# DIMUX XIREALE SERIES MU HIGHEST YIELD THROUGH SUPERIOR TECHNOLOGY



**INTRODUCING THE ENHANCED DIMLUX XTREME SERIES MKII** 

### - UNRIVALLED PERFORMANCE - NEW FEATURES THAT MAKE THE DIFFERENCE

**RESULTING IN THE HIGHEST YIELD THINKABLE** 



THE FUTURE OF GROWING JUST GOT BRIGHTER. Elevate your cultivation with the Dimlux Xtreme Series MKII. Specifically designed to meet the high standards of professional cultivation facilities, this fixture provides the most efficient and effective lighting for every growth stage.

## **TOP PERFORMANCE** & MAXIMUM YIELD

#### **HIGHEST YIELD**

With a Total Photon Efficacy of up to  $3.55 \ \mu mol/J$ , the Xtreme MKII delivers an unrivalled light output that's up to 20% higher than comparable fixtures on the market. Its maximum light output of  $3570 \ \mu mol/s$  boosts photosynthesis activity, directly leading to faster growth and higher harvest yields.

## FLEXIBLE LIGHT SPECTRUM FOR EVERY GROWTH STAGE

The flexible PhytoVegSpec® light spectrum of the Xtreme MKII allows you to adjust light settings for each growth stage. Additionally, the fixture can be enhanced with NIR (Far Red), UV-A, and UV-B, providing you with complete control over light quality and intensity for each stage. This customizable technology offers the freedom to create the ultimate cultivation environment, offering you the highest yield.

## FEATURES THAT MAKE THE DIFFERENCE

#### **OPTIMIZED OPTICS**

The specially designed deep light penetration lens of the Xtreme MKII increases light output and penetrates deeper into the crop. This promotes even growth and enhances photosynthesis efficiency, even in the lower layers of the crop.

#### **EASE OF USE AND CONTROL**

The Xtreme MKII is easy to operate with the Dimlux control system. This remote-control function allows you to precisely manage your lighting settings, ensuring optimal conditions for your crops. Integration with external hardware and software provides full flexibility and control over your cultivation environment.



#### NEGATIVE IONIZER + COLD PLASMA GENERATOR

Our patented integrated ionizer with cold plasma technology (without ozone) significantly reduces disease pressure by effectively neutralizing airborne pathogens. This results in healthier crops and a greatly enhanced yield quality.

#### TAILORED LIGHT OPTIONS

The Dimlux Xtreme MKII is available in 550W, 800W, and 1050W versions, in both standard and +NIR models, with optional add-ons for NIR+UV-A and UV-B.

## THE DIMLUX XTREME SERIES MKII: A SMART INVESTMENT

#### QUICK PAYBACK PERIOD THROUGH INCREASED YIELD

With a proven quick payback period due to increased yield, the Dimlux Xtreme MKII offers a reliable and sustainable solution for your cultivation. Our technology combines innovative features and advanced performance to make your cultivation business competitive and profitable.

XTREME

## PROUDLY DESIGNED AND ENGINEERED IN THE NETHERLANDS

Dimlux is a true Dutch company, dedicated to designing and engineering high-quality horticultural lighting from our own R&D center at our headquarters in Amsterdam. With an in-house team of experts, we drive every stage





## **SEEING IS BELIEVING**

Calculate your jump in yield with our ROI calculator.



of product development—from initial concept to final engineering—ensuring that each Dimlux product embodies the renowned Dutch standard of quality and innovation. Our focus on precision, sustainability, and reliability has established us as a leader in horticultural lighting, proudly representing the world-class craftsmanship for which the Netherlands is known. When you choose Dimlux, you're choosing genuine Dutch quality, built to enhance every aspect of your cultivation.



## **DIMLUX** XTREME SERIES 550W LED MKII ION







#### **SPECIFICATIONS**

Light Source	550W LED
Spectrum	Adjustable PhytoVegSpec <sup>®</sup> Indoor
Light Output (PPF)	1965 µmol/s
Light Output Total (PPF 350-	800nm) 1994 µmol/s
PAR Photon Efficacy (400-700)	am) 3.4 μmol/J @ 230-240V AC
Total Photon Efficacy (350-800	nm) 3.45 μmol/J @ 230-240V AC
AC Input Power	578W
AC Input Voltage	208-400V AC, 50/60Hz
Beam Angle	90° × 120°
Optics	Patented Deep Penetration Ultra High Transmittance Lens
Auxiliary Light	Patented Light Pipe Multi Color 65k
loniser	Patented Negative Ions & Cold Plasma
Ozone	Non Detectable <0.05PPM

#### **TOP VIEW**

32.8" (833m)



