

MODEL: OPT HBG10

Optimal Light | OPT-HBG10 Series

Next-Generation Ultra-High Efficacy LED High Bay

The OPT-HBG10 represents the pinnacle of industrial illumination, engineered for environments where uncompromising performance and long-term reliability are non-negotiable. Delivering an industry-leading 210 lm/W, this fixture redefines energy efficiency, slashing operational costs while providing superior light quality. Built with premium Sosen drivers and designed for a staggering 100,000-hour lifetime, the OPT-HBG10 is a "fit and forget" solution for high-ceiling applications. From smart sensing to emergency preparedness, it offers a modular suite of controls to meet the rigorous demands of modern industrial infrastructure.

PRODUCT FEATURES

Product Type	LED HIGHBAY LIGHT
Watt	100-150-200-240 Watts
Voltage	100-277 AC 50/60Hz
Power Supply	SOSEN
IP Rating	IP65 Dustproof and water-resistant)
LED	LED SMD 5050
CRI	>90
Lumen Efficiency	210 Lumen/Watt
Dimming	0-10 Volt Dimming
Life Span	120,000 Hours. L70/B50 at 25C L70
Housing Material	ADC12 die-cast aluminum

Engineered for Excellence

The OPT-HBG10 isn't just a lighting fixture—it is a strategic asset. By combining high-tier components with advanced thermal management, Optimal Light provides a lighting solution that survives the toughest conditions while delivering a rapid return on investment.



Key Performance Highlights

Extreme Efficiency: Achieve maximum brightness with minimum power consumption through our specialized 210 lm/W optical engine.

Intelligent Control Ready: Fully compatible with DALI dimming protocols and integrated Motion Sensors for automated energy savings.

Safety & Resilience: Optional Emergency Battery Backup ensures continuous operation during power failures, housed in a rugged IP65-rated chassis.

Optical Versatility: Tailor your beam spread with Multiple Lens options and Reflectors, ensuring precise light distribution for warehouses, factories, or sports arenas.

ELECTRICAL DATA

Nominal wattage	100W	150W	200W	240W
Nominal voltage&frequency	AC 100-277 Volt -			
Inrush current&time TH50	100A&520uS	120A&520uS	130A&520uS	130A&520uS
Power factor λ	>0.95			
Total harmonic distortion	<15 %			
Protection class	CLASS I			
Dimmable	0-10V			

PHOTOMETRICAL DATA

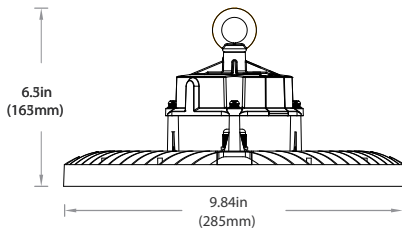
Nominal wattage	100W	150W	200W	240W
Luminous flux	21000lm	31500lm	42000lm	50400lm
Luminous efficacy	210lmw			
Color temperature	3000K/4000K/5000K/6500K			
Saturated red R9	<0			
Standard deviation of color matching	≤5 steps			
Flickering metric (Pst LM)	<1 No-flicker			
Stroboscope effect metric (SVM)	<0.4			
Photobiological safety EN62778	RG1			
Beam angle	60°90°110°			

MECHANICAL AND OTHER DATA

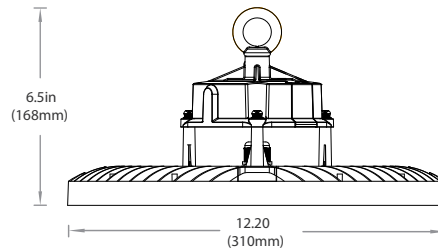
Nominal wattage	100W	150W	200W	240W
Body material	ADC12 die-cast aluminum			
Cover material	Polycarbonate (PC)			
Glow wire test IEC60695-2-12	850 C			
Mercury content	0.00mg			
Ambient temperature range	-40...+50C			
Storage temperature range	-40...+80C			
Type of connection	30cm AC cable 3-core			
Waterproof protection	IP65			
Protection class IK (shock resistance)	IK08			
Mounting type	Surface/Suspended			
Application environment	Indoor			
LED module replaceable	Yes			
With light source	Yes			
Lifespan L70/B50 at 25 L70	120000H			
Lifespan L80/B10 at 25 L80	80000H			
Lifespan L90/B10 at 25 L90	40000H			
Number of switching cycles	20000			

