#### **AREA PORTFOLIO**



## **OMNIblast GEN2**













#### Unrivalled combination of performance and flexibility

OMNIblast GEN2 is the ideal tool for sports venues and other very large area applications that require a lighting solution with the highest efficiency and flexibility to adapt to the different lighting needs.

This new LED solution offers an alternative with proven benefits for traditional fixtures fitted with 800W, 1000W, 1500W and 2000W lamps. OMNIblast GEN2 ensures the high horizontal and vertical lighting levels to meet the strict requirements of sports federations and TV broadcasting. A modular concept of optical units means that 1, 2 or 3 modules can be mounted on the same bracket to offer the utmost versatility, providing light distributions and lumen packages perfectly adapted to the specifications of the area to be lit.

To enhance the on-site experience and television images, the OMNIblast GEN2 guarantees perfect glare control, a high colour rendering index (CRI) and television lighting consistency index (TLCI) as well as flicker-free lighting. The OMNIblast GEN2 is available with warm, neutral or cool white LEDs as well as with RGB LEDs for theatrical effects.



ARENA

## OMNIblast GEN2 | SUMMARY

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#### CONCEPT

The OMNIblast GEN2 has been designed to provide an unrivalled combination of performance and flexibility for lighting sports venues and other areas where high lumen packages are needed. It is the ideal replacement for 800W, 1000W, 1500W and 2000W discharge lamps.

It ensures high lighting levels (horizontal and vertical) to meet the requirements of sport federations and broadcasters. To enhance the on-site experience and television images, the OMNIblast guarantees perfect glare control, a high colour rendering index (CRI) and television lighting consistency index (TLCI >85+) as well as flicker-free lighting for perfect high-definition broadcast and super slow motion replays.

The OMNIblast GEN2 incorporates a patented cooling technology that maximises its life span and lumen output.

The modular concept of optical units which enables 1, 2 or 3 modules to be grouped on the same bracket and the performing LensoFlex<sup>®</sup>3, BlastFlex<sup>TM</sup> and ReFlexo<sup>TM</sup> LED engines means that the OMNIblast GEN2 provides a wide range of lighting distributions and lumen packages to meet the specifications of the area to be lit.

It offers perfect glare control with specific optical units and external accessories such as a hood and louvres. The gear boxes can be installed remotely (up to 200m) or on a various range of brackets.

The OMNIblast GEN2 is available with standard warm white (3000K), neutral white (4000K) and cool white (5700K - the reference CCT for the video camera industry) LEDs. Cool white LEDs provide a high CRI and are thus particularly suitable for HD  $_4$ K UHD images.

#### **TYPES OF APPLICATION**

- Sports hall
- Stadium
- Arena
- Multi-purpose building
- Recreational venue
- Golf course
- Ski slope
- Horse race course
- Airport
- Industrial harbour
- Monument
- All other indoor/outdoor high bay applications

#### **KEY ADVANTAGES**

- Cost-effective and efficient solution to maximise energy and maintenance savings
- Compliant with international sport federation regulations
- Flexibility: modular approach for high-power applications (one to one replacement for up to 2000W)
- Compliant with UHD/HD/4K broadcast and super slow motion replays (flicker-free)
- High Colour Rendering Index (70, 80 or 90) and Television Colour Consistency (TLCI >85+)
- Instant on/off and entertainment mode (optional to create dramatic/theatrical effects)
- Optimised glare control
- Sport optics based on BlastFlex™ technology offering a wide range of beams: very narrow to asymmetric beams
- Inclination angle adjustable on-site for each LED and/or the complete bracket



OMNIblast GEN2 takes advantage of a patented cooling technology for sustainable performance.



Each module can be tilted individually up to  $40^{\circ}$  (+20° / - 20°).



The lightweight yet robust bracket for 2 or 3 modules incorporates various settings.



OMNIblast GEN2 offers a wide range of accessories (brackets, louvres, hoods...).

## OMNIblast GEN2 | CHARACTERISTICS Schréder

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#### **GENERAL INFORMATION**

Recommended installation height	8m to 50m   26' to 165'					
Driver included	No					
CE mark	Yes					
ENEC certified	Yes					
UL certified	Yes					
ROHS compliant	Yes					
Testing standard	LM 79-80 (all measurements in ISO17025 accredited laboratory)					

#### HOUSING AND FINISH

DIMENSIONS AND MOUNTING

AxBxCxD (mm | inch)

Housing	High-pressure die-cast aluminium					
Optic	Silicon lenses or aluminium reflectors					
Protector	Glass or polycarbonate					
Housing finish	Polyester powder coating					
Colour	RAL 7040 light grey					
	Any other RAL colour upon request					
Tightness level optical unit	IP 66					
Tightness level gear box	IP 66 (gear box) or IP 65 (gear cabinet)					
Impact resistance	IK 09 (glass) / IK 10 (polycarbonate)					
Vibration tests	ANSI C 136-31 - 3G and IEC 68-2-6 - 1.5g					
Ball throwing test	DIN 18032-3:1997-04					

