Product #	Type	Date	
Project Name			
Project Location	Р	repared By	

Specifications

 Linear type surface Wall/Ceiling/Ground mounted luminaire with specification grade optical performance using high efficacy LED. Typical use is for wall grazing, spot or floodlighting with adjustable aiming and variety of different beam types.

Housing

 Low copper, corrosion resistant, Extruded aluminum construction. One-piece silicone gasket ensures water-tight and dust-tight construction. Available in four lengths.

Optical system

 Clear tempered glass lens enclosed in the housing and sealed with extruded rubber gasket. Ultra-high efficiency TIR optics provides variety of different beam types. Optical performance is enhanced by high 95% reflecting collimating reflectors. Available beam types are Narrow, Medium, Wide, Elliptical Horizontal, Elliptical Vertical, and Asymmetric.

Electrical

 High power LED source, with performance of greater than 95 lumens per watt. Available in range of Color Temperature 3000K-5000K, CRI of 70 or greater. 2700K available on request.

LED Drivers

 UL/CSA recognized component to meet UL8750 & EN61347 (USR/CNR -E328335). Suitable for input power at 120-277VAC. Minimum power factor >0.95. Integrated 10kV/5kA surge protection device.

Finish

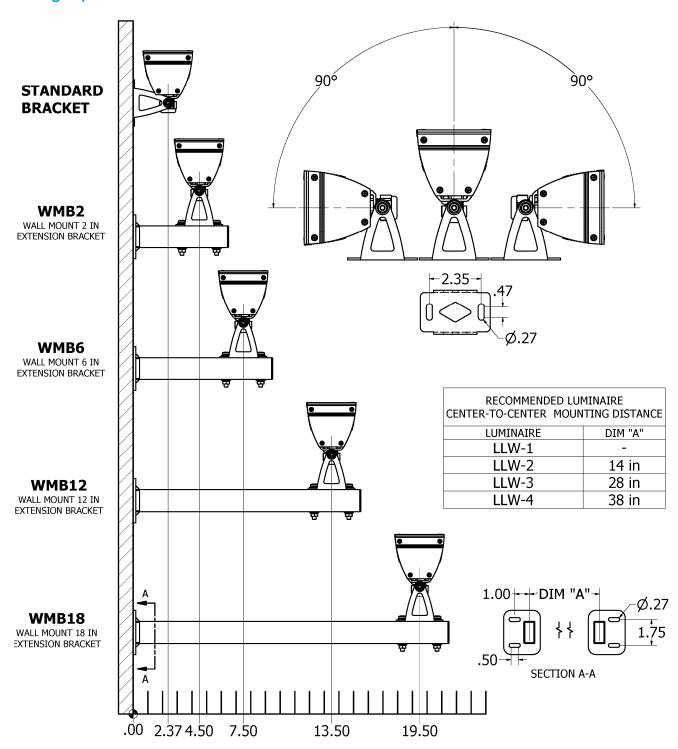
Standard finish is a charcoal gray powder coat paint.

Warranty and Certifications

 5 years for LED Light Engine and Driver 50,000-hour L70 LED Illumination per LM-80 Standards. In compliance with UL 1598 and CSA C22.2 NO. 250.0 standards. Suitable for indoor/ outdoor wet (IP65) or damp location use. Proposition of the state of the 3.334 **(**2) 3.000 5.923 3.176 13.681 25.681 38.681 49.681



