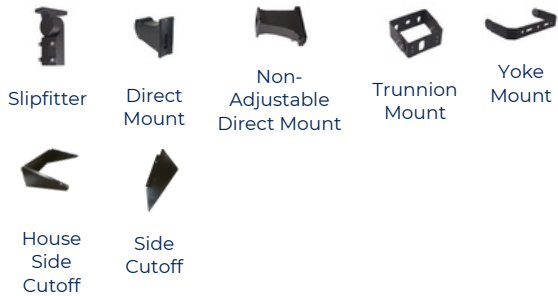




# HELIX1-LED

## Area Light



### IDEAL APPLICATIONS

- ✓ Parking Lots
- ✓ Schools
- ✓ Dealerships
- ✓ Commercial Plazas
- ✓ Roadways
- ✓ Outdoor Pathways/Walkways

The HELIX-LED is a highly versatile fixture designed with a full range of beam distribution options (Type II, III, IV, V), rotatable optics, glare control shields, and control options to create the perfect, most optimized lighting layout for your area. This standard fixture has all-in-one features including 120-347V, Colour Selection, and Lumen Adjustability.

The HELIX-LED Series is one of the most progressive area lights in the Canadian market that is dark sky friendly and listed on the DLC LUNA QPL.

### SPECIFICATIONS

	LED100A60	LED150A100		LED100A60	LED150A100
<b>PERFORMANCE</b>			<b>CONSTRUCTION</b>		
Max. Light Output	14400/11500/8600 lm (Lumen Selectable)	21200 /17000 /14000 lm (Lumen Selectable)	Housing	Die-cast Aluminum	
Max. Efficacy	143 lm/W		Lens	Polycarbonate	
CCT	Colour Selectable: 3000K/4000K/5000K Dedicated CCT: 2200K, 2700K, 3000K		Paint Specs.	Weather and Corrosion resistant Polyester powder coat finish	
Beam Distribution	Type II, Type III, Type IV, Type V		Housing Finish	Bronze*, Custom Colours	
LED Lifetime (L70)	100,000 Hours		<b>MOUNTING</b>		
CRI	83		Slip fitter, Direct mount for round/square poles, Trunnion mount, Yoke mount		
B-U-G	B3-U0-G3		<b>CERTIFICATIONS</b>		
Dimming	0-10V(10%-100%)		cULus certified as per UL1598 & CSA C22.2 NO. 250.0:21, IP65, Wet Location, DLC Premium, DLC LUNA		
<b>ELECTRICAL</b>			<b>Factory Installed Controls</b>		
Wattage	100/80/60W	150/120/100W	DHFS Motion Sensor, PCLS Control , Twist Lock Photocell, 7 PIN Receptacle with Shorting Cap ANSI C136. 41-2013 compliant, 3 PIN Receptacle with Shorting Cap ANSI C136.10, 20kV Surge protection(120-277V)		
Voltage	120-347V		<b>Options Sold Separately</b>		
Surge Protection	6kV internal & 10kV external as per UL1449		Slip fitter, Direct mount for round/square poles, Non- Adjustable Direct Mount, Trunnion mount, Yoke mount, House Side Cutoff, Side Cutoff, DHFS Motion sensor remote control, PCLS remote control		
Power Factor	0.998				
THD	4.17%	4.54%			
Cable Specs.	Input Power - 1m Cabtire Cable (SJOW 3x18 AWG) Dimming - 1m Cabtire Cable (SJOW 2x18 AWG)				
<b>AMBIENT OPERATING TEMPERATURE</b>					
-40°C to +50°C (-40°F to +122°F)					

Specs shown are for 120V/4000K

**Default factory setting 4000K/Highest Wattage Setting**

Note: DLC LUNA certification applies to only HELIX1-LED150A100 fixtures in 2200K - 3000K CCT and mounted with a Non Adjustable Direct Mount Arm (Code - 020041).



