# PRODUCT DATASHEET
# HB SEN P 87W 840 110DEG IP65

**HIGH BAY SENSOR GEN 4 | High-bay luminaires in IP65 with high frequency sensor**

## Areas of application

– Replacement for high bay luminaires with mercury vapor or metal halide lamps
– Warehouses
– Logistics halls
– Industry
– High ceiling (e.g. in shopping malls, airports, commercial buildings, lobbies)

## Product benefits

– Multiple adjustments of sensor range, daylight detection and hold time
– High luminous efficacy
– Energy savings of up to 64 % compared to conventional high bay luminaires
– 5 years guarantee
– Suitable for use in dusty and damp locations thanks to high IP rating

## Product features

– High frequency sensor for daylight and motion detection
– Different luminous flux and beam angle for mounting heights of ~ 6 m to 10 m in 4000 K
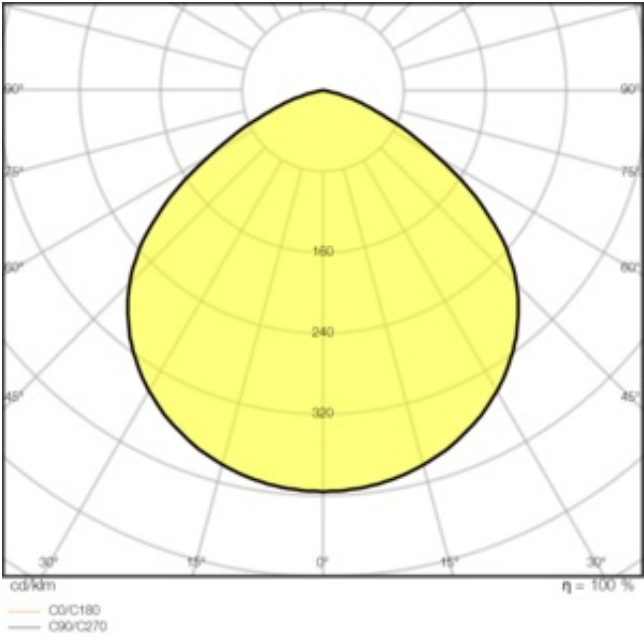
## TECHNICAL DATA

### Electrical data

| | |
|---|---|
| Nominal wattage | 87.00 W |
| Nominal voltage | 220...240 V |
| Mains frequency | 50...60 Hz |
| Nominal current | 400 mA |
| Inrush current | 44 A |
| Inrush current time $T_{h50}$ | 380 µs |
| Max. no. of lum. on circuit break. B16 A | 5 |
| Max. no. of lum. on circuit break. C10 A | 5 |
| Max. no. of lum. on circuit break. C16 A | 8 |
| Power factor λ | > 0.95 |
| Total harmonic distortion | < 20 % |
| Protection class | I |
| Operating mode | Mains voltage |

### Photometrical data

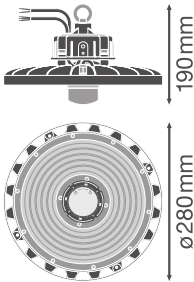| | |
|---|---|
| Luminous flux | 13000 lm |
| Luminous efficacy | 150 lm/W |
| Color temperature | 4000 K |
| Light color (designation) | Cool White |
| Color rendering index Ra | ≥80 |
| Standard deviation of color matching | < 5 sdcm |
| Low flicker | Yes |
| Photobiological safety group acc. to EN62778 | RG1 |
| Photobiological safety group acc. to EN62471 | RG1 |
| Beam angle | 110 ° |
| UGR | ≤ 29 |

| | | | |
|---|---|---|---|
| 0.5 | 1.36 | E(0°)  E(C0)  53.6° | 20596  2153 |
| 1.0 | 2.71 | E(0°)  E(C0)  53.6° | 5149  538 |
| 1.5 | 4.07 | E(0°)  E(C0)  53.6° | 2289  239 |
| 2.0 | 5.43 | E(0°)  E(C0)  53.6° | 1287  135 |
| 2.5 | 6.78 | E(0°)  E(C0)  53.6° | 824  86 |
| 3.0 | 8.14 | E(0°)  E(C0)  53.6° | 572  60 |
| Distance [m] | Cone diameter [m] | | Illuminance [lx] |