Mounting Options





Targeted LED Performance

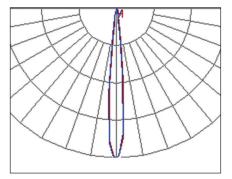
LUMINAIRE DATA @ 85 DEGREE C. Tj

Cree LM80 Projected Life Hours per IESNA TM21-11

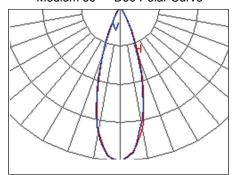
BASIC MODEL	Number	LED Color	LED Watts	Output Lumens	At 25 -degree C, Luminaire Ambient		At 40 -degree C, Luminaire Ambient		At <mark>50</mark> -degree C, Luminaire Ambient			
NO Of L	of LEDs	Temp.			L80(10K) Life Hours	Ts-Degree C	L80(10K) Life Hours	Ts-Degree C	L80(10K) Life Hours	Ts-Degree C		
	10	5000		2073	Greater than		Greater than		Greater than			
LLW1	10	4000	20	2032			60,000	Under 105	60,000	Under 105	60,000	Under 105
	10	3000		1969	,				,			
	20	5000		4147	Greater than 60,000	Under 105	Greater than 60,000	Under 105	Greater than 60,000	Under 105		
LLW2	20	4000	40	4064								
	20	3000		3940	00,000		00,000		00,000			
	30	5000		6220	6		Greater than 60,000	Under 105	Greater than 60,000	Under 105		
LLW3	30	4000	60	6096	Greater than 60,000	Under 105						
	30	3000		5909	00,000		00,000		00,000			
	40	5000		8294	Cuartan than							
LLW4	40	4000	80	8128	Greater than	Greater than 60,000	Under 105	Greater than 60,000	Under 105	Greater than 60,000	Under 105	
	40	3000		7879	00,000		00,000		60,000			

Photometrics

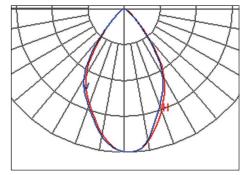
Narrow 10° - D10 Polar Curve



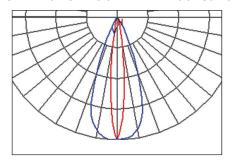
Medium 30° - D30 Polar Curve



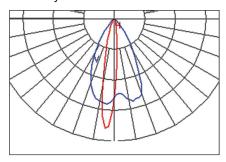
Wide 60° - D60 Polar Curve



OVAL Hor. OR Vert. ELH/ELV Polar Curve



Asymmetric Oval ASY Polar

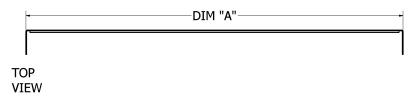


NOTE: SEE PHOTOMETRIC APPLICATION DATA FOR SPECIFIC BEAM



Glare Control Accessories

VISOR

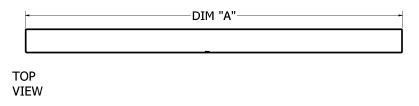


PART VARIATIONS					
PART NUMBER DIM "A"					
LLW-1	13.95 IN				
LLW-2	25.95 IN				
LLW-3	37.95 IN				
LLW-4	49.95 IN				

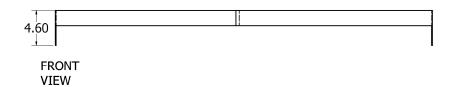




REGULAR HOOD

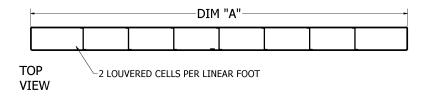


PART VARIATIONS						
PART NUMBER DIM "A"						
LLW-1	13.95 IN					
LLW-2	25.95 IN					
LLW-3	37.95 IN					
LLW-4	49.95 IN					

