

# **LINEAR SERIES** Technical Specification Sheet



### **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



# **LINEAR SERIES**

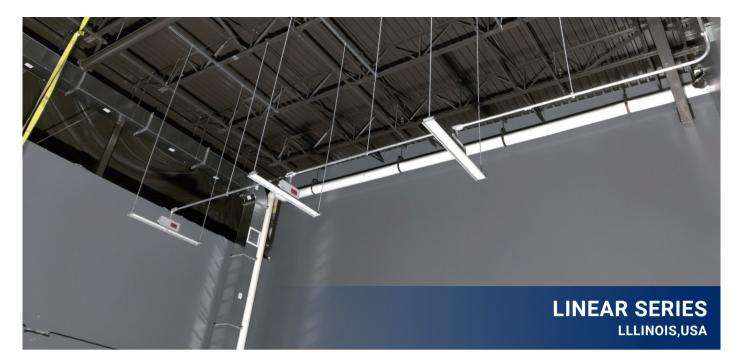


With its rugged copper-free aluminum construction, the Linear Series is rated for hazardous environments up to Class I Division 2, protecting against combustible dust, gases, and vapors. Featuring a maintenance-free design, the Linear Series ensures over 147,000 hours of reliable light output at temperatures up to 149°F (65°C), while its robust design and quality enable operation under temperatures as low as -40°F (-40°C).

With durable materials and first-in-class craftsmanship, it withstands extreme temperatures, vibration, water, and dust ensuring long-lasting performance even in the most punishing industrial settings. Its dimmable 1-10V driver and high luminous efficacy of up to 150 lumens per watt help maximize energy savings without compromising illumination levels.

For easy installation, the Linear Series includes a built-in wiring compartment with three 3/4" NPT conduit entries and WAGO connectors. It also offers multiple mounting options for suspended, wall, or surface installations. An optional bracket allows for simple retrofits of existing fixtures.

Purpose-built for industrial use, the Linear Series is a purpose-built solution delivering durable, efficient linear lighting for demanding hazardous work environments. Red Sky Lighting backs the Linear Series with an industry-leading 10-year warranty and factory replacement. Choose the Linear Series for exceptional performance, advanced safety, and unmatched durability in hazardous industrial environments.



### **FEATURES**



#### Rugged Construction

Built to withstand extreme temperatures, vibration, water and dust. Copper-free aluminum body and frame for corrosion-resistant

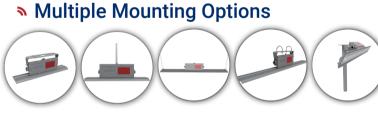
#### Easy and Through Wiring

Built-in wiring compartment with three NPT 34" entries and WAGO 221 lever connectors for easy wiring



#### Long Fixture Life

L70 >147,000 Hours@149°F Maintenance-free and safe operation



### **RATINGS**

Class I Division 2, Groups A, B, C, D Simutaneous Presence Class II Division 1 Group E, F, G Class II Division 2, Groups F, G Class III Class I, Zone 2, Group IIC Zone 21, Group IIIC

UL 1598 Wet Locations UL 1598A Marine Outside Type (Salt Water) IP66 IK08

# **CERTIFICATIONS**

UL844 UL1598 UL1598A CSA C22.2 NO. 250.0:21, 5th Ed CSA C22.2 No. 137, Edition: 2 DLC (Pending)

