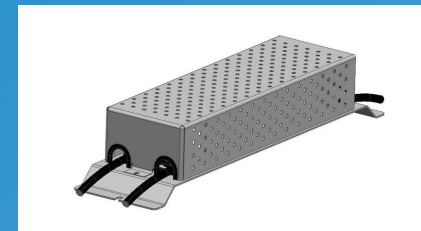


# *Maxolid –High Efficiency, 24K Lumen*

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July -2017



**PHILIPS**

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- Product Specifications
- Product Positioning
- Product Features and Benefits
- Product Photometry
- Product Benchmarking
- Product Designation
- Product Ordering Information
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# Efficient lighting leads to a brighter future



## Features :

- **Best energy-efficiency** : System efficacy of **>110 lm/W**, 1:1 replacement of 400W HPI- BU
- **Comfortable light**: CRI of 70 for ensures better color rendering
- **Optimal lighting effects**: new light platform & optical design reduce 20% glare
- **Robust & Reliable**: IP65 & IK 08 protection and 50K hours system life time
- **Wider Industry Application**: Available with ENB-SY20 and NB- SK60 optics and suited for ambient temperature unto 45 deg C
- **Reduced Weight**: Max 9 kg

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# Product Specifications- Maxolid Non Integral

Description	Maxolid Highbay Non Integral
System Wattage	210 W
Lumen Output	24000 Lm
System Efficacy	>110 Lm/W
Optics	ENB(2*10)-SY20 NB(2*30)-SY60
Color temperature	5700K
CRI	>70
IP	IP 65
Gasket Material	Heat Proof Silicone rubber ring
Housing	High Pressure Die Cast Aluminium High Transmittance Tempered Glass
Cover	
Mounting	Hook/Pole
Driver	Philips Xitanium- 2 Nos.
THD	10%
Power Factor	>.95
Operating Voltage Range	140V-270 AC
IK	IK 08
Weight	9 Kg
SDCM	<5



# Highbay Positioning

Height in Meters

> 15 m

14 – 15 m

8 – 10 m



From 8-10 meters



Upto 12- 15 meters

- Efficacy : >120 L/W
- Multiple optics for varied applications
- IP 65, IK 08
- CRI : 80



From 15-20 meters

- Efficacy >110 L/W
- Multiple Optics for varied applications
- ENB- FWHM 20° for 22 meters and above
- NB – FWHM 60°
- IP 65 , IK 08
- PDC Housing
- CRI : 70



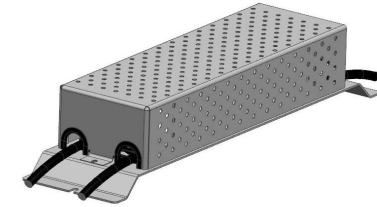
Products proposition

# Features and benefits

## Use with peace of mind

- 4 KV Surge Protection
- IK08 classification
- IP65 certified
- Efficacy : >110 Lm/w
- CRI >70
- Point to point replacement for a HPI 400W Highbay

Reliable Savings, lasting brightness  
High performance in a robust and compact design



## Long-lasting performance

- Designed for energy savings of up to 75% compared with conventional lighting
- L70 50k hours\*

*\*Designed to sustain 70% of initial lumen output (L70) at 50,000 hours of lifetime*

## High-quality materials and design

- Toughened and shatter-proof quality glass enhances safety
- Pressure die-cast housing offers excellent corrosion-resistance and<sup>5</sup> robustness

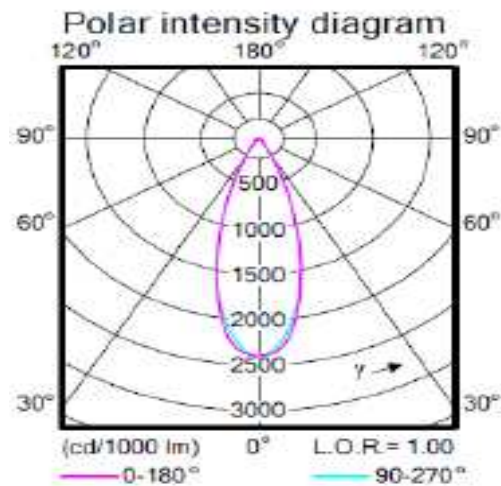
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## Optimal lighting effects