#### Doppler Radar Proximity sensor Minimum Mounting Height Above Canopy 50 cm / 19.7" Thermal Management Passive 35°C / 95°F Max. Ambient Temperature By Smart Remote, Maxi Controller or Internal Controller Control Smartports (3x) Interlink, Plant Temperature Sensor, Light Sensor Display For Spectrum and GUI 1.54" 65k Color IPS Total Harmonic Distortion (THD) < 20% Lifetime L90 > 50,000h IP65 IP Rating CE, UL 8800, UL 1598 Wet Location, DLC Certifications 12.4 kg / 27.3 lbs Weight Warranty 5 Year Standard

#### **SPECTRUM**

**SIDE VIEW** 

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#### **SPECIFICATIONS**

Light Source	550W LED
Spectrum	Adjustable PhytoVegSpec® Indoor +NIR
Light Output (PPF)	1965 µmol/s
Light Output Total (PPF 350-800nm)	1850 µmol/s
PAR Photon Efficacy (400-700nm)	3.2 µmol/J @ 230-240V AC
Total Photon Efficacy (350-800nm)	3.4 µmol/J @ 230-240V AC
AC Input Power	578W
AC Input Voltage	208-400V AC, 50/60Hz
Beam Angle	90° × 120°
Optics Patented D	eep Penetration Ultra High Transmittance Lens
Auxiliary Light	Patented Light Pipe Multi Color 65k
loniser	Patented Negative Ions & Cold Plasma
Ozone	Non Detectable <0.05PPM

**TOP VIEW** 

**SIDE VIEW** 





Proximity sensor		Doppler Radar
Minimum Mounting Height	Above Canopy	50 cm / 19.7"
Thermal Management		Passive
Max. Ambient Temperature		35°C / 95°F
Control	By Smart Remote, Maxi	Controller or Internal Controller
Smartports (3x)	Interlink, Plant Tem	perature Sensor, Light Sensor
Display For Spectrum and GU	IL	1.54″ 65k Color IPS
Total Harmonic Distortion (	(DH)	< 20%
Lifetime L90		> 50,000h
IP Rating		IP65
Certifications	CE, UL 880	00, UL 1598 Wet Location, DLC
Weight		12.4 kg / 27.3 lbs
Warranty		5 Year Standard

#### SPECTRUM







# TREME SERIES 800W LED MKII ION



#### **SPECIFICATIONS**

Light Source	800W LED
Spectrum	Adjustable PhytoVegSpec <sup>®</sup> Indoor
Light Output (PPF)	2884 µmol/s
Light Output Total (PPF 350-800nm)	2926 µmol/s
PAR Photon Efficacy (400-700nm)	3.45 µmol/J @ 230-240V AC
Total Photon Efficacy (350-800nm)	3.5 µmol/J @ 230-240V AC
AC Input Power	836W
AC Input Voltage	208-400V AC, 50/60Hz
Beam Angle	90° × 120°
Optics Patente	d Deep Penetration Ultra High Transmittance Lens
Auxiliary Light	Patented Light Pipe Multi Color 65k
loniser	Patented Negative Ions & Cold Plasma
Ozone	Non Detectable <0.05PPM

#### **TOP VIEW**

46.9" (1193m)



Proximity sensor		Doppler Radar
Minimum Mounting Height Above Canopy		60 cm / 23.6″
Thermal Management		Passive
Max. Ambient Temperature		35°C / 95°F
Control	By Smart Remote, Maxi Contr	oller or Internal Controller
Smartports (3x)	Interlink, Plant Temperat	ure Sensor, Light Sensor
Display For Spectrum and GL	II	1.54" 65k Color IPS
Total Harmonic Distortion (1	HD)	< 20%
Lifetime L90		> 50,000h
IP Rating		IP65
Certifications	CE, UL 8800, UI	1598 Wet Location, DLC
Weight		16.1 kg / 35.5 lbs
Warranty		5 Year Standard

#### SPECTRUM

**SIDE VIEW** 





#### SPECIFICATIONS

Light Source	800W LED
Spectrum	Adjustable PhytoVegSpec® Indoor +NIR
Light Output (PPF)	2663 µmol/s
Light Output Total (PPF 350-800nm)	2871 µmol/s
PAR Photon Efficacy (400-700nm)	3.2 µmol/J @ 230-240V AC
Total Photon Efficacy (350-800nm)	3.45 µmol/J @ 230-240V AC
AC Input Power	832W
AC Input Voltage	208-400V AC, 50/60Hz
Beam Angle	90° × 120°
Optics Patented	Deep Penetration Ultra High Transmittance Lens
Auxiliary Light	Patented Light Pipe Multi Color 65k
loniser	Patented Negative Ions & Cold Plasma
Ozone	Non Detectable <0.05PPM

