

NeoBulb Quasar/Quasar Track



NeoBulb Quasar/Quasar Track series is available in six different light colors such as white, warm white, amber, red, green, and blue. The Quasar series is perfect for down lighting in hotels, shopping malls, retails, hospitals, residential areas and more. It can highlight important task areas and provides innovative and energy-efficient solutions for the designers and end users. It is ideal to replace conventional Halogen down lights.

NeoBulb Quasar/Quasar Track series is available in S-type & L-type, and is differentiated with wattage and height of the luminaire body. **NeoBulb Quasar/Quasar Track S-type** with 5W is a round recessed down light. **NeoBulb Quasar/Quasar Track L-type** with 7.5W is also a round recessed down light but has a longer body length & provides better light output.

NeoBulb Quasar/Quasar Track Series as well as entire NeoBulb product lines are ingeniously engineered LED lighting devices that are designed based on the proprietary NeoPac Universal Platform (NUP). Empowered by this structural LED technological platform, all NeoBulb products can operate at ultra-high power with high luminous flux, low junction temperature (T_j) and have outstanding performance with long predictable reliable life.

■ **Features**

- Suitable for offices, hotels, shopping malls, retails, hospitals and show rooms, etc.
- Plug-and-Play for easy installation
- NeoBulb System-In-Package LED light engines
- Point-Like-Source to provide a bright light beam
- Ultra-High-Power LEDs with safe junction temperatures
- Excellent thermal management to ensure LEDs performance
- Constant current driver mode for steady power supply
- Effective heat dissipation by back-end natural convection
- Energy saving, more efficient than Incandescent and Halogen lamps
- Useful life time at over 40,000 hours
- 5/ 7/ 7.5W Available
- Light color - White / Warm / Green /Blue / Red / Amber
- CE compliant
- International RoHS “green product” design compliance

■ **Specifications**

Items	Quasar-S/L	Quasar Track-S/L
Voltage Range	AC 100~ 240 V, 50 ~ 60 Hz	AC 100~ 240 V, 50 ~ 60 Hz
Power Efficiency	82 %	82 %
Beam Pattern / Beam Angle	Narrow (26°),Wide (80°)	Narrow (26°),Wide (80°)
Operating Temp.& Humidity	- 20 ~ 45°C & 10 ~ 90 % RH	- 20 ~ 45°C & 10 ~ 90 % RH
Storage Temp.	-40°C ~ 80°C	-40°C ~ 80°C
Useful Life	> 40,000 Hrs	> 40,000 Hrs
Case	Al Alloy Base	Al Alloy Base
Dimensions (mm)	158x73x55/188x73x55	192x73x55/222x73x55
Net Weight (Approx.)	325/370gm	275/320gm

◆ **L-Type –Narrow Beam Specifications**

Items	Quasar/Quasar	Quasar/Quasar	Quasar/Quasar	Quasar/Quasar	Quasar/Quasar	Quasar/Quasar
	Track (Red)	Track (Amber)	Track (Green)	Track (Blue)	Track (White)	Track (Warm White)
LED-Power Consumption	7W	7W	7.5 W	7.5 W	7.5 W	7.5 W
System Power Consumption	9 W	9 W	9 W	9 W	9 W	9 W
LEDs Initial Luminous Flux	220 lm	280 lm	330 lm	90 lm	450 lm	340 lm
LEDs Maintained Luminous Flux	175lm	195 lm	300lm	85 lm	405 lm	300 lm
Lighting Fixture Luminous Flux	160 lm	175 lm	270 lm	80 lm	365 lm	270 lm
Max. Illuminance (E _{max}) (@3m)	>34 lux	>36 lux	>56 lux	>18 lux	>97 lux	>71 lux
Wavelength(λ) nm / CCT(K)	620~630 nm	586~594 nm	520~535 nm	465~475 nm	5000~7000K (CRI > 75)	2800~ 3200K (CRI >65)
Light Source(NeoPac® Emitter)	7 Watt	7 Watt	7.5 Watt	7.5 Watt	7.5 Watt	7.5 Watt
Junction Temperature (T _j)(T _a = 25°C)	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C
Sys. Thermal Resistance (R _{ja})	6.4°C / W	6.4°C / W	6.0 °C / W	6.0 °C / W	6.0 °C / W	6.0 °C / W