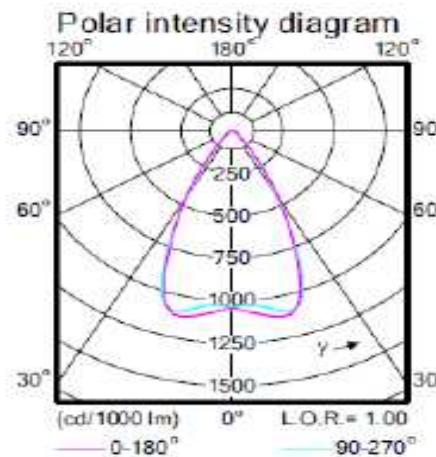
- New designed optic module allows  $UGR < 25$
- Two beam angle, ENB, NB

ENB



- Extra Narrow beam
- FWHM 20°
- rotational symmetry
- centralized beam fit for high ceiling

NB



- Narrow beam
- FWHM 60°
- rotational symmetry
- fit for low ceiling and general lighting



## What does this product compare with?

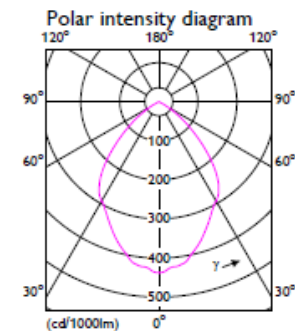
# Best Energy Efficiency

Parameter	400W HPI BU High Bay	Maxolid Highbay- NI
Lamp wattage	HPI BU 400W	210W LED System
Lamp lumen output	32500	
Luminaire efficiency	0.7	
Effective lumen output	22750	24000
System wattage	440W	210W
Savings		~230W Per point
		>50% Per point

Savings < 70% against the conventional Highbay on EM (HPL) Gear

Downward Light Output Ratio = DLOR

= Optical efficiency of the conventional luminaire in throwing the light downward compared to the lumens generated by the lamp inside the optical chamber.



Light output ratio 0.65  
Service upward 0.00  
Service downward 0.65



## What does this product compare with?

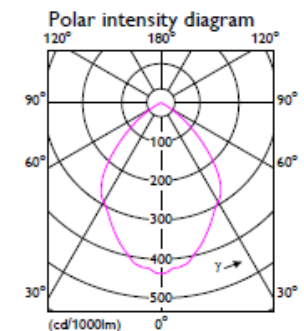
### Best Energy Efficiency

## Retrofit Project against 2 years old installed Highbay

Parameter	400W Highbay	Maxolid LED Highbay
Lamp wattage	HPI BU 400W	210 LED System
Lamp lumen output	42000	
LM@10K & DLOR	70% & .7	
Effective lumen output	20580	24000
System wattage	440W	210W
Savings		~230 Per point
		>50% Per point

Savings < 50% against the conventional Highbay on EM(SON) Gear

Lumen maintenance @ 10000 Hr : 70%



Light output ratio	0.65
Service upward	0.00
Service downward	0.65

Downward Light Output Ratio = DLOR

= Optical efficiency of the conventional luminaire in throwing the light downward compared to the lumens generated by the lamp inside the optical chamber.

## What does this product compare with?

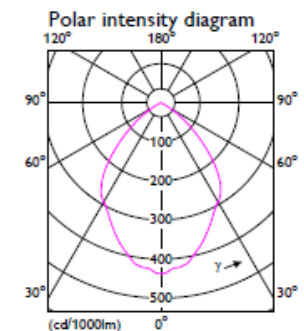
### Best Energy Efficiency

## Retrofit Project against 2 years old installed Highbay

Parameter	400W Highbay	Maxolid LED Highbay
Lamp wattage	HPI BU 400W	210 LED System
Lamp lumen output	32500	
LM@10K & DLOR	70% & .65	
Effective lumen output	16000	24000
System wattage	440W	210W
Savings		~230 Per point
		>50% Per point

