# **LINEAR HARSH SERIES**

HARSH LOCATION LED LUMINAIRE

Reliable. Durable. Efficient. 4,000 to 11,000 lumen models



#### **ABOUT RED SKY LIGHTING**

## PIONEERING INDUSTRIAL ILLUMINATION FOR HARSH & HAZARDOUS CONDITIONS

A leading manufacturer of premium LED lights for demanding work conditions

Headquartered in California, products assembled in the USA

Servicing global clients across 4 continents in metal processing, oil & gas, marine, manufacturing

Renowned for quality, dependability, client care and uncompromising safety standards



#### WHY CHOOSE RED SKY

#### SERIOUSLY SAFE LIGHTS

- · Rigorously tested in our professional labs
- · Surpassing industry certifications and safety protocols
- Crafted with highest grade components for maximum durability

#### **TOP-NOTCH SERVICES**

- Team of experts for seamless support
- · Energy audit services, lighting simulation services
- Hassle-free return policy and management

#### FAST DELIVERY

- Majority of orders delivered within 14 days
- · Same day shipping for products in stock
- · Real-time order tracking for full transparency

#### SUSTAINABLE SOLUTIONS

- High luminous efficacy LEDs for energy savings
- Conscious product design
- Recyclable materials for products and packaging



# 



#### Rugged Construction

Heat sink designed to perform in high ambient temperatures up to +55°C and as low as -40°C.

Built to withstand extreme temperatures, vibration, water and dust.

Copper-free aluminum body and frame for corrosion resistant

Thermal Management

Safe and reliable heat transfer

Long Fixture Life

L70 >147,000 hrs@55°C Maintenance-free and safe operation

## **CERTIFICATIONS**

UKCA ROHS CE LVD/EMC



IP66 IK08(PC) Salt Spray 720 hrs (ISO 9227)

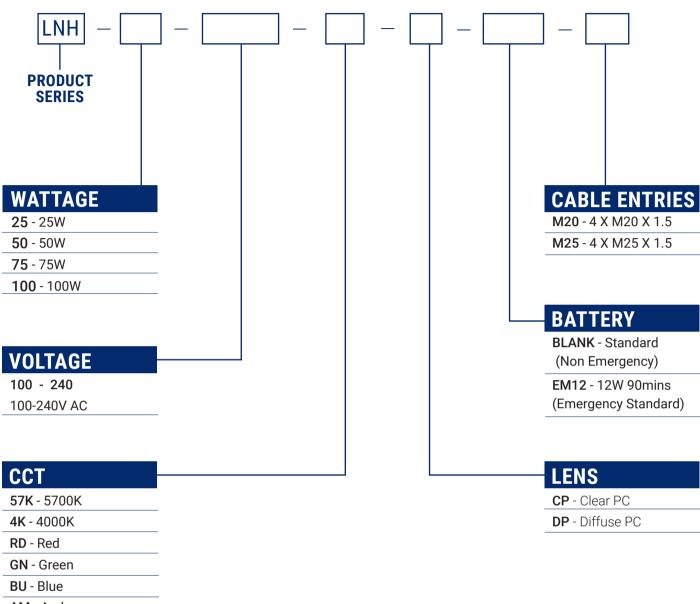
# **NTECHNICAL PARAMETERS**

Specification	LNH-25	LNH-50	LNH-75	LNH-100
	Electi	rical Parameters		
Power	25W	50W	75W	100W
Rated Input Current (220V AC)	0.127A	0.253A	0.379A	0.505A
Voltage/Frequency	100-240V AC 50/60Hz			
Power Factor	≥0.90			
THD	<20%			
L70		147,000 hr	s@55°C	
Surge Protection		L/N-FG 6K	V, L-N 4KV	
Supply Wire		1mm²-4mm²	², Rated 90°C	
Warranty		5 Ye	ears	
	Optic	al Parameters		
Lumen Output*	4,089Lm	7,453Lm	11,313Lm	10,294Lm
Lumen Output(EM)*	EM12 - 12W (2,217Lm@90Mins) EM12 - 12W (2,303Lm@90Mins			03Lm@90Mins)
Lumen Efficacy*	150Lm/W			
Available Beam Angle		11	0°	
Correlated Color Temperature (CCT)	4000K/5700K/Red/Green/Blue/Amber			
Color Rendering Index (CRI)	Ra>70			
	Mechanical Parameters			
Housing Material		Marine Grade	Aluminium	
Hardware		Stainless	steel 316	
Lens Material		Polycarb	oonate	
Mounting Options	Le	ow Ceiling, High Ceilir	ig, Wall, Eyebolt, Pole	
Product Weight	13.9lbs/	′6.3kg	21lbs/	9.5kg
Package Weight	10lbs/7	.3kg	23.1lbs	/10.5kg
Cable Entry		(4) M20	/M25	
Product Dimensions(L×W×H)	29.4×6.2×4.4in (747×158×111 mm) 52.4×6.2×4.4in (1332×158×111 mm		32×158×111 mm)	
Package Dimensions(L×W×H)	31.9x8.7x6.7in (80	09×220×170 mm)	54.7x8.7x6.7in (13	88×220×170 mm)
	Environmental Parameters			
Ambient Operating Temperature	-40°C~+55°C, 0°C~+50°C(Emergency)			
Ambient Operating Humidity	5%-95% RH			
Optimal Operating Temperature	25°C			
EPA wind rating (FT2/m2)	1.528/0	0.142	2.722	/0.253