## Rotatable Optics



Can be used to re-direct the light in the required direction providing more flexibility especially for retrofit jobs.



## CONTROLS



Colour Selection/Lumen Adjustment Switches



PCLS - Photocell-CCT-Lumen Sensor



DHFS- Dimming High Frequency Motion Sensor



Twist Lock Photocell

## ORDERING GUIDE



Fixture	Wattage	Voltage	Colour Temp.	Beam Distribution	Finish	Dimming	Controls	Surge Protection
LED100A60	LED150A100	H - 120-347V	VK - Colour Selectable (3000K/4000K <sup>a</sup> 5000K)	T2 - Type II	BRZ - Bronze <sup>a</sup>	DIM - 0-10V Dimming	Blank <sup>a</sup>	SP10 - 10kV Surge Protection <sup>a</sup>
				T3 - Type III <sup>a</sup>				
				T4 - Type IV	CST - Custom Finish		PC - Photocontrol	SP20 - 20kV Surge Protection <sup>b</sup>
				T5 - Type V				
			2.2K - 2200K <sup>d</sup>	T2R - Type II Rotated Right			PCLS - Photocell CCT Lumen Sensor <sup>c</sup>	
			2.7K - 2700K <sup>d</sup>	T2L - Type II Rotated Left			3PIN - 3 PIN Receptacle	
			3K - 3000K <sup>d</sup>	T3R - Type III Rotated Right			7PIN - 7 PIN Receptacle	
				T3L - Type III Rotated Left			DHFS - Dimming. High Frequency Motion Sensor <sup>c</sup>	
				T4R - Type IV Rotated Right				
				T4L - Type IV Rotated Left				










### STOCK CODE

083664	HELIX1-LED100A60-H-VK-T3-BRZ-DIM-SP10
083782	HELIX1-LED100A60-H-VK-T3-BRZ-DIM-PCLS-SP10 <sup>c</sup>
081707	HELIX1-LED150A100-H-VK T3-BRZ-DIM-SP10
081856	HELIX1-LED150A100-H-VK-T3-BRZ-DIM-PCLS-SP10 <sup>c</sup>

Note: Default factory setting is 4000K/Highest Wattage

- <sup>a</sup> Standard Configuration
- <sup>b</sup> Available with 120-277V only
- <sup>c</sup> One remote control needed for sensor (PCLS - RC107 & DHFS - RC100)
- <sup>d</sup> Units qualify for DLC LUNA when ordered in fixed 2200K or 2700K or 3000K CCT and with a Non Adjustable Direct Mount Arm

## ACCESSORIES ORDERING GUIDE

		
<input type="checkbox"/> 020014 - HELIX1 SELECT YOKE MOUNT BRZ	<input type="checkbox"/> 020010 - HELIX1/2 DIRECT MOUNT F/RND AND SQR POLE BRZ	<input type="checkbox"/> 02001 - HELIX1/2 DIRECT TRUNNION MOUNT BRZ
		
<input type="checkbox"/> 020009 - HELIX1/2 SLIP FITTER BRZ	<input type="checkbox"/> 020037 - HELIX1 SELECT HOUSE SIDE CUTOFF SHIELD BRZ	<input type="checkbox"/> 020038 - HELIX1 SELECT SIDE CUTOFF SHIELD BRZ
		
<input type="checkbox"/> 020041 - HELIX1/2 NON ADJ DIRECT MOUNT BRZ (FOR LUNA COMPLIANT)	<input type="checkbox"/> 087016 - RC-100 MOTION SENSOR REMOTE CONTROL (FOR DHFS)	<input type="checkbox"/> 087034 - RC-107 PHOTOCONTROL REMOTE CONTROL (FOR PCLS)

AMPERAGE DRAW & SURGE PROTECTION						
	CURRENT					SURGE PROTECTION
	120V	208V	240V	277V	347V	120-347V
HELIX1-LED100A60	0.86A	0.67A	0.50A	0.49A	0.32A	10kV
HELIX1-LED150A100	1.32A	0.76A	0.66A	0.57A	0.46A	10kV