◆ L-Type - Wide Beam Specifications

Items	Quasar/Quasar Track (Red)	Quasar/Quasar Track (Amber)	Quasar/Quasar Track (Green)	Quasar/Quasar Track (Blue)	Quasar/Quasar Track (White)	Quasar/Quasar Track (Warm White)
LED-Power Consumption	7W	7W	7.5 W	7.5 W	7.5 W	7.5 W
System Power Consumption	9 W	9 W	9 W	9 W	9 W	9 W
LEDs Initial Luminous Flux	220 lm	280 lm	330 lm	90 lm	450 lm	340 lm
LEDs Maintained Luminous Flux	175lm	195 lm	300lm	85 lm	405 lm	300 lm
Lighting Fixture Luminous Flux	150 lm	165 lm	255 lm	75 lm	345 lm	255 lm
Max. Illuminance (E _{max}) (@3m)	>9 lux	>10 lux	>13 lux	>2 lux	>20 lux	>15 lux
Wavelength(λ) nm / CCT(K)	620~630 nm	586~594 nm	520~535 nm	465~475 nm	5000~7000K (CRI > 75)	2800~ 3200K (CRI >65)
Light Source(NeoPac® Emitter)	7 Watt	7 Watt	7.5 Watt	7.5 Watt	7.5 Watt	7.5 Watt
Junction Temperature (T _j)(T _a = 25°C)	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C
Sys. Thermal Resistance (R _{ja})	6.4°C / W	6.4°C / W	6.0 °C / W	6.0 °C / W	6.0 °C / W	6.0 °C / W

◆ S-Type –Narrow Beam Specifications

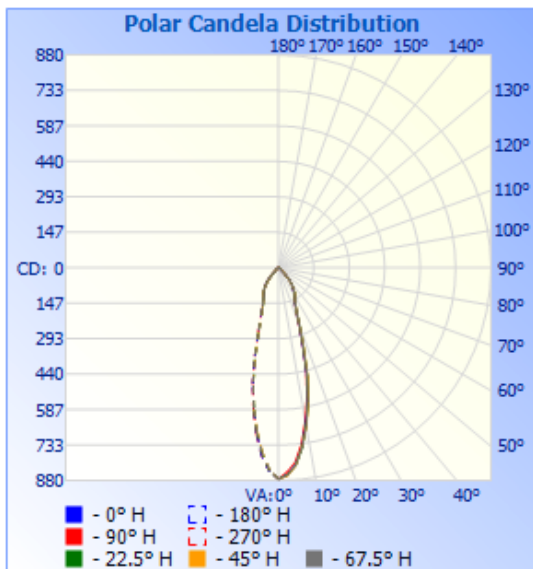
Items	Quasar/Quasar Track (Red)	Quasar/Quasar Track (Amber)	Quasar/Quasar Track (Green)	Quasar/Quasar Track (Blue)	Quasar/Quasar Track (White)	Quasar/Quasar Track (Warm White)
LED-Power Consumption	5 W	5 W	5 W	5 W	5 W	5 W
System Power Consumption	6 W	6 W	6 W	6 W	6 W	6 W
LEDs Initial Luminous Flux	160 lm	200 lm	220 lm	60 lm	300 lm	225 lm
LEDs Maintained Luminous Flux	130 lm	140 lm	200 lm	55 lm	270 lm	200 lm
Lighting Fixture Luminous Flux	115 lm	125 lm	180 lm	50 lm	245 lm	180 lm
Max. Illuminance (E _{max}) (@3m)	>24 lux	>26 lux	>37 lux	>11 lux	>69 lux	>47 lux
Wavelength(λ) nm / CCT(K)	620~630 nm	586~594 nm	520~535 nm	465~475 nm	5000~7000K (CRI > 75)	2800~ 3200K (CRI >65)
Light Source(NeoPac® Emitter)	5 Watt	5 Watt	5 Watt	5 Watt	5 Watt	5 Watt
Junction Temperature (T _j)(T _a = 25°C)	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C
Sys. Thermal Resistance (R _{ja})	9.0°C / W	9.0°C / W	9.0°C / W	9.0°C / W	9.0°C / W	9.0°C / W

