales@greenlux.com to inquire about customized spectra.

Lumi-CS

A white grow light with top-tier spectral uniformity and a colour rendering index score of 94. This creates extremely good visibility to measure and observe plant growth and responses. Balanced wavelengths for all growth stages and a natural plant response. Suitable for the replacement of fluorescent tubes.

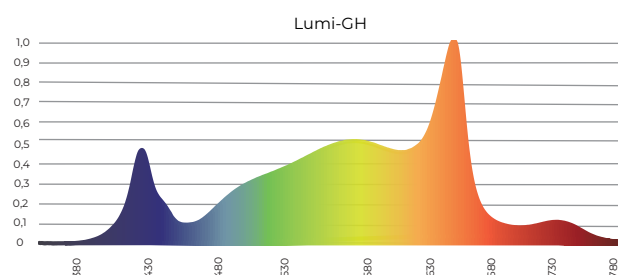


UV	B	G	R	FR	PAR
0%	19%	36%	38%	7%	91%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
4300	94	0.5	0.5	5,3	3,8

Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)

Lumi-GH

A top choice for 1:1 replacement of HPS lights. An efficient white grow light for both commercial greenhouses & research applications in glasshouses. Additional far-red in the spectrum helps with biomass, internodal length, flowering & fruiting.



UV	B	G	R	FR	PAR
0%	14%	35%	46%	5%	95%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
3700	90	0.4	0.3	8.4	8.1

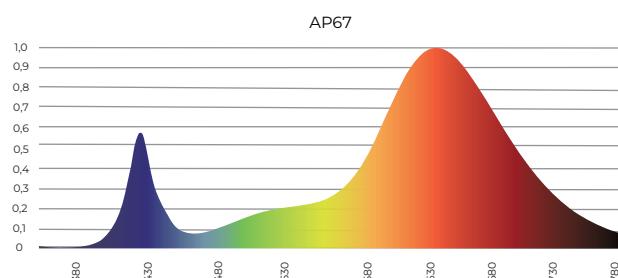
Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)

TAILORED SPECTRA

This spectra family includes spectra targeted towards specific plant responses, such as flowering, biomass growth, or vernalization.

AP67

A spectrum for strong generative growth. Designed to induce flowering, and suitable also for plant propagation and speed breeding.



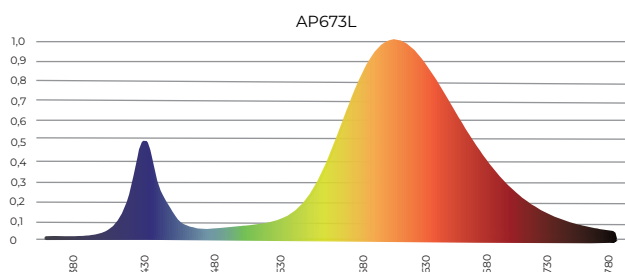
UV	B	G	R	FR	PAR
0%	12%	16%	57%	15%	85%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
2500	70	0.5	0.2	3.7	3.3

Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)

Please contact sales@greenlux.com to inquire about customized spectra.

AP673L

A spectrum for strong vegetative growth, boosting plant biomass, flavour & nutrient.

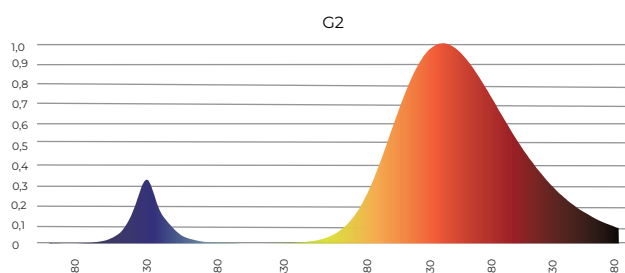


UV	B	G	R	FR	PAR
0%	10%	19%	63%	8%	91%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
2000	60	0.6	0.2	7.9	5.5

Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)

G2

G2 is traditionally used in vernalization applications with winter crops, therefore this spectrum is most popular in crop science and especially in crop breeding. The vernalization process is enhanced by reducing the time required for flower induction. This spectrum also enhances flowering and stem elongation.