TM-21 ESTIMATED LUMEN MAINTENANCE			
	50,000 Hours	75,000 Hours	100,000 Hours
HELIX1-LED	88.9%	83.7%	78.9%

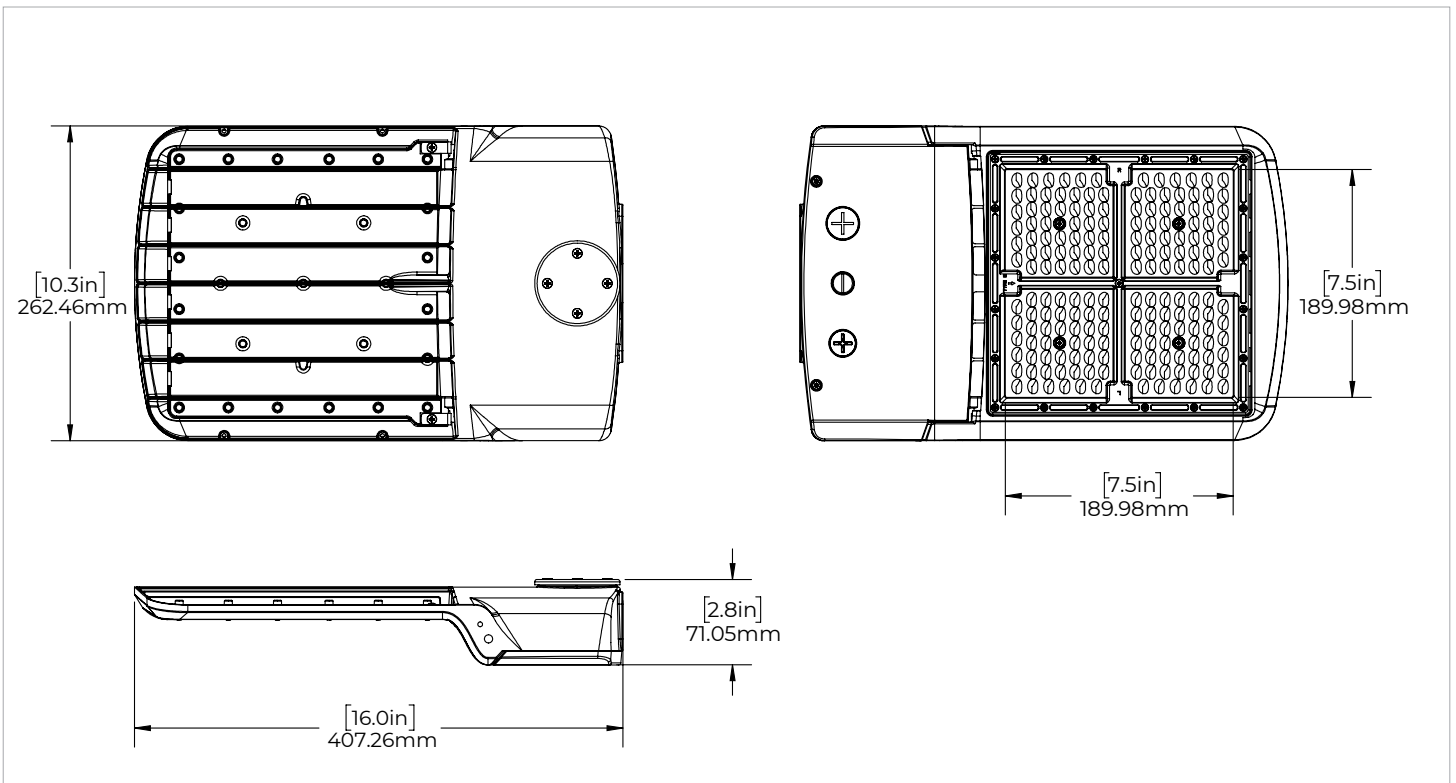
Life hours are derived from IESNA LM-80 testing report and projected per IESNA TM-21 calculations