**TOP VIEW** 

**SIDE VIEW** 







## XTREME SERIES 800W LED + NIR MKII ION

Proximity sensor		Doppler Radar
Minimum Mounting Height	Above Canopy	60 cm / 23.6"
Thermal Management		Passive
Max. Ambient Temperature		35°C / 95°F
Control	By Smart Remote, Maxi Co	ntroller or Internal Controller
Smartports (3x)	Interlink, Plant Tempe	rature Sensor, Light Sensor
Display For Spectrum and GU	JI	1.54″ 65k Color IPS
Total Harmonic Distortion (1	THD)	< 20%
Lifetime L90		> 50,000h
IP Rating		IP65
Certifications	CE, UL 8800,	UL 1598 Wet Location, DLC
Weight		16.1 kg / 35.5 lbs
Warranty		5 Year Standard

#### SPECTRUM







## **DIMLUX** XTREME SERIES 1050W LED MKII ION





#### **SPECIFICATIONS**

Light Source	1050W LED
Spectrum	Adjustable PhytoVegSpec® Indoor
Light Output (PPF)	3877 µmol/s
Light Output Total (PPF 350-800	Dnm) 3931 μmol/s
PAR Photon Efficacy (400-700nm)	3.55 µmol/J @ 230-240V AC
Total Photon Efficacy (350-800nm	) 3.6 µmol/J @ 230-240V AC
AC Input Power	1092W
AC Input Voltage	208-400V AC, 50/60Hz
Beam Angle	90° × 120°
Optics Pc	atented Deep Penetration Ultra High Transmittance Lens
Auxiliary Light	Patented Light Pipe Multi Color 65k
loniser	Patented Negative Ions & Cold Plasma
Ozone	Non Detectable <0.05PPM

#### **TOP VIEW**

46.9" (1193mm)



#### Doppler Radar Proximity sensor Minimum Mounting Height Above Canopy 70 cm / 28″ Thermal Managemen Passive 35°C / 95°F Max. Ambient Temperature By Smart Remote, Maxi Controller or Internal Controller Control Smartports (3x) Interlink, Plant Temperature Sensor, Light Sensor Display For Spectrum and GUI 1.54" 65k Color IPS Total Harmonic Distortion (THD) < 20% Lifetime L90 > 50,000h IP Rating IP65 Certifications CE, UL 8800, UL 1598 Wet Location, DLC 20.8 kg / 45.8 lbs Weight Warranty 5 Year Standard

DIMLUX XTREME

#### **SPECTRUM**

**SIDE VIEW** 





#### **SPECIFICATIONS**

Light Source	1050W LED
Spectrum	Adjustable PhytoVegSpec® Indoor +NIR
Light Output (PPF)	3604 µmol/s
Light Output Total (PPF 350-800nm)	3822 µmol/s
PAR Photon Efficacy (400-700nm)	3.3 µmol/J @ 230-240V AC
Total Photon Efficacy (350-800nm)	3.5 µmol/J @ 230-240V AC
AC Input Power	1092W
AC Input Voltage	208-400V AC, 50/60Hz
Beam Angle	90° × 120°
Optics Patented	Deep Penetration Ultra High Transmittance Lens
Auxiliary Light	Patented Light Pipe Multi Color 65k
loniser	Patented Negative Ions & Cold Plasma
Ozone	Non Detectable <0.05PPM

**TOP VIEW** 

**SIDE VIEW** 





Proximity sensor	Doppler Radar
Minimum Mounting Height	Above Canopy 70 cm / 28″
Thermal Management	Passive
Max. Ambient Temperature	35°C / 95°F
Control	By Smart Remote, Maxi Controller or Internal Controller
Smartports (3x)	Interlink, Plant Temperature Sensor, Light Sensor
Display For Spectrum and GU	I 1.54″ 65k Color IPS
Total Harmonic Distortion (1	HD) < 20%
Lifetime L90	> 50,000h
IP Rating	IP65
Certifications	CE, UL 8800, UL 1598 Wet Location, DLC
Weight	20.8 kg / 45.8 lbs
Warranty	5 Year Standard

#### SPECTRUM







# **DIMLUX XTREME SERIES LED**

#### ABOUT OUR FLEXIBLE PHYTOVEGSPEC® LIGHT SPECTRUM

Our adjustable PhytoVegSpec® light spectrum combines full control over light quality (spectral flexibility) and quantity (intensity and DLI) ensuring a uniform spread and even light distribution with extreme penetration into the canopy. The Dimlux Xtreme Series LED produces ultra-high levels of PPFD, evenly spread over a 1.62×1.62m grow area, with a full light spectrum, producing consistently high quality & high yield indoor crops.