UV	B	G	R	FR	PAR
0%	9%	2%	66%	23%	77%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
NA	NA	3.6	0.1	2.8	2.8

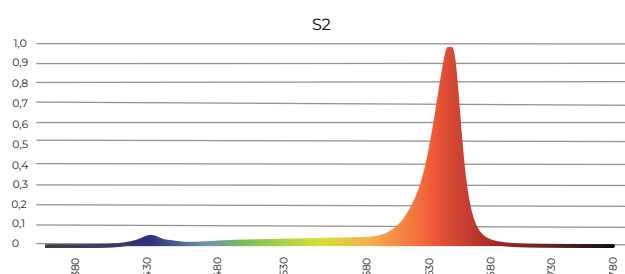
Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)

ENHANCED HIGH EFFICIENCY

Spectrum focused on high efficacy of up to 3.2 $\mu\text{mol/J}$, reducing electricity costs and therefore delivering efficient growth and photosynthesis for various applications.

S2

This spectrum is the most efficient for growth and supplemental lighting. By focusing on the most effective wavelengths for photosynthesis, this spectrum helps to results in improved energy efficiency and lower operational costs overall.



UV	B	G	R	FR	PAR
0%	5%	8%	86%	1%	99%
CCT	CRI	B:G	B:R	R:FR	R:sFRs
NA	NA	0.6	0.1	-	-

Typical values presented in the tables. There may be some variations between the spectra in different fixture models due to disparity in the LED layout.
Rs:FRs (Sellaro et. al. 2010)

Please contact sales@greenlux.com to inquire about customized spectra.

Valoya LED Luminaires

Choose a Form Factor for Your Needs

LL-CV Series



Multi-tier grow room, vertical farming, chambers
-Dimmable
-IP666
-Retrofit to fluorescent tubes
-UV Available

L-Series



Rooms and chambers, tissue culture and vertical farming
-Non-dimmable
-Slim, retrofit
-IP20

C-Series



Rooms and chambers, tissue culture and vertical farming
-Dimmable
-Slim, retrofit
-IP66

RF-Series



High intensity multi-tier grow room, vertical farming
-Dimmable
-IP65

BX-Series



Chambers, vertical farming, green houses, & HPS hybrid
-Dimmable
-IP67
-UV Available

BL-Series



High intensity multi-tier grow room, vertical farming
-Non-dimmable
-IP66
-Chainable

RX-Series



Greenhouse & HPS Hybrid
-Dimmable
-High Power
-IP65

LightDNA



Rooms and chambers, tissue culture and vertical farming
-Dimmable
-Multi-channel
-IP66

UV-Series



Rooms and chambers, tissue culture and vertical farming
-Dimmable
-UVB & UVA wavelengths
-IP66

To see which spectrum is available in which product series, please see detailed techsheets, pages 9-19 of this brochure.

LL-CV Series

LL60 & LL90



Customizable LED lighting platform, designed for seamless integration into diverse rack and room configurations. Mix-n-match different fixture lengths and spectra on a single mains input, to optimally illuminate your growing area.

Typical applications

Vertical farming, tissue culture, growth chamber

Light intensity in typical applications

20 ~ 400 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Optional Valoya LL-Series mounting rail kit.

	LL60-CV					LL90-CV				
Spectra	AP67	AP673L	NS12	Lumi-CS	G2	AP67	AP673L	NS12	Lumi-CS	G2
Dimensions (L x W x H)	572 x 37 x 13 mm 22,5x 1,5 x 0,5 in					872 x 37 x 13 mm 22,5 x 1,5 x 0,5 in				
Weight (kg)	0,19					0,29				
Power (W)	23					35				
Voltage (VAC)	48 VDC									
Efficacy (μmol/J)	2,1	2,1	2,2	2,0	2,1	2,1	2,1	2,2	2,0	2,1
Distance from plant (m)	0,1 - 1,0									
Warranty	Up to 5 years. More at www.valoya.com/warranty									
Certifications	CE marked, RoHS compliant.									
Light Output (μmol/s)	48	48	51	46	48	74	74	77	70	74
Control	0-10V, PWM, DALI option available									
IP Rating	IP66									
Lifetime	Q90 at 35 000 h		Q90 at 50 000 h			Q90 at 35 000 h		Q90 at 50 000 h		