Savings < 50% against the conventional Highbay on EM(HPL) Gear

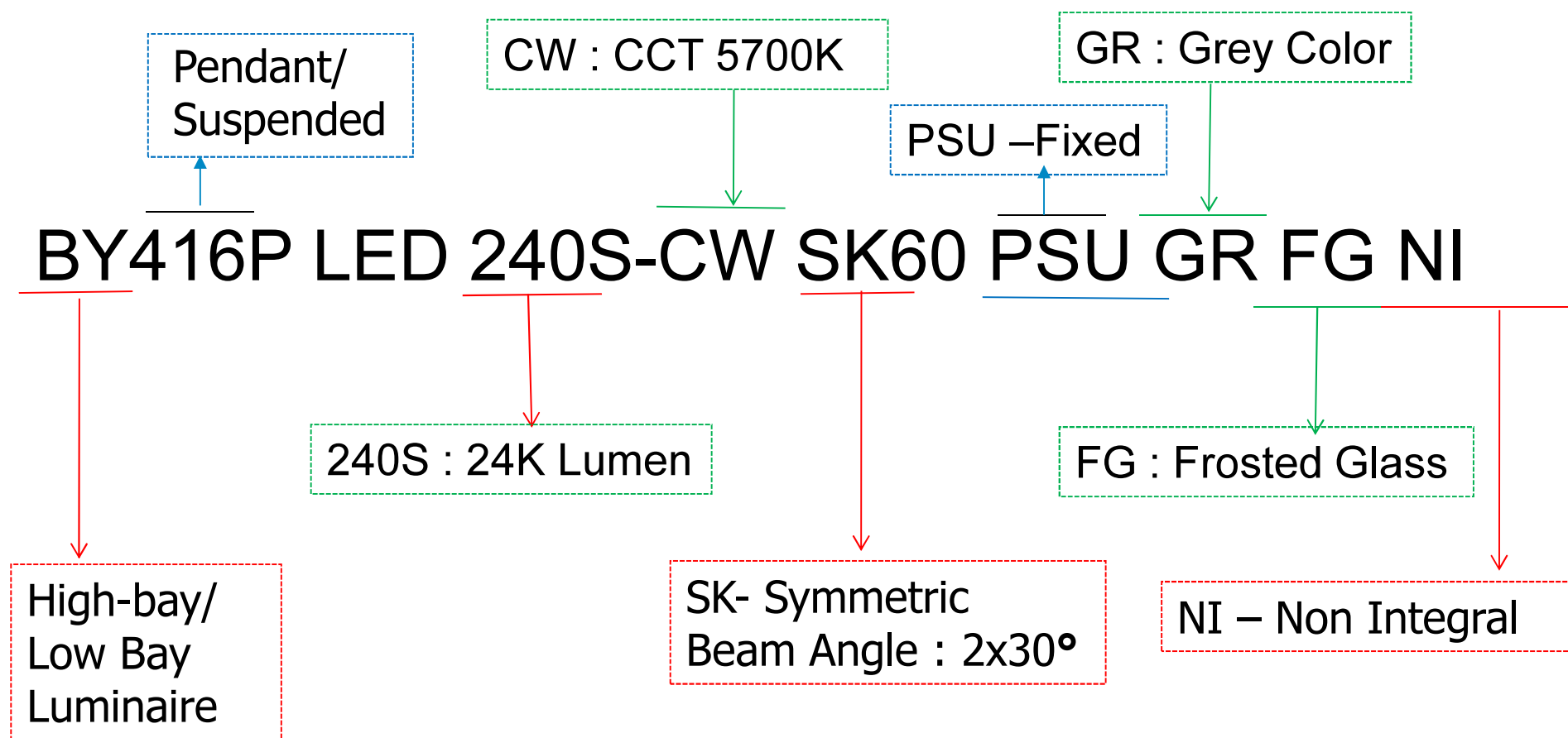
Lumen maintenance @ 10000 Hr : 70%



Light output ratio	0.65
Service upward	0.00
Service downward	0.65

Downward Light Output Ratio = DLOR

= Optical efficiency of the conventional luminaire in throwing the light downward compared to the lumens generated by the lamp inside the optical chamber.



## How to read the Cat ref

## Ordering Codes

S No.	Mounting Type	12 NC	Item Description	Qty. Per Box
1	Maxolid NI Highbay	919515811995	BY416P LED240S CW SK60 FG GR NI S5	1
2	Maxolid NI Highbay	919515811996	BY416P LED240S CW SY20 FG GR NI S5	1
3	Gear Box – IP 20	919515811943	ZVS431 2x100W PSU XTFCL	1
4	Gear Box – IP 66		TO BE ANNOUNCED	

## Spare 12 NC

S No.	12 NC	Item Description	SPARE DRIVER 12 NC
1	919515811995	BY416P LED240S CW SK60 FG GR NI S5	9290 014 04806
2	919515811996	BY416P LED240S CW SY20 FG GR NI S5	9290 014 04806