—— C0/C180 (Half beam angle [°]: 107.2°)

LDC typ cone



—— C0/C180
—— C90/C270

LDC typ polar

## Dimensions & Weight

| Diameter | 280.00 mm |
|---|---|
| Height | 190.00 mm |
| Product weight | 2242.00 g |
| Cable length | 1500 mm |



## Materials & Colors

| | |
|---|---|
| Product color | Black |
| Housing color | Black |
| Body material | Aluminum |
| Cover material | Polycarbonate (PC) |
| Glow Wire Test according to IEC 60695-2-12 | 850 °C |
| Mercury content | 0.0 mg |

## Application & Mounting

| | |
|---|---|
| Ambient temperature range | -20...+50 °C |
| Temperature range at storage | -40...+70 °C |
| Type of connection | Cables |
| Type of protection | IP65 |
| Protection class IK (shock resistance) | IK08 |
| Dimmable | No |
| Mounting type | Surface/Suspended |
| Mounting location | Ceiling / Wall |
| Application environment | Indoor |
| LED module replaceable | Not replaceable |
| With light source | Yes |

## Lifespan

| | |
|---|---|
| Lifespan L70/B50 at 25 °C | 80000 h |
| Lifespan L80/B10 at 25 °C | 50000 h |
| Lifespan L90/B10 at 25 °C | 35000 h |
| Number of switching cycles | 200000 |

## Control gear

| | |
|---|---|
| ECG - Output ripple current | < 10 % |

## Sensor

| | |
|---|---|
| Type of sensor | Motion / Light |
| Sensor technology | Microwave |
| Sensor detection angle | < 150 ° |
| Sensor controlled switching time | 30s...10 min |
| Detection range of motion sensor | 6...15 m |
| Detection threshold of daylight sensor | 100 lx |

## Certificates & Standards

| Standards | CE / CB / ENEC / TÜV SÜD / EAC |
|---|---|
| Luminaire with limited surface temperature, "D sign" | Yes |
| Ball shot safe | No |

## Additional product data

| Product remark | |
|---|---|

## EQUIPMENT / ACCESSORIES

– Sensor, mounting hook and mounting bracket included
– Reflectors, refractors and remote control available as separate accessory

## DOWNLOAD DATA

| | DOWNLOAD DATA |
|---|---|
| PDF | User instruction<br>UI_HIGHBAY SENSOR |
| PDF | Addon Technical Information<br>LS Insert HB Sensor P |
| PDF | Declarations of conformity<br>EC Declaration HB SEN P |
| | IES file (IES)<br>HB SEN P 87W 840 110DEG IP65 |
| | LDT file (Eulumdat)<br>HB SEN P 87W 840 110DEG IP65 |
| | R3D file (Relux 3D Model)<br>HB P /HB SEN P 87W |
| | M3D file (3D Model)<br>HB P/ HB SEN P 87W |
| | UGR file (UGR table)<br>HB SEN P 87W 840 110DEG IP65 |

## LOGISTICAL DATA

| Product code | Packaging unit (Pieces/Unit) | Dimensions (length x width x height) | Gross weight | Volume |
|---|---|---|---|---|
| 4058075603257 | Shipping box<br>1 | 328 mm x 328 mm x 171 mm | 2838.00 g | 18.40 dm³ |

The mentioned product code describes the smallest quantity unit which can be ordered. One shipping unit can contain one or more single products. When placing an order, for the quantity please enter single or multiples of a shipping unit.

## References / Links

– For Guarantee see www.ledvance.com/guarantee

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