OMNIblast GEN2 1 - 595x251x330x188 |

**OMNIblast GEN2 2** – 700**x**521**x**723**x**630

#### **ELECTRICAL INFORMATION**

Electrical class	EU class I - US class 1					
Nominal voltage	230-400V – 50-60Hz 120-277V – 50-60Hz 347-480V – 50-60Hz					
Power factor	> 90% at full load					
Surge protection	230-400V range: 10kV 120-277V range: 20kV 347-480V range: 20kV					
Electromagnetic compatibility (EMC)	EN 55015:2013/A1:2015, EN 61000-4-2, -3, -4, -5, -6, -8, -11:2014, EN 61000-3-2, -3:2013					
Control options	No dimming, DMX-RDM or o-10V					

#### OPTICAL INFORMATION

LED colour temperature	3000K (Warm white)					
	4000K (Neutral white) 5700K (Cool white) RGB-CW Tunable white					
Colour rendering index (CRI)	> 70 (Neutral or cool white)					
	> 80 (Warm white)					
	> 90 (Neutral or cool white)					

#### **OPERATING CONDITIONS**

Operating temperature range (Ta)	-30 °C up to +55 °C <sup>(*)</sup>
	-22 ° F up to 131 °F <sup>(*)</sup>

 $^{(^{\rm t})}$  Depending on the configuration and driving current. For more details, please contact us.

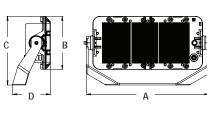
#### LIFETIME OF THE LEDS @ TQ 25°C

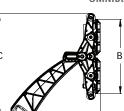
For all versions	40,000h – L90B10
	115,000h – L80B10

	27.6 <b>x</b> 20.5 <b>x</b> 28.5 <b>x</b> 24.8					
	<b>OMNIblast GEN2 3</b> – 700 <b>x</b> 791 <b>x</b> 816 <b>x</b> 630   27.6 <b>x</b> 31.1 <b>x</b> 32.1 <b>x</b> 24.8					
Weight (kg   lbs)	<b>OMNIblast GEN2 1</b> – 10   22 (PC) - 12   26.5 (glass)					
	<b>OMNIblast GEN2 2</b> – 24   52.9 (PC) - 28   61.7 (glass)					
	<b>OMNIblast GEN2 3</b> – 30   66.1 (PC) - 35   77.1 (glass)					
Aerodynamic resistance	OMNIblast GEN2 1 - 0.112					
(CxS)	<b>OMNIblast GEN2 2</b> - 0.269					
	OMNIblast GEN2 3 - 0.479					
Standard mounting	Steel U bracket (OMNIblast GEN2 1) Alumium bracket (OMNIblast GEN 2 2 & 3)					
Optional mounting	Pendant fixation					

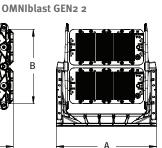
24.4**x**9.9**x**13**x**7.4

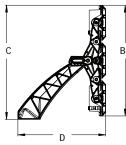
#### OMNIblast GEN2 1





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OMNIblast GEN2 3

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### OMNIblast GEN2 | PHOTOMETRY





LensoFlex<sup>®</sup>3 uses lenses made of mouldable and optical-grade silicon offering superior transparency and excellent photothermal stability. This withstands high driving currents and delivers maximised lumen output over time.

As silicon offers a higher thermal resistance compared to PMMA, temperature is not as critical for LensoFlex<sup>®</sup><sub>3</sub> engines. This offers two distinct advantages; LensoFlex<sup>®</sup><sub>3</sub> ensures enhanced performance in warm climates and enables a high driving current to be used to increase the lumen output and a higher lm/kg ratio. It also does not suffer from yellowing over time.





Using metal reflectors with a superior reflective co-efficient, the ReFlexo<sup>™</sup> photometric engine delivers high performance for specific applications such as counter beam lighting in tunnels or very extensive light distributions for sports or apron lighting. Another key advantage of the ReFlexo<sup>™</sup> is its' ability to direct all the light to the front of the luminaire, ensuring that no back light is emitted.

This photometric engine guarantees glare free lighting for excellent visual comfort and the creation of ambiance.



Using silicon collimators, the BlastFlex<sup>™</sup> photometric engine offers the highest efficacy for directional beams dedicated to specific applications in architectural and sports lighting.

The ability to control the light with the highest accuracy reduces the light spill in the surroundings and contributes to an optimal use of the energy consumed.

Thanks to a superior thermal resistance, the BlastFlex<sup>TM</sup> optics can work with very high currents to provide large lumen packages and do not suffer from the yellowing effect over time.