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



GREENLUX, FINLAND
In-house trials



GREENLUX, FINLAND
In-house trials

LL-CV Series

LL120 & LL150



Customizable LED lighting platform, designed for seamless integration into diverse rack and room configurations. Mix-n-match different fixture lengths and spectra on a single mains input, to optimally illuminate your growing area.

Typical applications

Vertical farming, tissue culture, growth chamber

Light intensity in typical applications

20 ~ 400 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Optional Valoya LL-Series mounting rail kit.

	LL120-CV					LL150-CV				
Spectra	AP67	AP673L	NS12	Lumi-CS	G2	AP67	AP673L	NS12	Lumi-CS	G2
Dimensions (L X W X H)	1172 x 37 x 13 mm 22,5 x 1,5 x 0,5 in					1472 x 37 x 13 mm 22,5 x 1,5 x 0,5 in				
Weight (kg)	0,39					0,49				
Power (W)	46					57				
Voltage (VAC)	48 VDC									
Efficacy (μmol/J)	2,1	2,1	2,2	2,0	2,1	2,1	2,1	2,2	2,0	2,1
Distance from plant (m)	0,15 - 1,0									
Warranty	Up to 5 years. More at www.valoya.com/warranty									
Certifications	CE marked, RoHS compliant.									
Light Output (μmol/s)	97	97	101	92	97	120	120	125	114	120
Control	0-10V, PWM, DALI option available									
IP Rating	IP66									
Lifetime	Q90 at 35 000 h			Q90 at 50 000 h		Q90 at 35 000 h			Q90 at 50 000 h	

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



GREENLUX, FINLAND
In-house trials



GREENLUX, FINLAND
In-house trials

LL-Series

LL120 & LL150



Specifically designed for vertical farming, growth rooms, and chambers, the LL Series is a sleek, efficient, and robust grow light that offers exceptional durability and a high IP rating. LL-Series are available in a complete set of 3-4 luminaires (incl. drivers, cables and mounting accessories). Additional configuration is also possible for larger projects.

Typical applications

Vertical farming, tissue culture, growth chamber

Light intensity in typical applications

20 ~ 400 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Optional Valoya LL-Series mounting rail kit.

	LL120-3	LL120-4	LL150-3	LL150-4
Spectra	Lumi-VF	Lumi-VF	Lumi-VF	Lumi-VF
Dimensions (L x W x H)	(1470 x 37 x 13 mm)X3 (58 x 1,5 x 0,3 in)X3		(1470 x 37 x 13 mm)X4 (58 x 1,5 x 0,3 in)X4	
Weight (kg)	(0,39 kg)X3	(0,39 kg)X4	(0,49 kg)X3	(0,49 kg)X4
Power (W)	134	178	161	214
Voltage (VAC)	90-305 (uPowertek BLD-150-C380)	90-305 (uPowertek BLD-200-C420)	90-305 (uPowertek BLD-150-C380)	90-305 (uPowertek BLD-200-C420)
Efficacy ($\mu\text{mol}/\text{J}$)	2,6	2,6	2,8	2,8
Distance from plant (m)	0,15 - 1,0			
Warranty	Up to 5 years. More at www.valoya.com/warranty			
Certifications	CE marked, RoHS compliant.			
Light Output ($\mu\text{mol}/\text{s}$)	342	456	441	589
Control	0-10V, PWM, DALI option available			
IP Rating	IP66			
Lifetime	Q90 at 50 000 h			

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



GREENLUX, FINLAND
In-house trials



GREENLUX, FINLAND
In-house trials



C-Series

The C-series is ideal for grow rooms and other demanding applications where high intensity lighting is needed. These luminaires are ultra slim and lightweight which makes them easy to install even in places with very limited space. The bar shaped form factor minimizes shadow effect. These dimmable LED bars are highly resistant to dust and humidity (IP66) and come in three different lengths.