\* Value calculated based on 5700K and clear PC, varies to differrent spec.

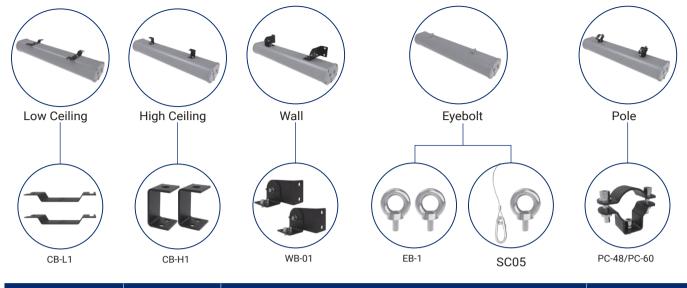
# **ORDERING INFORMATION**

EXAMPLE: LNH-50-100-240-57K-CP-EM12-M20



AM - Amber

# **MOUNTING ACCESSORIES**



Mounting Method	PN	Description	MPN Code
Low Ceiling	CB-L1	Low Ceiling Mount Bracket, 1 Pair	309050220
High Ceiling	CB-H1	High Ceiling Mount Bracket, 1 Pair	309050222
Wall	WB-01	Wall Mount Swivel Bracket, 1 Pair	309050224
<b>F</b> 1 1	EB-1	Eyebolt, 1 Pair	309050226
Eyebolt	SC05	Safety Cable Kit, SUS304	309050228
Pole	PC-48	40-51 mm Diameter Range SUS316 Pole Clamp, 1 Pair	309050230
	PC-60	54-62 mm Diameter Range SUS316 Pole Clamp, 1 Pair	309050232

### **REPLACEMENT PARTS (ORDERED SEPARATELY)**

Part Number	Description	MPN Code
LNH-25-Driver	Replacement Driver Kit for LNH-25 Fixtures	303010096
LNH-50-Driver	Replacement Driver Kit for LNH-50 Fixtures	303010097
LNH-75-Driver	Replacement Driver Kit for LNH-75 Fixtures	303010098
LNH-100-Driver	Replacement Driver Kit for LNH-100 Fixtures	303010099
LNH-*-EM-Driver	Replacement Driver Kit for LNH-*-EM Fixtures	303010100
LNH-*-EM Battery	Replacement Battery for LNH-*-EM	303040006
CP004-A-01	Replacement Clear PC Lens for LNR2, LNR EM, LLP, LNH	303030012
DP004-A-01	Replacement Diffuse PC Lens for LNR2, LNR EM, LLP, LNH	303030013

#### NLUMEN TABLE

Part Number	Wattage (W)	ССТ	Lens	Lumen Output (Lm)	Efficiency (Lm/W)
	Voltag	e 100-240V A	С		
LNH-25-100-240-57K-CP-M20	25	5700K	Clear PC	4,089	164
LNH-25-100-240-57K-DP-M20	25	5700K	Diffuse PC	3,367	132
LNH-50-100-240-57K-CP-M20	50	5700K	Clear PC	7,453	152
LNH-50-100-240-57K-DP-M20	50	5700K	Diffuse PC	6,314	130
LNH-75-100-240-57K-CP-M20	75	5700K	Clear PC	11,313	151
LNH-75-100-240-57KDP-M20	75	5700K	Diffuse PC	9,750	130
LNH-100-100-240-57K-CP-M20	100	5700K	Clear PC	10,294	155
LNH-100-100-240-57K-DP-M20	100	5700K	Diffuse PC	12,753	131

For additional information, please contact your sales representative.