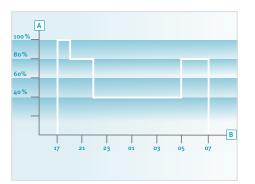
## OMNIblast GEN2 | CONTROL SYSTEMS Schréder





#### Dimming through o-10V or DMX-RDM

Intelligent luminaire o-10V drivers enable to operate dimming profiles. DMX-RDM is a protocol that allows bi-directional communication between a lighting fixture and a controller over a standard DMX line. This protocol allows configuration, status monitoring, and control of the lighting fixture. The standard has been developed by the Entertainment Services and Technology Association (ESTA) and is the current standard on the market.



A. Performance B. Time

## OMNIblast GEN2 | PERFORMANCE



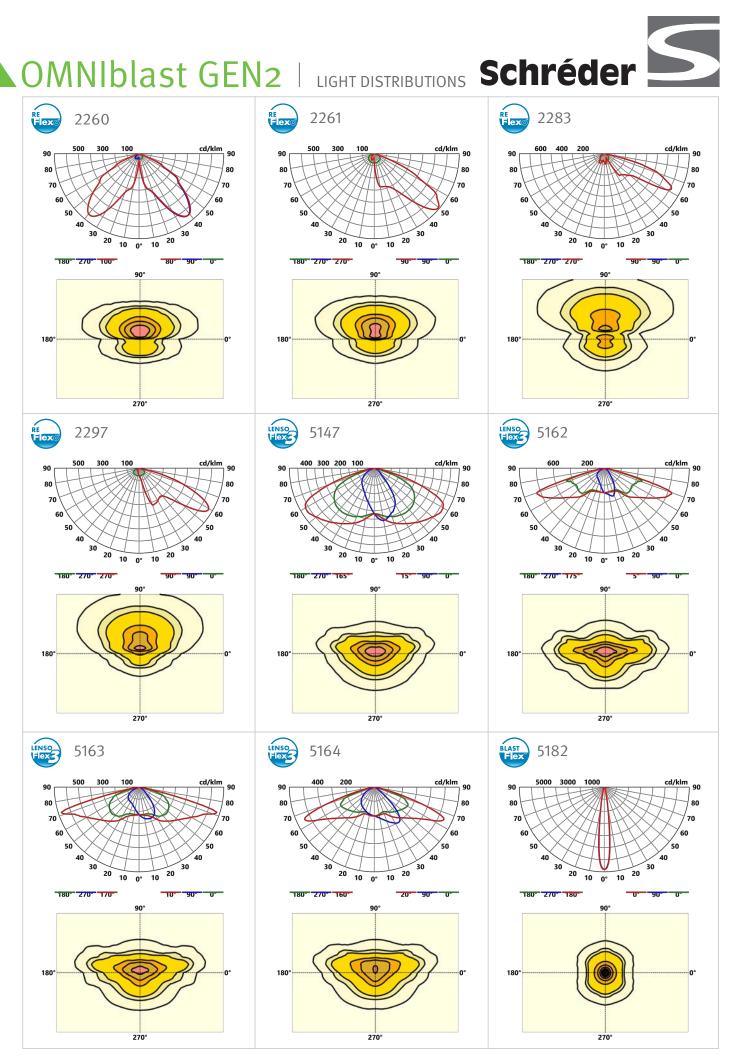


			output Warm	inaire flux (lm) 1 White ) - CRI 80	Luminaire output flux (lm) Neutral White (4000K) - CRI 90		Luminaire output flux (lm) Cool White (5700K) - CRI 90		Luminaire output flux (lm) Neutral White (4000K) - CRI 70		Luminaire output flux (lm) Cool White (5700K) - CRI 70		Power consumption (W)		Luminaire efficacy (lm/W)	
Luminaire	Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Up to	Photometries
OMNIblast GEN2 1	96	2000	18500	54500	17500	51700	17500	51700	21400	63100	21400	63100	610	610	103	2260   2261   2283   5182   5184   5185   5186   5188
OMNIblast GEN2 2	192	2000	37000	109000	35100	103500	35100	103500	42900	126300	42900	126300	1220	1220	103	2260   2261   2283   5182   5184   5185   5186   5188
OMNIblast GEN2 3	288	2000	55500	163600	52700	155300	52700	155300	64300	189500	64300	189500	1830	1830	103	2260   2261   2283   5182   5184   5185   5186   5188