Typical applications

Grow rooms, vertical farms

Light intensity in typical applications

50 ~ 400 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks and LED driver included.

Optional hooks available to order.



Standard



Optional

	C65			C75			C90		
Spectra	AP67	AP673L	NS12	AP67	AP673L	NS12	AP67	AP673L	NS12
Dimensions (L x W x H)	1175 x 45 x 33 mm 46,3 x 1,8 x 1,3"			1475 x 45 x 33 mm 58 x 1,8 x 1,3"			1750 x 45 x 33 mm 68,9 x 1,8 x 1,3"		
Weight (kg / lb)	2,0 / 4,4			2,5 / 5,5			3,0 / 6,6		
Power (W)	60	60	63	75	75	77	85	86	86
Voltage (VAC)	100-240, 277								
Efficacy ($\mu\text{mol}/\text{J}$)	2,2	2,1	2,1	2,2	2,1	2,2	2,2	2,0	2,1
Distance from plant (m)	0,1 - 1,5								
Warranty	Up to 3 years limited warranty. More details at www.valoya.com/warranty								
Certifications	CE marked, RoHS compliant. Tested and certified to UL/CSA standards								
Light Output ($\mu\text{mol}/\text{s}$)	130	123	130	163	154	166	184	174	178
Control	0 - 10 V, PWM								
IP Rating	IP66								
Lifetime	Q90 at 35 000 h								

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



BAYER, FRANCE
Research chamber



LEAF EXPRESSION SYSTEM, UK
Research chamber

L-Series



The T8 size tube form factor allows the L-series products to be installed in fluorescent tube fixtures (fixtures with magnetic ballast). The optional installation kit available are cost effective, easy to install cable set with IP65 end caps.

Typical applications

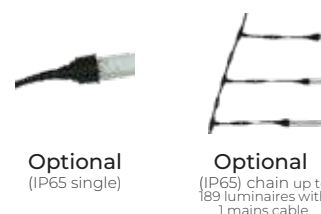
Vertical farming, tissue culture, growth chamber

Light intensity in typical applications

20 ~ 250 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Optional Valoya end-cap set with ingress protection available to order.



	L14	L18	L28				L35			
Spectra	NS12	AP67	AP67	AP673L	G2	NS12	AP67	AP673L	G2	NS12
Dimensions (Length / Diameter)	895 mm / Ø 26 35,2" / Ø 1,02	1198 mm / Ø 26 47,2" / Ø 1,02	1198 mm / Ø 26 47,2" / Ø 1,02		1498 mm / Ø 26 59" / Ø 1,02		1198 mm / Ø 26 47,2" / Ø 1,02		1498 mm / Ø 26 59" / Ø 1,02	
Weight (kg / lb)	0,29 / 0,64	0,36 / 0,79	0,36 / 0,79				0,44 / 0,97			
Power (W)	14	18	28				35			
Voltage (VAC)	110-240, 277									
Efficacy (µmol/J)	2,2	2,1	2,2				2,2			
Distance from plant (m)	0,15 - 0,5									
Warranty	Up to 3 years limited warranty. More details at www.valoya.com/warranty									
Certifications	CE marked, RoHS compliant. Tested and certified to UL/CSA standards									
Light Output (µmol/s)	31	38	62				76			
Control	No									
IP Rating	IP20 (L-Series); IP64 with optional end-cap									
Lifetime	Q90 at 35 000 h									

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



GROWING UNDERGROUND, UK
Vertical farm 30m under the ground



SELECTA KLEMM, GERMANY
Tissue Culture Lab

RF-Series



The Racking Fixture combines the latest in vertical cultivation design with Valoya's historic build quality. We utilize tempered glass lenses to obtain high light output and quality with easy cleaning and consistent predictable results for years to come.