The Dimlux Xtreme Series LED can be dimmed without losing efficiency. The spectrum and output power can be programmed depending on the time of day and the growing stage of the crop. The auxiliary RGB LEDs can be used as additional light and as (green) work light in the night phase. The auxiliary lighting can be switched on automatically by the internal radar motion sensor.

#### **CHOOSE FOR STANDARD OR +NIR VERSION?**

The +NIR (which stands for 'Nearly InfraRed') fixtures have extra far-red light that is used together with red. Due to the extra far red, the plants will grow taller than with the non-far-red variety. The extra far red provides a more complete spectrum, increased photosynthesis, increased photon absorption and an increased yield due to modified morphology. The plant will stretch a little more than with the normal version without NIR. Customers who aim for the most compact cultivation possible opt for the normal version without extra far red.

#### BOOST GROWTH WITH OUR SPECTRUM-ENHANCING UV-A+NIR AND UV-B ADD-ONS

Maximize your growth results with Dimlux's specialized add-ons designed to extend the light spectrum for even greater crop performance. Our UV-A+NIR and UV-B add-ons provide targeted wavelengths that enhance photosynthesis and stimulate plant development even more.

The advanced and separate UV-A, UV-B, and NIR controls offer precise light tailoring throughout the grow cycle. UV-A increases resistance to fungi and other pathogens. It can be used as photosynthesis booster in combination with red light. When used after sunset, it accelerates the nighttime metabolism and the sleep rhythm which speeds up flower inducement. UV-B intensifies potency, resin production, and pathogen resistance, with a synergistic effect when paired with UV-A, maximizing benefits while minimizing stress on plants. Easy to integrate, these add-ons allow you to tailor your lighting strategy for optimal results across every growth stage.



# **DIMLUX XTREME SERIES LED**

#### ABOUT OUR NEGATIVE IONIZER + COLD PLASMA GENERATOR

#### WHAT IS IT AND IS THIS COMPLETELY NEW?

Our integrated ionizer with cold plasma technology significantly reduces disease pressure by effectively neutralizing airborne pathogens. This results in healthier crops and a greatly enhanced yield quality. The use of an ionizer with cold plasma technology for this purpose within agriculture is common and not new. What's new and boundary breaking, is that Dimlux has now integrated this patented technology within a fixture.

#### HOW DOES IT WORK IN PRACTICE?

The extremely powerful negative ions flow is created and expelled from the ionic optics and sends out electrically charged negative ions into the air that bond with pathogens. Once a bond is made, these particles become too heavy to stay in the air. This results in the contaminants falling to the floor. It is also possible to create positive ions which in combination with negative ions bond to pathogens and because of the energy that comes free the pathogen will be destroyed. The ratio between the negative and positive ions can be selected based on the pathogen that's needs to be neutralized. Ions have a very short lifespan from a few seconds to multiple seconds, because of this the ions must be generated as close to crop as possible to get the desired result. Due to the ionic optics that are close to the crop and the fact that each fixture covers its own micro area, the ions are at full strength when they reach the crop and are therefore extremely effective. This placement across the entire crop field and close to the plants, makes the built-in ionizer in the fixture far more effective than usual standalone ionizers which don't have this spread and coverage.

## CUSTOMIZABLE IONIZATION FOR PRECISION CONTROL

The Dimlux Xtreme Series MKII ionizer allows you to easily adjust the balance of positive and negative ions to suit your specific cultivation needs.



DIMLUX



With simple, user-friendly controls, you can fine-tune the ion ratio for optimal air quality and disease prevention. Additionally, you have the flexibility to turn off the ionizer completely if desired, giving you full control over your growing environment.

## SAFE AND PROVEN: IONIZATION AND COLD PLASMA TECHNOLOGY IN AGRICULTURE

Ionization and cold plasma technologies are safe and proven. They are well-researched and have already been safely applied in agriculture to reduce airborne pathogens without harming workers or crops. These technologies function by generating ions that neutralize contaminants, similar to naturalions found in forests and mountains. Studies show that when properly implemented, ionization meets OSHA and other health standards, ensuring that ozone levels remain safe for human and plant exposure.

The Dimlux Xtreme Series MKII uniquely integrates this proven technology into its lighting and in accordance with OSHA standards, combining air purification and optimal lighting in a proven safe way. For more information and research about the effectivity and the absolute safety for humans and crops we recommend to read this research on using this technology in agricultural fields: www.mdpi.com/852108







Designed and engineered in the Netherlands www.dimlux.nl

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