					-				
		output	flux (lm)	output	flux (lm)	Power consumption (W)		Luminaire efficacy (lm/W)	
Number of LEDs	Current (mA)	Min	Max	Min	Max	Min	Max	Up to	Photometries
144	500	-	-	15400	17000	244	244	69	5147   5162   5163   5164   5182   5184   5185   5186   5188
153	500	11900	13000	-	-	252	252	51	5147   5162   5163   5164   5182   5184   5185   5186   5188
288	500	-	-	33300	34000	488	488	69	5147   5162   5163   5164   5182   5184   5185   5186   5188
306	500	23800	26100	-	-	504	504	51	5147   5162   5163   5164   5182   5184   5185   5186   5188
432	500	-	-	46200	51000	732	732	69	5147   5162   5163   5164   5182   5184   5185   5186   5188
459	500	35700	39000	-	-	756	756	51	5147   5162   5163   5164   5182   5184   5185   5186   5188
	of LEDs 144 153 288 306 432	of LEDs (mA)   144 500   153 500   288 500   306 500   432 500	Number of LEDs     Current (mA)     Min       144     500     -       153     500     11900       288     500     -       306     500     23800       432     500     -	of LEDs     (mA)     Min     Max       144     500     -     -       153     500     11900     13000       288     500     -     -       306     500     23800     26100       432     500     -     -	Output flux (Im) RGB-CW     Output Tunable       Number of LEDs     Current (mA)     Min     Max     Min       144     500     -     15400       153     500     11900     13000     -       288     500     -     -     33300       306     500     23800     26100     -       432     500     -     -     46200	Number of LEDs     Current (mA)     Min     Max     Min     Max       144     500     -     15400     17000       153     500     11900     13000     -     -       288     500     -     -     33300     34000       306     500     23800     26100     -     -       432     500     -     -     -     -	output flux (Im) RGB-CW     output flux (Im) Tunable white     consul (M       Number of LEDs     Current (mA)     Min     Max     Min     Max     Min       144     500     -     -     15400     17000     244       153     500     11900     13000     -     -     252       288     500     -     -     33300     34000     488       306     500     23800     26100     -     -     504       432     500     -     -     46200     51000     732	Number of LEDs     Current (mA)     Min     Max     Min     Max     Min     Max       144     500     -     -     15400     17000     244     244       153     500     1900     13000     -     -     252     252       288     500     -     -     33300     34000     488     488       306     500     23800     26100     -     -     504     504       432     500     -     -     46200     51000     732     732	Number of LEDs     Current (mA)     Min     Max     Min     Max     Min     Max     Min     Max     I unable white     consumption (W)     efficacy (lm/W)       144     500     -     -     15400     17000     244     244     69       153     500     11900     13000     -     -     252     252     51       288     500     -     -     33300     34000     488     488     69       306     500     23800     26100     -     -     504     504     51       432     500     -     -     46200     51000     732     732     69

Tolerance on LED flux is  $\pm$  7% and on total luminaire power  $\pm$  5%.



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### OMNIblast GEN2 | LIGHT DISTRIBUTIONS Schréder

BLAST Flex

90

5185

1000

BLAST Flex

90

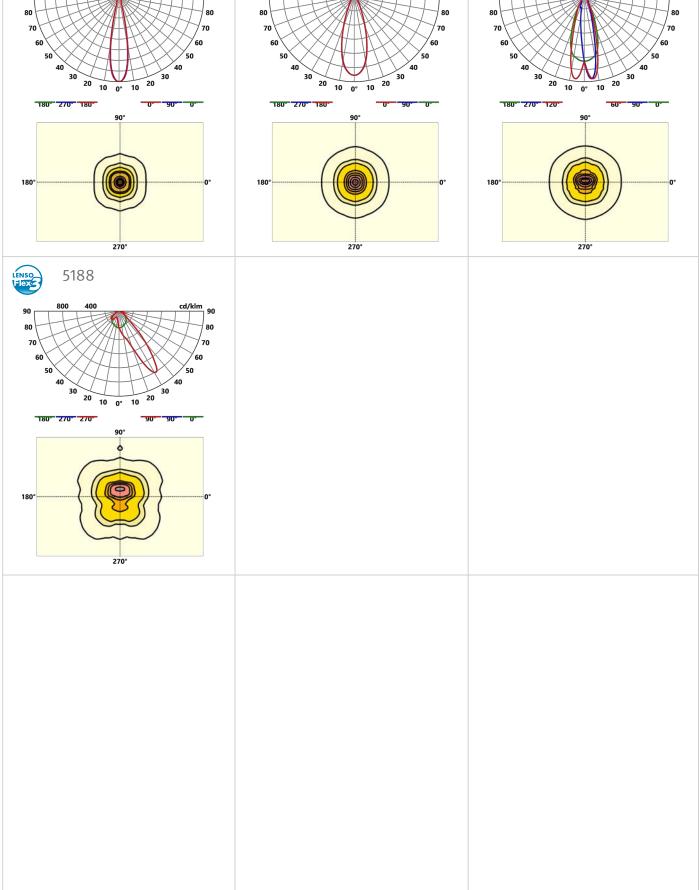
5184

3000 2000 1000

d/klm

90





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