Typical applications

Mid - to - high intensity lighting, multi-tier grow rooms

Light intensity in typical applications

100 ~ 1700+ $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks included. Optional hooks, mains input connector and blank cap available to order.

	RF350-3		RF700-6	
Spectra	Solray385	SolrayX	Solray385	SolrayX
Dimensions (L X W X H)	1190 x 515 x 85 mm 46,9 x 20,3 x 3,3"		1190 X 1130 X 85 mm 46,9 x 44,5 x 3,3"	
Weight (kg / lb)	6,0 / 13,2		8,5 / 18,7	
Power (W)	360	345	714	690
Voltage (VAC)	220 - 480			
Efficacy ($\mu\text{mol}/\text{J}$)	2,6	2,6	2,6	2,7
Distance from plant (m)	0,15 - 2,0			
Warranty	Up to 5 years. More at www.valoya.com/warranty			
Certifications	CE marked, RoHS compliant. Tested and certified to UL/CSA standards			
Light Output ($\mu\text{mol}/\text{s}$)	950	910	1890	1855
Control	0-10V, PWM			
IP Rating	IP65			
Lifetime	Q90 at 50 000 h			

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



PEARL PHARMA, USA
Cannabis Cultivation Facility



PEARL PHARMA, USA
Cannabis Cultivation Facility

BL-Series



BL-Series combines the high intensity and durability of the BX-Series with the chainability feature allowing up to 16 luminaires to be connected to a single mains input. The installation is easy due to an internal driver and the lifespan and quality of light are ensured due to the robust build, tempered glass cover and IP66 rating.

Typical applications

High intensity lighting, greenhouse, grow rooms

Light intensity in typical applications

100 ~ 1000 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks included. Optional hooks, mains input Wieland connector and blank cap available to order.



Standard



Optional



Optional



Optional

BL120

Spectra	AP67	AP673L	NS1
Dimensions (L x W x H)	1176 x 73.5 x 58 mm 46,3 x 2,9 x 2,3"		
Weight (kg / lb)	3,2 / 7,1		
Power (W)	119		116
Voltage (VAC)	220 -240		
Efficacy ($\mu\text{mol}/\text{J}$)	2,1		2,0
Distance from plant (m)	0.1 - 4.0		
Warranty	Up to 3 years limited warranty. More details at www.valoya.com/warranty		
Certifications	CE, UKCA, RoHS compliance		
Light Output ($\mu\text{mol}/\text{s}$)	254	239	230
Control	No		
IP Rating	IP66		
Lifetime	Q90 at 35 000 h		

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



CMF, MALAYSIA
Greenhouse



HELSINKI UNIVERSITY, FINLAND
Research Greenhouse

BX-Series



The BX-Series are high intensity, robust LED bars designed for growth chambers and multitier cultivation. They come in slim, light, humidity and impact resistant bar shaped luminaires. The BX-Series is rated IP67 meaning it is completely dust-tight and can withstand water submersion without compromising any functionality.

Typical applications

High intensity lighting, grow rooms, multilayer

Light intensity in typical applications

200 ~ 1000 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks and LED driver with mating part to the Cable connector included.
Optional hooks available to order.



Standard

Optional

BX120

BX180

Spectra	AP67	AP673L	NSI	Solray385	AP67	AP673L	NSI	Solray385
Dimensions (L X W X H)	1176 x 73,5 x 58 mm 46,3 x 2,9 x 2,3"				1722 x 73,5 x 58 mm 67,8 x 2,9 x 2,3"			
Weight (kg / lb)	2,6 / 5,7				3,9 / 8,6			
Power (W)	125		120	130	200		190	204
Voltage (VAC)	100 - 277							
Efficacy (μmol/J)	2,3	2,3	2,1	2,6	2,2	2,1	2,0	2,6
Distance from plant (m)	0.1 - 4.0							
Warranty	Up to 5 years limited warranty. More details at www.valoya.com/warranty							
Certifications	CE marked, RoHS compliant. Tested and certified to UL/CSA standards							
Light Output (μmol/s)	285		250	335	430	420	375	535
Control	0-10V, PWM, Dim to off				1-10V, PWM			
IP Rating	IP67							
Lifetime	Q90 at 36 000 h							