DIMENSIONS

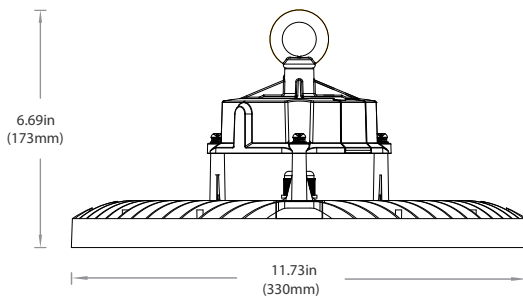
OPT HBG10-100/150W



OPT HBG10-200W



OPT HBG10-240W



LUMEN PACKAGE

Models	CCT	Lumens	CRI	Size
OPT HBG10-100W	3000K/4000K/5000K/6500K	21000lm	Ra70	D285*163mm
OPT HBG10-150W	3000K/4000K/5000K/6500K	31500lm	Ra70	D285*163mm
OPT HBG10-200W	3000K/4000K/5000K/6500K	42000lm	Ra70	D310*168mm
OPT HBG10-240W	3000K/4000K/5000K/6500K	50400lm	Ra70	D330*173mm

Other customized lumens package can be calculated based on below multiplier table.

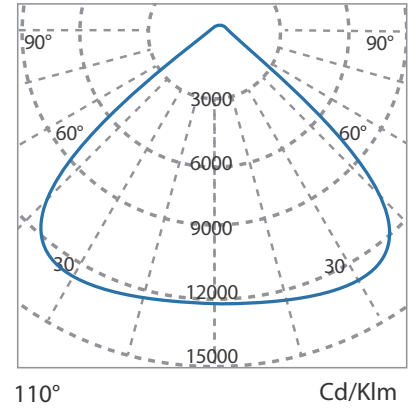
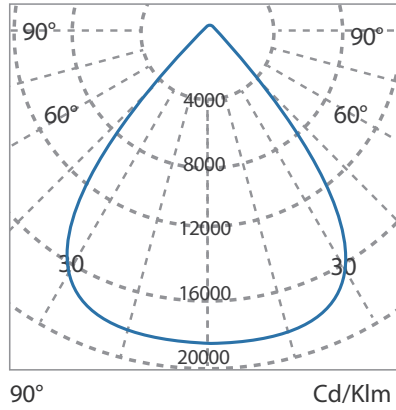
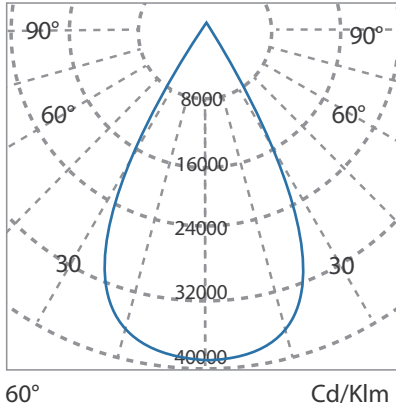
MULTIPLIER TABLE

70 CRI	CCT	CONVERSION FACTOR
	2700K	0.94
	3000K	0.99
	3500K	1.03
	4000K	1.06
	5000K	1.06
	6500K	1.04

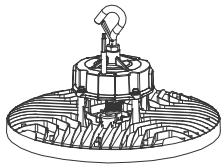
80 CRI	CCT	CONVERSION FACTOR
	2700K	0.89
	3000K	0.93
	3500K	0.97
	4000K	1.00
	5000K	1.00
	6500K	0.98

90 CRI	CCT	CONVERSION FACTOR
	2700K	0.78
	3000K	0.82
	3500K	0.85
	4000K	0.88
	5000K	0.88
	6500K	0.86

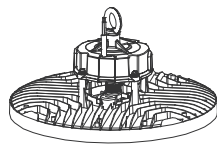
PHOTOMETRY



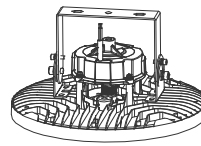
MOUNTING DETAILS



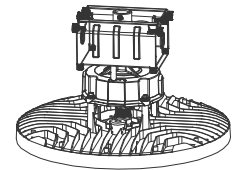
Hook mount



Ring mount



Bracket mount



J-box mount

PACKAGE INFO

POWER	QTY/CTN	CTN SIZE (mm)	CBM (m ³)	NET WEIGHT (kg)	GROSS WEIGHT (kg)
100/150W	1pc	L290*W290*H190	0.0160	1.74	2.46
200W	1pc	L350*W350*H190	0.0232	2.15	3.00
240W	1pc	L370*W370*H190	0.0260	2.48	3.57