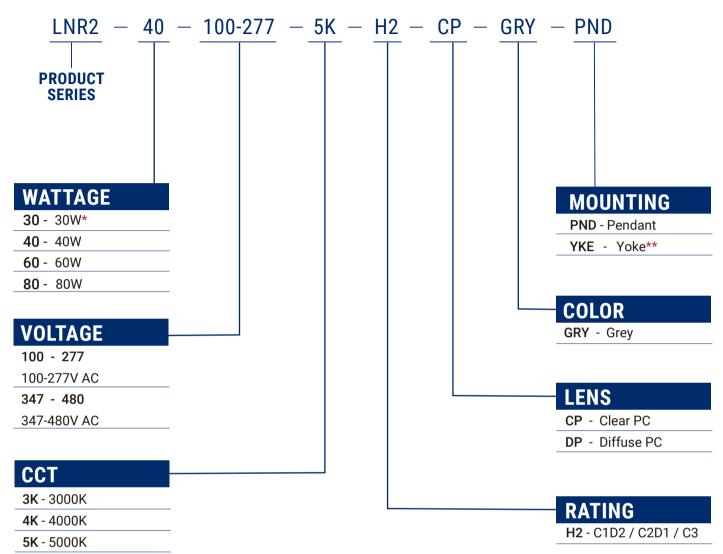
### **NTECHNICAL PARAMETERS**

Specification	LNR2-30	LNR2-40	LNR2-60	LNR2-80		
Electrical Parameters						
Power	30W	40W	60W	80W		
Voltage/Frequency		100-277V AC, 347-4	480V AC 50/60Hz			
Power Factor		≥9	0%			
THD		<2	0%			
L70		147,000	Hours@149°F			
Dimming		0-1	10V			
Surge Protection		10	KV			
Warranty		LEDs: 10 years	s, Driver: 7 years			
	Optical Parameters					
Lumen Output*	4,426Lm	5,795Lm	9,185Lm	12,026Lm		
Lumen Efficacy*		150Lr	n/w			
Correlated Color Temperature (CCT)	3000K/4000K/5000K					
Color Rendering Index (CRI)	Ra>70					
Mechanical Parameters						
Finish	Thermoset Powdercoat					
Hardware	Stainless steel 316					
Lens Material	Polycarbonate					
Mounting Options	Pendant, Yoke, Chain, Pole, Stanchion					
Product Weight	11.0lbs/5.0kg 14.68lbs/6.66kg			s/6.66kg		
Cable Entry	(3) 3/4" NPT					
Product Dimensions(L×W×H)	23.6×5.0×6.6in(600×127×168 mm) 47.2×5.0×6.6in(1200×127×168 mm)					
	Environmen	tal Parameters				
Ambient Operating Temperature	C1D2@-40°F~	149°F (-40°C ~ 65°C),	C2D1@-40°F ~ 122°F	(-40°C ~ 50°C)		
T-Code Rating	T4A					

\* Value calculated based on 5000K and Clear PC, varies to differrent spec.

# **ORDERING INFORMATION**

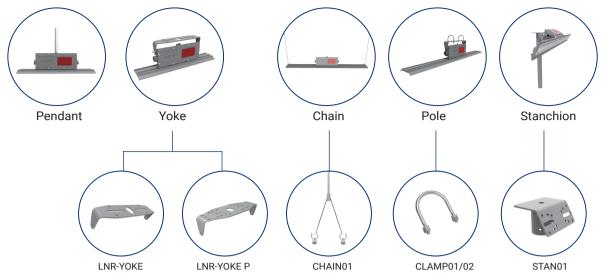
EXAMPLE: LNR2-40-100-277-5K-H2-CP-GRY-PND



\* unavailable in 347-480V AC

\*\* LNR-YOKE Pre-installed as standard

# MOUNTING ACCESSORIES



Mounting Method	PN	Description	MPN Code
Yoke	LNR-YOKE	Yoke Mount, LNR SERIES, SS304, Power Coated Grey RAL7037	309050042
roke	LNR-YOKE P*	Retrofit Yoke Mount, LNR SERIES, SS304, Power Coated Grey RAL7037	309050332
Chain	CHAIN01	Chain Hang Kit, LNR&LNT SERIES, SS304	309050071
Dino olomp	CLAMP01	Pipe Clamp Kit for Round pole $\Phi$ 1 7/8(48mm), SS304	309050047
Pipe clamp	CLAMP02	Pipe Clamp Kit for Round pole $\Phi$ 2 3/8(60mm), SS304	309050046
Stanchion	STAN01**	Slip-Fit Stanchion Mount Kit, SS304, Power Coated Grey RAL7037	309050300

#### \* Retrofit Bracket Compatibility Chart

For customers trying to retrofit an existing fixture, use the table below as a guide to select the best bracket tosuit your need