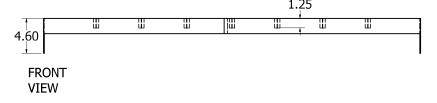




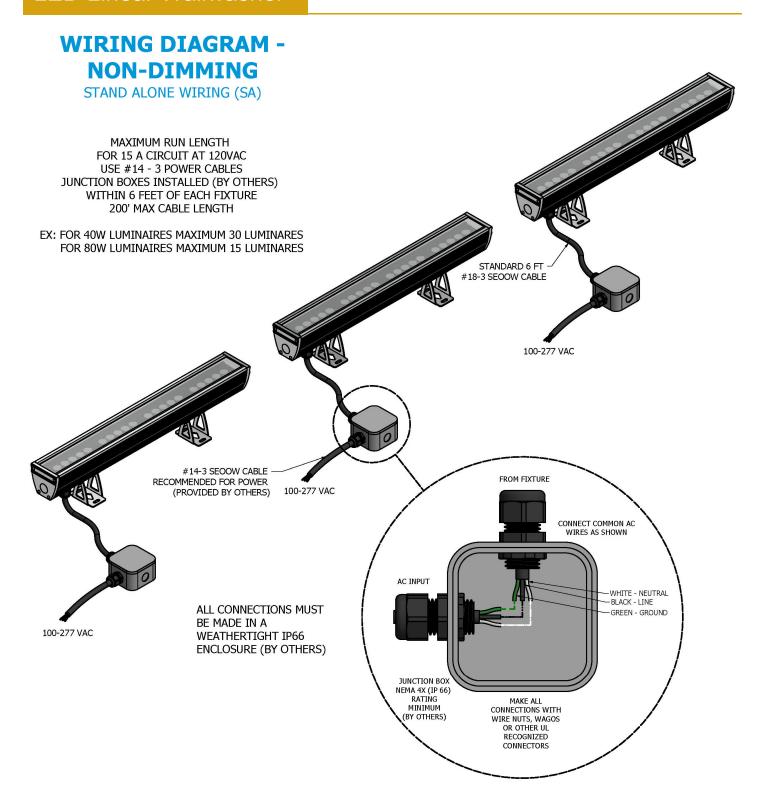
CROSS LOUVERED HOOD



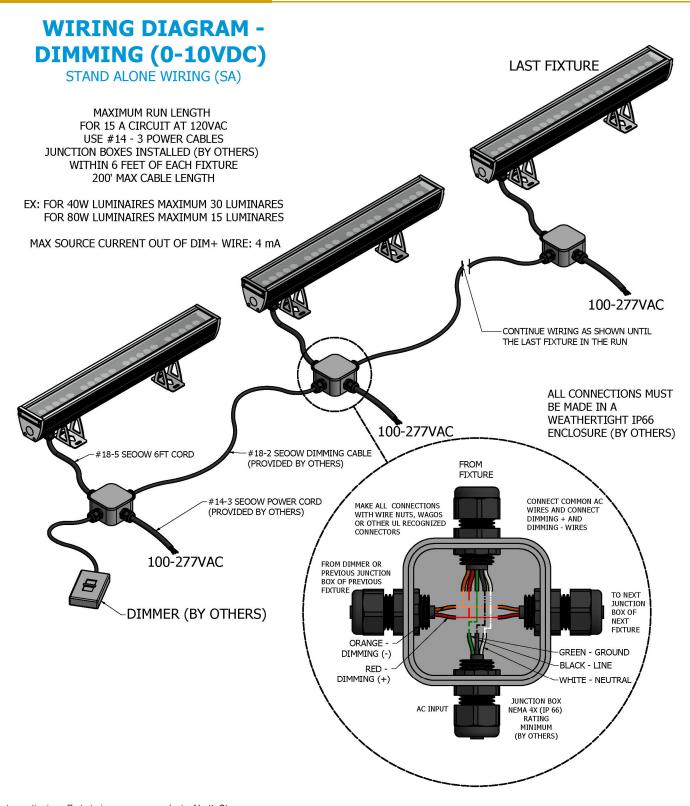
PART VARIATIONS					
PART NUMBER DIM "A"					
LLW-1	13.95 IN				
LLW-2	25.95 IN				
LLW-3	37.95 IN				
LLW-4	49.95 IN				







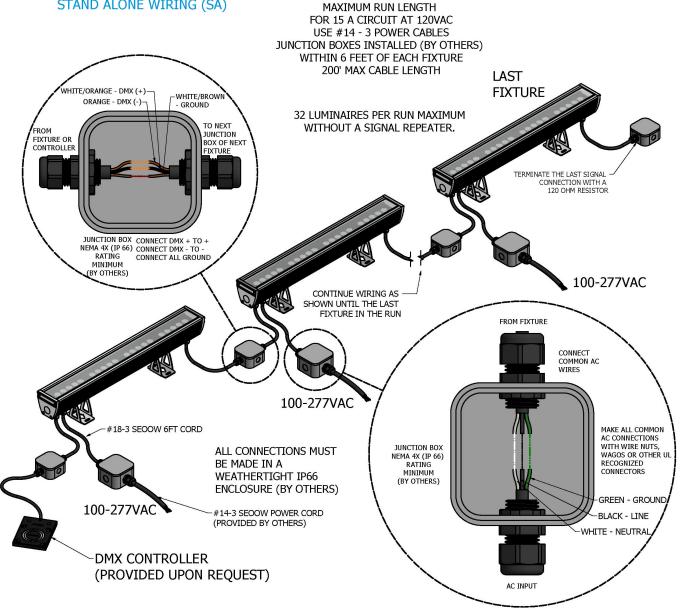






WIRING DIAGRAM -**DIMMING (DMX)**

STAND ALONE WIRING (SA)