# A DIRECT RETROFIT FROM HID TO LED

The LNH series LED is easy to retrofit in the same configuration as your existing HID luminaires. For example, a 100-watt Linear Harsh (LNH-100) delivers virtually the same illumination as its equivalent 400 watt HPS luminaire while providing 75% reduction in energy costs and up to 150,000 hours of continuous operation.

MODELS	Lumen Output (Lm)	MH Equivalent (W)	HPS Equivalent (W)
LNH-25	3,750	100	150
LNH-50	7,500	200	225
LNH-75	11,250	250	310
LNH-100	15,000	350	400

# **NTHE RIGHT BEAM PATTERN FOR YOUR APPLICATION**

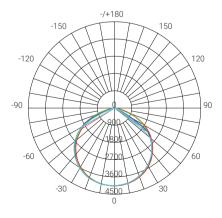
RSL optic package is engineered to deliver maximum footcandles efficiently where you need them, without wasted light or overspill.

RSL offers complimentary lighting design services for our products using industry-leading AGI32 software, tailored for projects of all sizes in harsh and hazardous locations. We assist you in determining the number of fixtures needed, the types of lights to use, their optimal placement, and how to maximize energy savings—all within budget.

Simply fill out the form (https://dev.redskylighting.com/lighting-design) with a few key details, request a layout, and we'll bring your ideas to life within 2-5 business days.

Beam	NEMA/IESNA Type	Beam Description	Beam Projection Distance
30°	NEMA 3	Medium Narrow	
60°	NEMA 4	Medium	
90°	NEMA 5	Medium Wide	
120°	NEMA 6	Wide	-
T1	Туре І	Asymmetric distributions, well suited for narrow areas, such as Conveyor belts, Aisleways, Catwalks, Loading docks and Tunnels.	
T2	Туре II	Asymmetric distributions, well suited for narrow areas, such as roadways, paths and driveways.	
Т3	Type III	Asymmetric distributions, well suited for site / area perimeters, wide roadways, and open areas.	
Т5	NEMA 7 Type V (Square)	Very Wide: symmetrical pattern with excellent uniformity for large, open areas.	

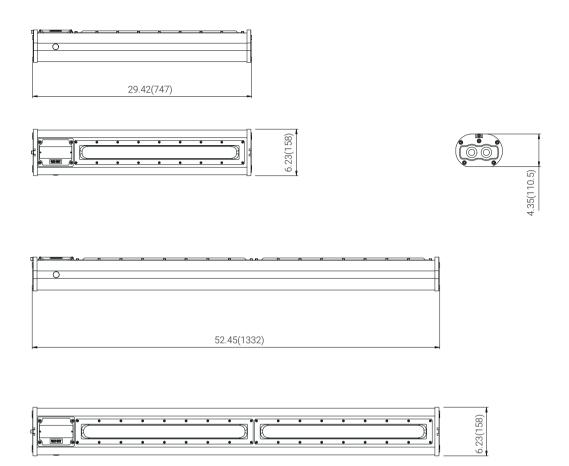
### <u> PHOTOMETRIC</u>

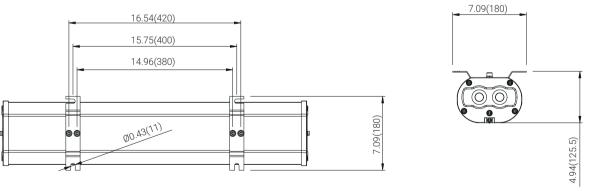




### **DIMENSIONS**

unit: in(mm)

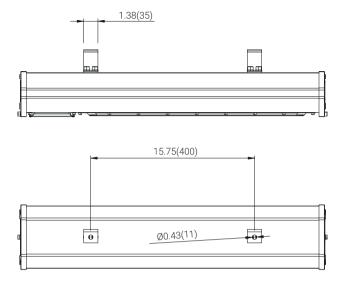


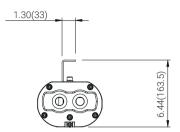


Low Ceiling

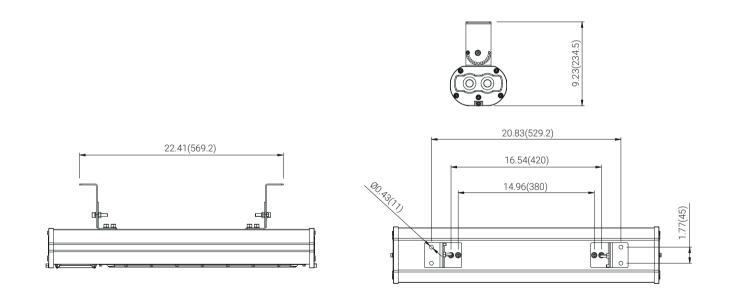


unit: in(mm)