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



MPI, GERMANY
Research Chamber



CA, USA
Indoor facility for medicinal plants

RX-Series



The RX-series design resembles traditional HID lighting and offers an easy to install option for one-to-one replacement of HID lights. RX-series lights are thus ideal for a step by step investment in LEDs by replacing part of HID lights with more energy efficient Valoya wide spectrum LED lights. A highly durable fixture due to all aluminium build, high IP and passive cooling with easy to clean glass cover.

Typical applications

High intensity lighting, HID replacement

Light intensity in typical applications

100 ~ 1000 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks and mating part to the cable connector included. Optional hooks available to order.



Standard



Optional

	RX400		RX500			RX600				RX800	
Spectra	AP67	NSI	AP67	AP673L	NSI	Solray385	Solray385FR	Lumi- GH	SolrayX	S2	
Dimensions (L X W X H)	350 x 400 x 170 mm 13,8 x 15,7 x 6,7"										
Weight (kg / lb)	11,6 / 26,4										
Power (W)	395		480			470	655	655	650	655	795
Voltage (VAC)	120 - 240, 277		110 - 277; 220 - 480								
Efficacy (μmol/J)	2,3	2,2	2,3	2,2	2,1	2,6	2,6	2,7	2,7	3,1	
Distance from plant (m)	0,5 - 4,0										
Warranty	Up to 5 years. More at www.valoya.com/warranty										
Certifications	CE marked, RoHS compliant										
Light Output (μmol/s)	920	852	1100	1060	1000	1700	1700	1770	1750	2470	
Control	0-10V		0-10V, PWM. Light output: off. 10 - 100%, DALI								
IP Rating	IP65										
Lifetime	Q90 at 36 000 h					Q90 at 36 000 h		Q90 at 50 000 h			

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



DELIVERDE, FINLAND



MPI, GERMANY
Research greenhouse



LFL, GERMANY
Research greenhouse



PA, USA
Indoor facility for medical plants



RX-Series

The RX-series design resembles traditional HID lighting and offers an easy to install option for one-to-one replacement of HID lights. RX-series lights are thus ideal for a step by step investment in LEDs by replacing part of HID lights with more energy efficient Valoya wide spectrum LED lights. A highly durable fixture due to all aluminium build, high IP and passive cooling with easy to clean glass cover.

Typical applications

High intensity lighting, HID replacement

Light intensity in typical applications

100 ~ 1000 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks and mating part to the cable connector included. Optional hooks available to order.



Standard



Optional

	RX325						RX360	
Spectra	AP67	NS1	Solray385	Solray385FR	SolrayX	Lumi-GH	S2	
Dimensions (L x W x H)	350 x 235 x 178 mm 13,8 x 9,3 x 7"							
Weight (kg / lb)	5,8 / 12,8							
Power (W)	245	255	335				370	
Voltage (VAC)	110 - 277; 220 - 480							
Efficacy (μmol/J)	2,2	2,1	2,6	2,6	2,7	2,7	3,1	
Distance from plant (m)	0.5 - 4.0							
Warranty	Up to 5 years. More at www.valoya.com/warranty							
Certifications	CE marked, RoHS compliant							
Light Output (μmol/s)	545	540	870		900	900	870	1140
Control	0-10V, PWM. Light output: off. 10 - 100%							
IP Rating	IP65							
Lifetime	Q90 at 36 000 h				Q90 at 50 000 h			

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



DELIVERDE, FINLAND



MPI, GERMANY
Research greenhouse



LFL, GERMANY
Research greenhouse



PA, USA
Indoor facility for medical plants

LightDNA



LightDNA is a high-end product line of Valoya's professional LED grow lights. Our Light DNA-2 offers two dimmable channels (daylight spectrum and far-red), enabling flexible and precise control of light intensity and spectrum. With IP66 protection, it allows for a more accurate simulation of daily and seasonal light patterns.