◆ **S-Type –Wide Beam Specifications**

Items	Quasar/Quasar Track (Red)	Quasar/Quasar Track (Amber)	Quasar/Quasar Track (Green)	Quasar/Quasar Track (Blue)	Quasar/Quasar Track (White)	Quasar/Quasar Track (Warm White)
LED-Power Consumption	5 W	5 W	5 W	5 W	5 W	5 W
System Power Consumption	6 W	6 W	6 W	6 W	6 W	6 W
LEDs Initial Luminous Flux	160 lm	200 lm	220 lm	60 lm	300 lm	225 lm
LEDs Maintained Luminous Flux	130 lm	140 lm	200 lm	55 lm	270 lm	200 lm
Lighting Fixture Luminous Flux	110 lm	120 lm	170 lm	45 lm	230 lm	170 lm
Max. Illuminance (E _{max}) (@3m)	>6 lux	>7 lux	>9 lux	>1 lux	>14 lux	>10 lux
Wavelength(λ) nm / CCT(K)	620~630 nm	586~594 nm	520~535 nm	465~475 nm	5000~7000K (CRI > 75)	2800~ 3200K (CRI >65)
Light Source(NeoPac® Emitter)	5 Watt	5 Watt	5 Watt	5 Watt	5 Watt	5 Watt
Junction Temperature (T _j)(T _a = 25°C)	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C	70 ± 1°C
Sys. Thermal Resistance (R _{ja})	9.0°C / W	9.0°C / W	9.0°C / W	9.0°C / W	9.0°C / W	9.0°C / W

■ **Photometric Data**

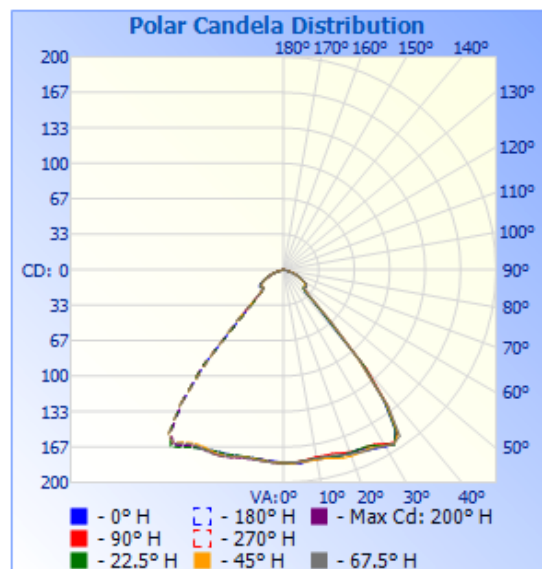
I. Beam pattern (Narrow, 26°)



Flood Summary

	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	86.9%	308.7	76.1	76.5
Beam (50%):	34.4%	122.1	28.9	29
Total:	103.6%	367.8		

II. Beam pattern (Wide, 80°)



Flood Summary

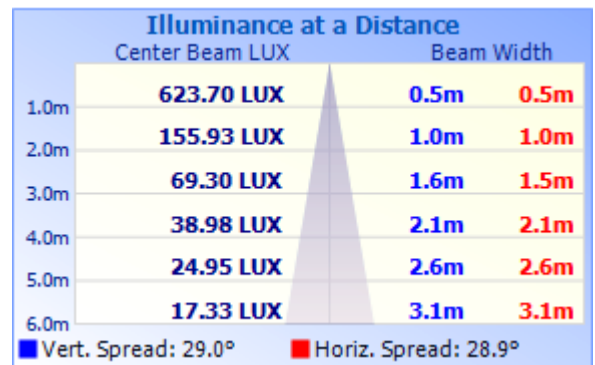
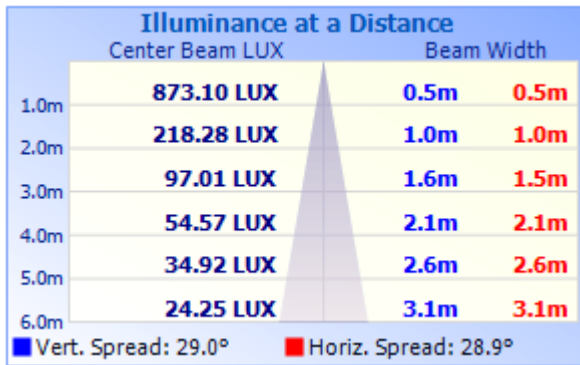
	Efficiency	Lumens	Horizontal Spread	Vertical Spread
Field (10%):	96.8%	324.4	113	125.2
Beam (50%):	79.4%	265.9	51.5	81.1
Total:	101.9%	341.4		

■ **Illuminance Distribution Vs. Distance**

◆ **Narrow (26°) Beam (Max.)Distribution**

◆ L-Type(White Color)