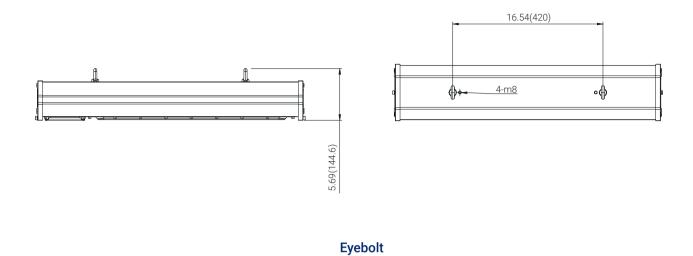
**High Ceiling** 

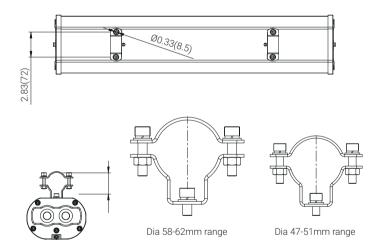


Wall



unit: in(mm)





Pole

# **NHAZARDOUS LOCATION LIGHTING BASICS**

#### Atmosphere Groups

#### Temperature Classification

Substance	Hazard Class	Division Groups	Zone Groups	Max. Surface Temperatures	NEC <sup>®</sup> 500 CEC <sup>®</sup>	NEC <sup>®</sup> 500/IEC- Group II
Acetylene		Group A	IIC	450°C(842°F)	T1	T1
Hydrogen	Class I	Group B	IIC	300°C(572°F)	T2	
Ethylene	Flammable	Group C	IIB	280°C(536°F)	T2A	
Propane	Gases	Group D	IIA	260°C(500°F)	T2B	T2
Methane		Group D	IIA <sup>2</sup>	230°C(446°F)	T2C	. 2
			IIIC <sup>3</sup>	215°C(419°F)	T2D	
Combustible Metal Dusts	Class II Combustible Dusts	Group E <sup>1</sup>		200°C(392°F)	Т3	
Combustible Carbonaceous Dust		Group F	IIIB <sup>3</sup>	180°C(256°F)	T3A	T3
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB <sup>3</sup>	165°C(329°F)	ТЗВ	15
	Class III Fibers			160°C(320°F)	T3C	
Combustible Fibers and Flyings	and Flyings	Not Applicable	IIIA <sup>3</sup>	135°C(275°F)	T4	
Note 1: Group E is applicable to Class II, Division 1 only.			120°C(248°F)	T4A	T4	
Note 2: Methane is a Group IIA Gas for non-mining applications.			100°C(212°F)	T5	Т5	
Note 3: Group IIIA, IIIB and IIIC have not been adopted by the Canadian Electrical Code.			85°C(185°F)	Т6	Т6	

#### Classification of Divisions and Zones

Hazard Level	Division Scheme	Zone Scheme	Definitions
Continuous Hazard	Division 1	Zone 0 / Zone 20	A place in which an explosive atmosphere is continually present
Intermittent Hazard		Zone 1 / Zone 21	A place in which an explosive atmosphere is likely to occur in normal operation
Hazard Under Abnormal Conditions	Division 2	Zone 2 / Zone 22	A place in which an explosive atmosphere is not likely to occur in normal operation, but may occur for short periods

#### IP Codes

1st No.	Solid Objects
0	No protection
1	Objects greater than 50mm
2	Objects greater than 12.5mm
3	Objects greater than 2.5mm
4	Objects greater than 1mm
5	Dust protected
6	Dust proof
2nd No.	Liquids
0	No protection
1	Vertically dripping
2	Dripping up to 15°
3	Limited spraying
4	Splashing from all directions
5	Hosing jets from all directions
6	Strong hosing jets from all directions
7	Temporary immersion
8	Continuous immersion
9	Steam-jet cleaning

#### IK Ratings

IK Code	Level of Protection Achieved
IK00	Not protected
IK01	Protected against 0.14 joules impact
IK02	Protected against 0.2 joules impact
IK03	Protected against 0.35 joules impact
IK04	Protected against 0.5 joules impact
IK05	Protected against 0.7 joules impact
IK06	Protected against 1 joules impact
IK07	Protected against 2 joules impact
IK08	Protected against 5 joules impact
IK09	Protected against 10 joules impact
IK10	Protected against 20 joules impact



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