# Phase In Phase Out- Specification Details

Type Ref	BY416P LED220S CW SY20 FG PSU GR NI & BY416P LED220S CW SK60 FG PSU GR NI	BY416P LED240S CW SY20 FG GR NI S5 & BY416P LED240S CW SK60 FG GR NI S5
System Lumen	22000 Lumens	24000 Lumens
System Wattage	210 Watts	210 Watts
Luminous Efficacy	> 100 Lm / Watt	> 110 Lm / Watt
Color Temperature	5700 Kelvin	5700 Kelvin
IP Rating	IP 65	IP 65
System Power Factor	> 0.95	> 0.95
Surge Protection	3KV	4KV
THD	< 10	< 10

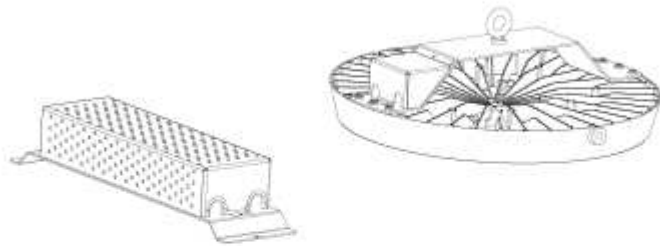
# MI Sheet

## LED HIGHBAY

### Installation Instruction

Philips  
Lighting

#### I Bolt Mounting



TYPE	: BY416P
LAMP	: LED
VOLTAGE	: 240 V, 50 Hz
IP CLASSIFICATION	: LUMINAIRE : IP 65, GEAR TRAY: IP 20
NET WEIGHT	: 9 Kg.
MAX. PROJECTED AREA	: 0.16 m <sup>2</sup>
CCT	: 5700 K
APPLICATION	: INDUSTRIAL HIGHBAY

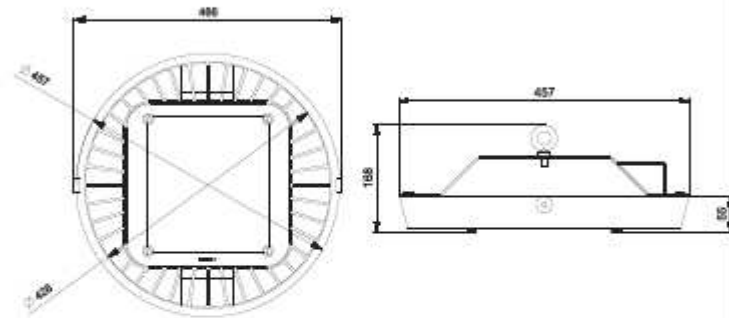
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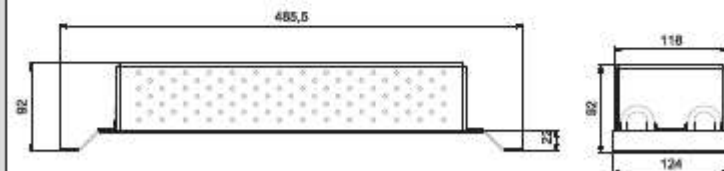
#### Dimensions

#### Indoor Luminaire

##### Heat Sink Assembly

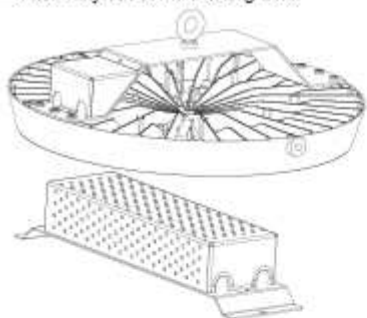


##### Driver Mounting Tray Assembly

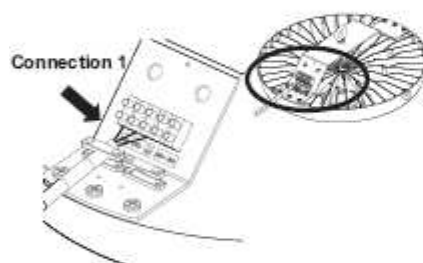




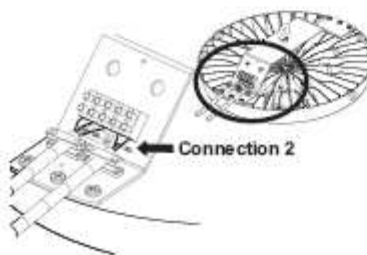
- 1 Take the Heat Sink Assembly & Driver Tray Assembly out of the Packing box.