Manufacturer	Part Number	Retrofit Yoke
Crouse Hinds	DP057MTK	$\checkmark$
Dialight	LTXW4	$\checkmark$
	LTXW4LP	$\checkmark$
AZZ <sup>™</sup> Rig-A-Lite <sup>™</sup>	53050	$\checkmark$
Appleton	RMLSB	$\checkmark$

\*\* Requires A Yoke Mount

# **NOTHER ACCESSORIES**



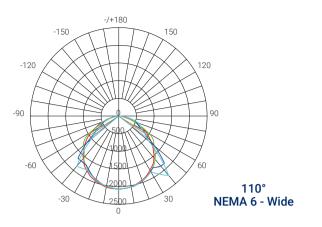
PN	Description	MPN Code
SFCB03	Safety Cable Kit, LNR SERIES, SS304	309050049
GLCO-03	Gland with 3ft cord for C1D2 only	204020003
GLCO-10	Gland with 10ft cord for C1D2 only	204020004

# NLUMEN TABLE

PN	Wattage (W)	ССТ	Beam	Lens	Lumen Output (Lm)	Efficiency (Lm/W)
Voltage 100-277V AC						
LNR2-30-100-277-5K-110-H2-CP-GRY-YKE	30	5000K	110°	Clear PC	4,426	152
LNR2-30-100-277-5K-110-H2-DP-GRY-YKE	30	5000K	110°	Diffuse PC	3,949	136
LNR2-40-100-277-5K-110-H2-CP-GRY-YKE	40	5000K	110°	Clear PC	5,795	151
LNR2-40-100-277-5K-110-H2-DP-GRY-YKE	40	5000K	110°	Diffuse PC	5,171	135
LNR2-60-100-277-5K-110-H2-CP-GRY-YKE	60	5000K	110°	Clear PC	9,185	158
LNR2-60-100-277-5K-110-H2-DP-GRY-YKE	60	5000K	110°	Diffuse PC	8,256	143
LNR2-80-100-277-5K-110-H2-CP-GRY-YKE	80	5000K	110°	Clear PC	12,026	155
LNR2-80-100-277-5K-110-H2-DP-GRY-YKE	80	5000K	110°	Diffuse PC	10,785	139
	V	oltage 34	7-480V A	C		
LNR2-40-347-480-5K-110-H2-CP-GRY-YKE	40	5000K	110°	Clear PC	5,902	153
LNR2-40-347-480-5K-110-H2-DP-GRY-YKE	40	5000K	110°	Diffuse PC	5,372	139
LNR2-60-347-480-5K-110-H2-CP-GRY-YKE	60	5000K	110°	Clear PC	9,597	157
LNR2-60-347-480-5K-110-H2-DP-GRY-YKE	60	5000K	110°	Diffuse PC	8,621	141
LNR2-80-347-480-5K-110-H2-CP-GRY-YKE	80	5000K	110°	Clear PC	12,182	157
LNR2-80-347-480-5K-110-H2-DP-GRY-YKE	80	5000K	110°	Diffuse PC	10,993	142

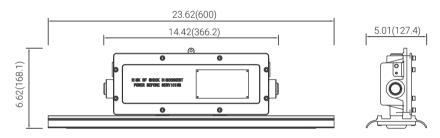
For additional information, please contact your sales representative.

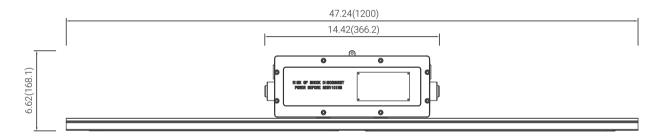




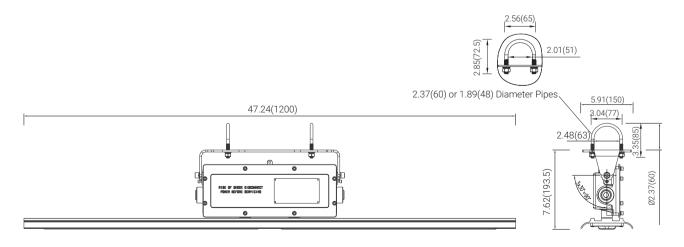
# **<u>N DIMENSIONS</u>**

unit: in(mm)