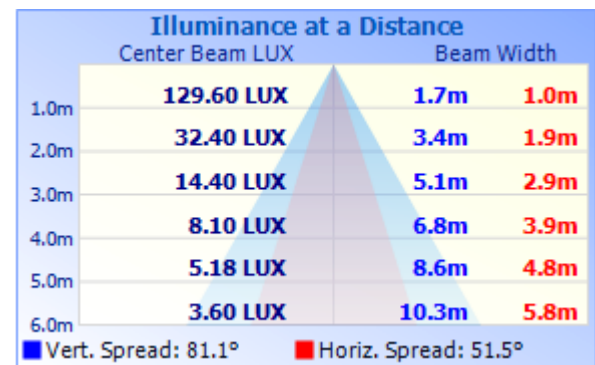
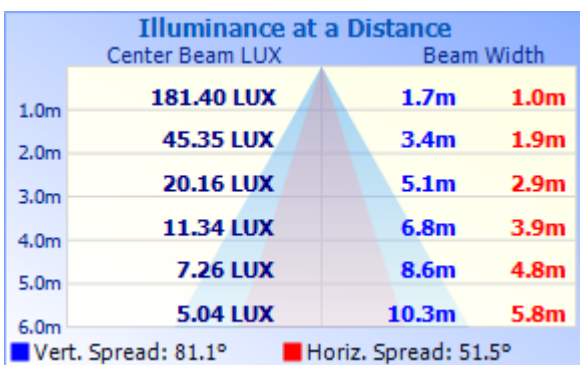
◆ S-Type (White Color)



◆ **Wide (80°) Beam (Max.)Distribution**

◆ L-Type(White Color)

◆ S-Type (White Color)



Note:

Different colors illuminance distribution at different heights could get from white color illuminance distribution diagram multiplying by a factors for narrow beam, wide beam and asymmetric beam as shown in the below table.

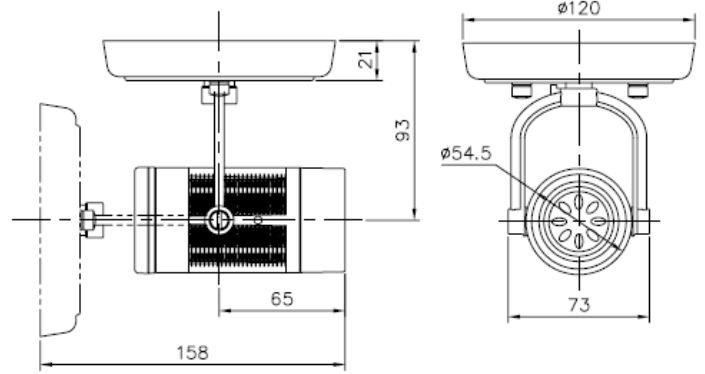
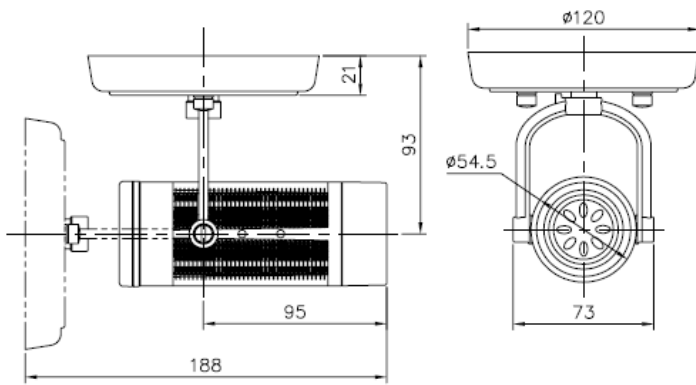
Color	Illuminance value (Lux) at particular Height
Red	White color lux x 0.28
Amber	White color lux x 0.32
Green	White color lux x 0.58
Blue	White color lux x 0.16
Warm White	White color lux x 0.72

■ Drawings :

Quasar

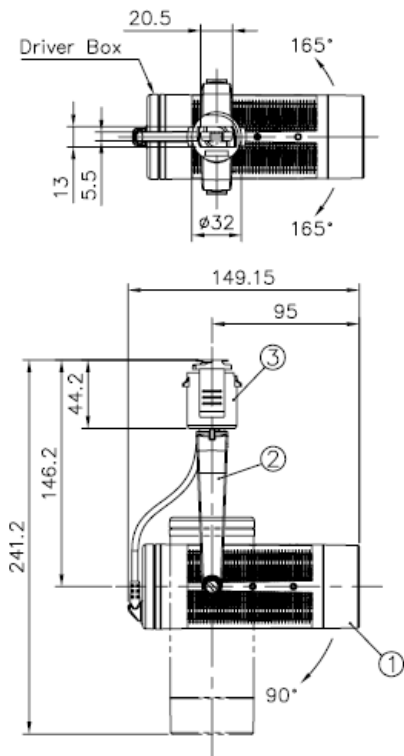
◆ L-Type:

◆ S-Type:



Quasar Track

◆ L-Type:



Remarks:

1. Deviation +/- 10% for all listed data

Dimensional Units: mm