EPA (ft <sup>2</sup> )			
	0° Tilt	45° Tilt	90° Tilt
HELIX1-LED	0.25	1.16	1.52
HELIX1-LED(HCO)	0.63	1.32	1.52
HELIX1-LED(SCO)	0.70	1.16	1.52

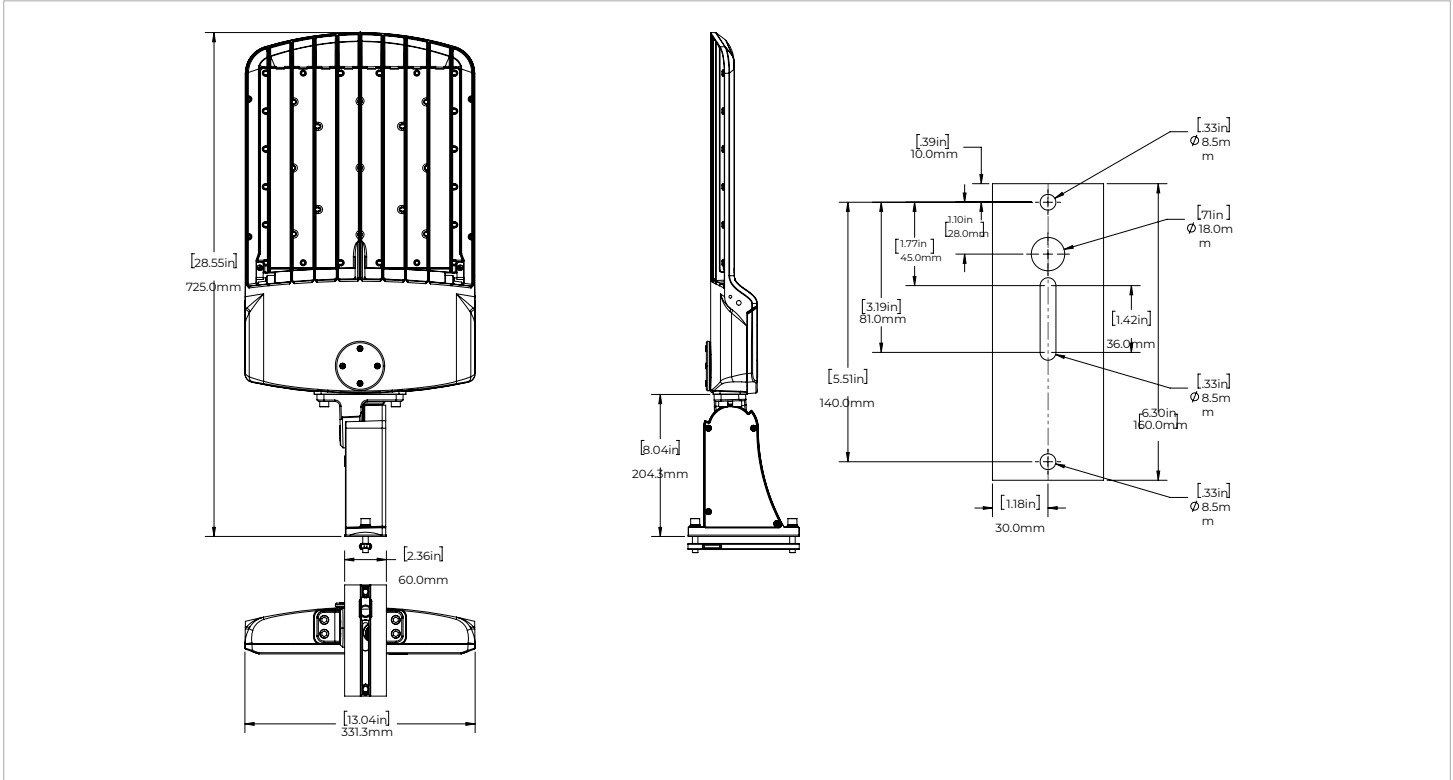
  

WEIGHT	
HELIX1-LED	8.4 lbs