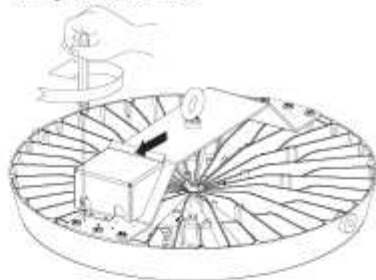
- 3 In "Connection 1" insert a 3 core cable as per Led (+ve), Led (-ve), Earth marking label and grip it with wire clamp.



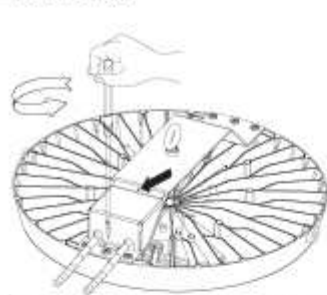
- 4 In "Connection 2" insert another 2 core cable as per Led (+ve), Led (-ve) label and grip it with wire clamp.



- 2 Open Cover Connection box with the help of screw driver.

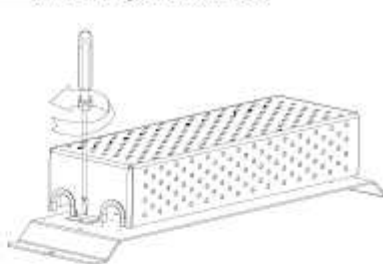


- 5 Close cover connection box with the help of screw driver.

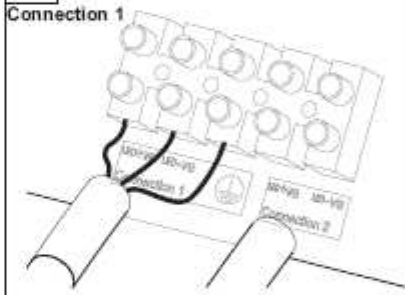


Notice: Recommended cable lengths 5~20 m.

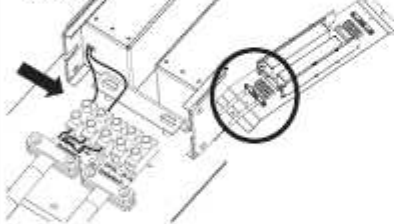
- 6 Open Upper Tray in Drive tray assembly with the help of screw driver.



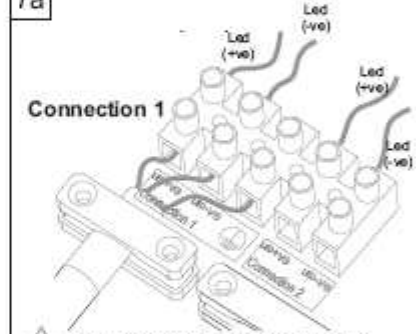
- 3a



- 7 Connect the 3 core cable's other side terminals in "Connection 1" driver output terminals as per label. Please don't connect one wire to "Connection 1" and another wire to "Connection 2" of the same cable.

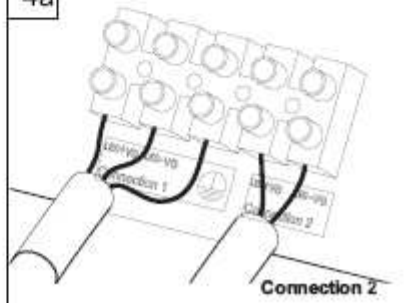


- 7a



Notice: No opposite terminal connection allowed

- 4a

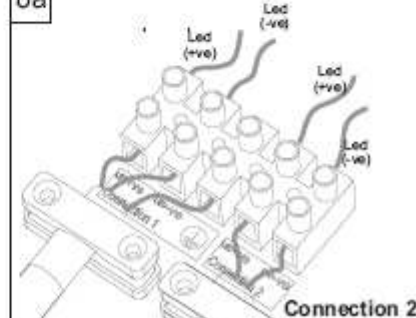


Recommended wire cross section between luminaire & gear tray is 1 sq. mm.

- 8 Connect 2 core cable other side terminals in "Connection 2" with driver output terminals as per label. Please don't connect one wire to "Connection 1" and another wire to "Connection 2" of the same cable.



- 8a



Notice: No opposite terminal connection allowed