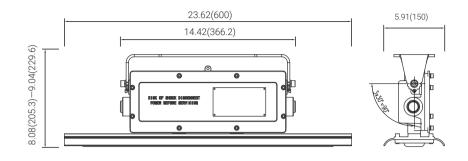


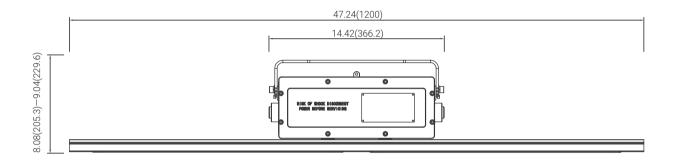
Pendant



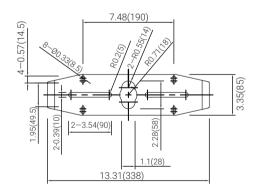


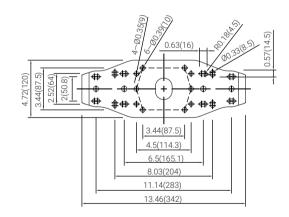
unit: in(mm)





Yoke



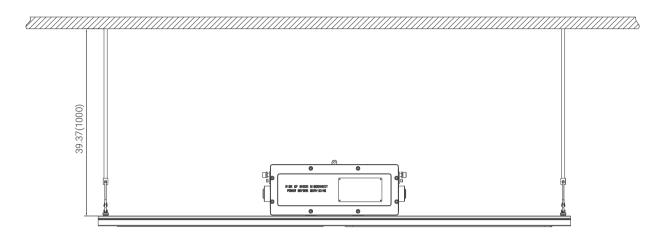


#### **LNR-YOKE**

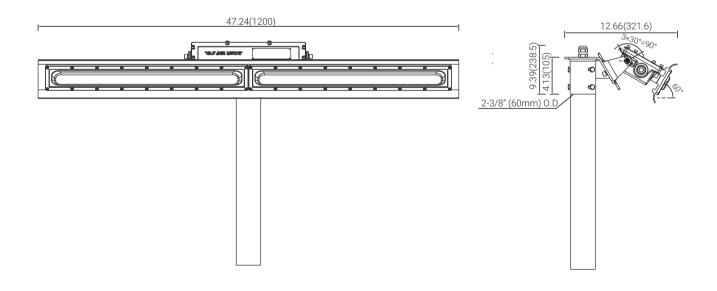
**LNR-YOKE P** 

### **DIMENSIONS**

unit: in(mm)



#### Chain



#### Stanchion

# MAZARDOUS 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(842)	T1	T1	
Hydrogen	Class I	Group B	IIC	300(572)	T2	11	
Ethylene	Flammable	Group C	IIB	280(536)	T2A		
Propane	Gases	Group D	IIA	260(500)	T2B	T2	
Methane	Class II Combustible Dusts		IIA <sup>2</sup>	230(446)	T2C	12	
		Group D		215(419)	T2D		
Combustible Metal Dusts		Group E <sup>1</sup>	IIIC <sup>3</sup>	200(392)	Т3		
Combustible Carbonaceous Dust		Combustible	Group F	IIIB <sup>3</sup>	180(256)	T3A	T3
Combustible Dusts not in Group E or F (Flour, Grain, Wood, Plastics, Chemicals)		Group G	IIIB <sup>3</sup>	165(329)	T3B	10	
				160(320)	T3C		
Combustible Fibers and Flyings	Class III Fibers and Flyings	Not Applicable	IIIA <sup>3</sup>	135(275)	T4		
Note 1: Group E is applicable to Class II, Division 1 only.				120(248)	T4A	T4	
Note 2: Methane is a Group IIA Gas for non-mining applications.				100(212)	Т5	Т5	
Note 3: Group IIIA, IIIB and IIIC have not been adopted by the Canadian Electrical Code.			85(185)	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	Division 1	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

RED SKY LIGHTING LLC 9370 Pittsburgh Ave Rancho Cucamonga, CA 91730, USA 1(262) 456-5002 contact@redskylighting.com www.redskylighting.com