RECOMMENDED DMX CABLE - BELDEN 7919A OUTDOOR RATED 24AWG BARE COPPER - 4 TWISTED PAIRS, OVERALL FOIL SHIELDED

NOTE: MAXIMUM TOTAL SIGNAL WIRE MUST NOT BE GREATER THAN 1000 FEET WITHOUT A SIGNAL **REPEATER**

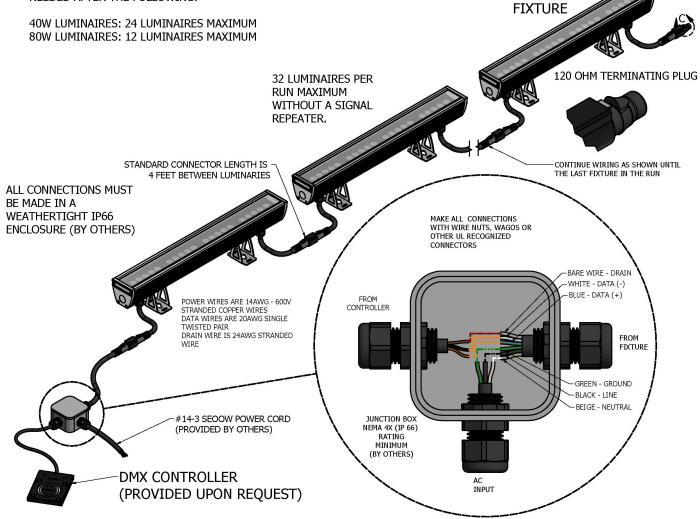
Due to continuing efforts to improve our products, North Star Lighting reserves the right to make changes to this product at any time without prior notice

NOTE: DMX WIRING MUST BE DONE IN SERIES AS SHOWN. USING A Y-SPLIT CONNECTION IS **NOT** RECOMMENDED. Y-SPLIT WIRING FOR DMX IS NOT RELIABLE. IF A Y-SPLIT MUST BE MADE, A SIGNAL REPEATER MUST USED TO SPLIT THE SIGNAL.

WIRING DIAGRAM - DIMMING (DMX)

SIDE-BY-SIDE WIRING (SB)

NOTE: DUE TO WIRE CURRENT LIMITATIONS A NEW JUNCTION BOX AND POWER SOURCE ARE NEEDED AFTER THE FOLLOWING:



RECOMMENDED DMX CABLE - BELDEN 7919A OUTDOOR RATED 24AWG BARE COPPER - 4 TWISTED PAIRS, OVERALL FOIL SHIELDED

NOTE: MAXIMUM TOTAL SIGNAL WIRE MUST NOT BE GREATER THAN 1000 FEET WITHOUT A SIGNAL REPEATER NOTE: DMX WIRING MUST BE DONE IN SERIES AS SHOWN. USING A Y-SPLIT CONNECTION IS **NOT** RECOMMENDED. Y-SPLIT WIRING FOR DMX IS NOT RELIABLE. IF A Y-SPLIT MUST BE MADE, A SIGNAL REPEATER MUST USED TO SPLIT THE SIGNAL.

LAST



Ordering Guide

-	-							-
Luminaire Catalog Number			Catalog	g Adder	Options			
Model Number	Power Consumption (Watts)	LED CCT	Beam Distribution	Input Voltage (VAC)	Lighting Controls	Luminaire Configuration	Luminaire Mounting	Glare Control
LLW1	10	3K - 3000 K	D10 - 10° Narrow Beam	U - 120V-277V	ND - Non- Dimming	SA - Stand Alone	S - Standard Bracket	V - Visor
	20	4K - 4000 K	D30 - 30° Medium Beam		DM - 0-10 VDC (Dim to Off) Interface Only	SB - Side-By-Side	02 - 2" Wall Mount Bracket	H- Hood
LLW2	20	5k - 5000 K	D60 - 60° Wide Beam		DMX - DMX Dim Interface Only**		06 - 6" Wall Mount Bracket	C - Cross Louver
	40	XK - Specify CCT or single Color*	ELH - Elliptical Horizontal Beam				12 - 12" Wall Mount Bracket	
LLW3	30		ELV - Elliptical Vertical Beam				18 - 18" Wall Mount Bracket	
	60		ASY - Asymmetric Beam					
LLW4	40							
	80							

**Contact North Star Lighting for Availability and lead-times.