Typical Applications

Climate rooms and chambers above tables and in plant shelves

Light Intensity in Typical Applications

200 ~ 1000 $\mu\text{mol}/\text{m}^2/\text{s}$

Accessories

Standard hooks are included. Accessories are determined based on project specifications. Please consult our sales team before purchasing.

	Dynamic 2-Channel Light			
	BX120-2ch		BX180-2ch	
Spectra	NSI+FR Solray+FR		NSI+FR Solray+FR	
Dimensions (L X W X H)	1176 x 73,5 x 58 mm 46,3 x 2,9 x 2,3"		1722 x 73,5 x 58 mm 67,8 x 2,9 x 2,3"	
Weight (kg / lb)	2,6 / 5,7		3,9 / 8,6	
Power (W)	132		199	
Voltage (VAC)	100-240, 277			
Efficacy (μmol/J)	Please check with sales (product dependent)			
Distance from plant (m)	0,1 - 4,0			
Warranty	Up to 3 years limited warranty. More details at www.valoya.com/warranty			
Certifications	CE marked, RoHS compliant.			
Light Output (μmol/s)	Please check with sales (product dependent)			
Control	1 - 10 V, PWM			
IP Rating	IP67			
Lifetime	Q90 at 36 000 h			

Typical values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures

References



MPI, GERMANY
Research chamber



BRONSON CHAMBERS, NETHERLANDS
Research chamber

UV-Series



Valoya UV products provide a diverse selection of narrowband and broadband solutions, covering both UVB and UVA wavelengths. The slim, narrowband LL120-Series is a durable, and lightweight fixture designed to enhance both existing and new lighting setups. Easy to install and integrate, it offers a seamless solution for optimizing UV illumination.

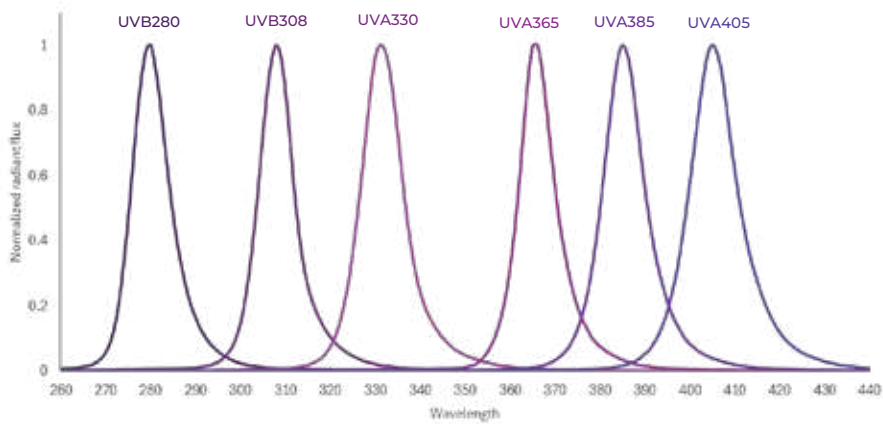
LL-Series are available in a complete set of 3-4 luminaires (incl. drivers, cables and mounting accessories). Additional configuration is also possible for larger projects.



LL-Series

Product	LL120 UVB280	LL120 UVB308	LL120 UVA330	LL120 UVA365	LL120 UVA385	LL120 UVA405
Dimensions (L X W X H)	1172 x 13 x 37 mm 46 X 1,5 X 0,5"					
Weight (kg/lb)	0,39 / 0,9					
Power (W)	22 W	19 W	19 W	21 W	20 W	20 W
Voltage (VAC)	200 - 277 VAC					
Distance from plant (m)	0,15 - 1,0					
Certifications	CE marked					
Light Output (mW)	1045 mW	855 mW	950 mW	6890 mW	8200 mW	7650 mW
Control	0-10V, PWM, DALI option available					
IP Rating	IP66					
Warranty	Up to 5 years limited warranty. More details at www.valoya.com/warranty					
Lifetime	Q70 at 40 000 h					

Estimated values presented. Tolerances apply. For more detailed technical specifications please download the 'Technical Data Sheet' from valoya.com/brochures



Valoya fixtures have been tested according to the following standards:

NORTH AMERICA

UL1598: Luminaire safety.
 UL8750: Light Emitting Diode (LED) equipment for use In lighting products.
 UL2108: Standard for Low Voltage Lighting Systems.
 UL 8800: Standard for Horticultural Lighting Equipment
 CSA C22.2: #9.0: General Requirements for Luminaires.
 CSA C22.2: #250.0.8: Safety for Light emitting diode (LED) equipment for lighting applications.
 CSA C22.2 No. 250.13-14: Light Emitting Diode (LED) equipment for use in lighting products.

EUROPE

EN60598-1: Luminaires. General requirements and tests.
 EN60598-2-1: Luminaires. Part 2: Particular requirements. Section one – Fixed general purpose luminaires.
 EN62031: LED modules for general lighting. Safety specifications.
 EN 62493: Assessment of lighting equipment related to human exposure to electromagnetic fields.
 EN55015: Limits and methods of measurement of radio disturbance characteristics of electrical lighting and similar equipment.
 EN61547: Equipment for general lighting purposes. EMC immunity requirements.
 EN61000-3-2: Electromagnetic compatibility - Limits - Limits for harmonic current emissions.
 EN61000-3-3: Electromagnetic compatibility – Limits - Limits for Voltage Fluctuations and Flicker.
 IEC EN 61000-4-2: Electromagnetic compatibility (EMC)- Part 4-2: Testing and measurement techniques - electrostatic discharge immunity test.
 IEC EN 61000-4-3: Electromagnetic compatibility (EMC)- Part 4-3: Testing and measurement techniques - radiated, radio-frequency, electromagnetic field immunity test.
 IEC EN 61000-4-4: Electromagnetic compatibility (EMC) - Part 4-4: Testing and measurement techniques - Electrical fast transient/burst immunity test.
 IEC EN 61000-4-5: Electromagnetic compatibility (EMC) - Part 4-5: Testing and measurement techniques - Surge immunity test.
 IEC EN 61000-4-6: Electromagnetic compatibility (EMC) - Part 4-6: Testing and measurement techniques - Immunity to conducted disturbances, induced by radio-frequency fields.
 IEC EN 61000-4-8: Electromagnetic compatibility (EMC) - Part 4-8: Testing and measurement techniques - Power frequency magnetic field immunity test.
 IEC EN 61000-4-11: Electromagnetic compatibility (EMC) - Part 4-11: Testing and measurement techniques - Voltage dips, short interruptions and voltage variations immunity tests.
 IEC 61347-2-13: Lamp controlgear. Particular requirements for d.c. or a.c. supplied electronic controlgear for LED modules.
 IEC 61347-1: Lamp controlgear - Part 1: General and safety requirements.
 IEC 62384: DC or AC supplied electronic control gear for LED modules. Performance requirements.
 EN62471: Photobiological safety of lamps and lamp systems.
 EN62560: Self-ballasted LED-lamps for general lighting services by voltage >50V - Safety specifications.
 EN62776: Double-capped LED lamps designed to retrofit linear fluorescent lamps - Safety specifications.

Get in touch with Valoya!

Headquarters

☎ +358 29 3700 670
 ✉ sales@greenlux.com
 🌐 www.valoya.com
 🌐 www.greenlux.com

📍 Mekaanikonkatu 1
 00880 Helsinki
 Finland



Visit our website.

North America

Valoya Inc
 ✉ sales.us@valoya.com

India

Valoya India
 ✉ sales.india@valoya.com

Distributors

To find a local distributor,
 please go to
www.valoya.com/contact



Valoya is a part of Greenlux Lighting Solutions Ltd.

Valoya® is a registered trademark of Valoya Oy in the European Community, the USA and certain other countries.
 Due to our continuous program of product development, data is subject to change without notice.