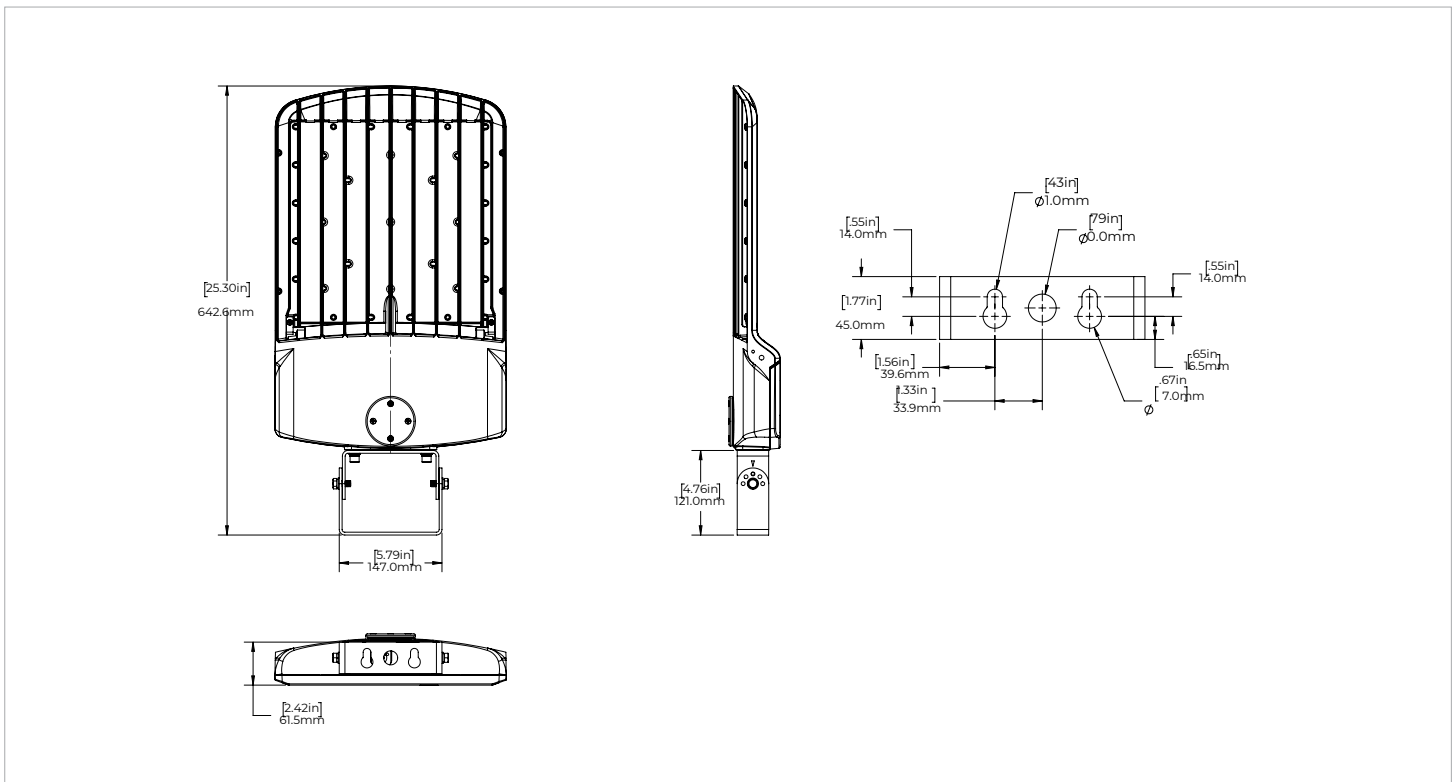
## HELIX 1



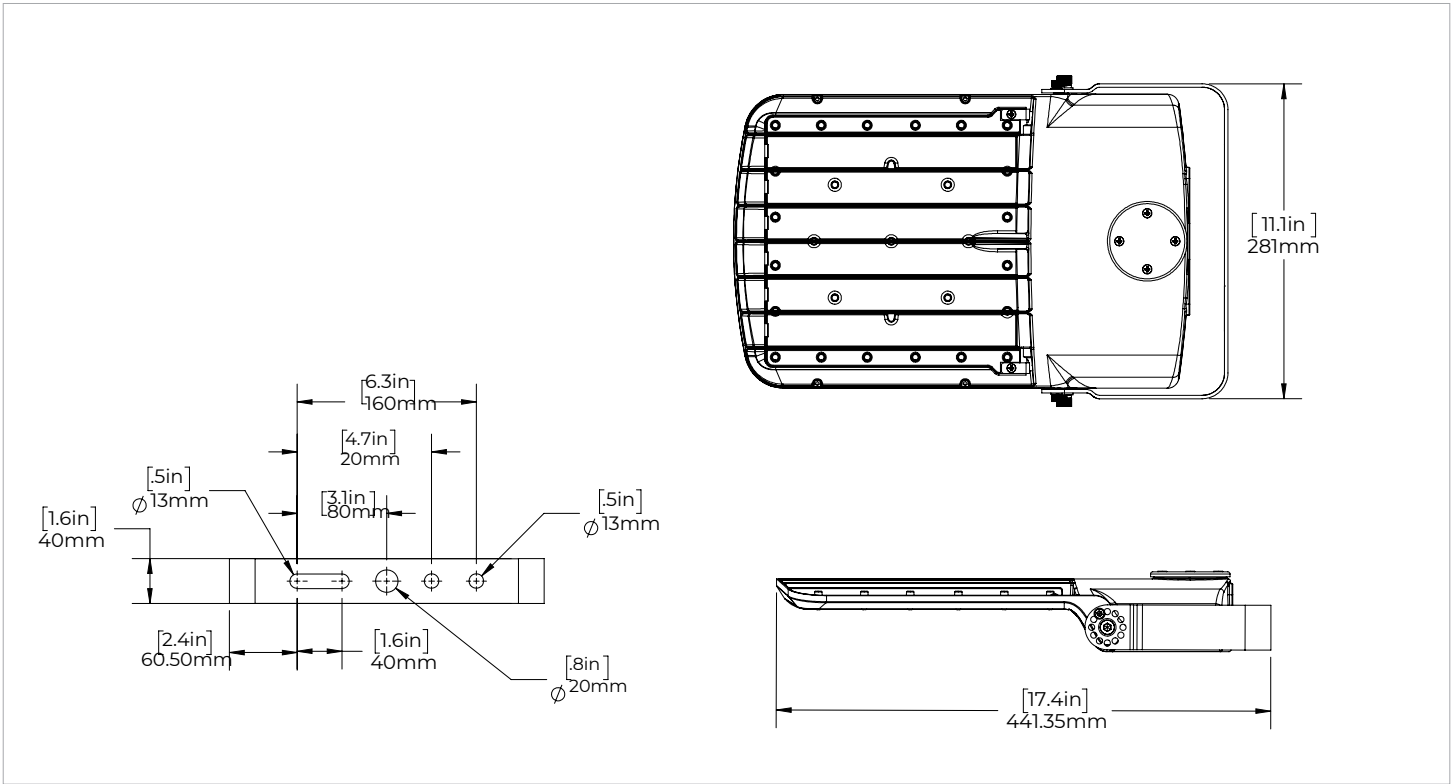
**DIRECT MOUNT**



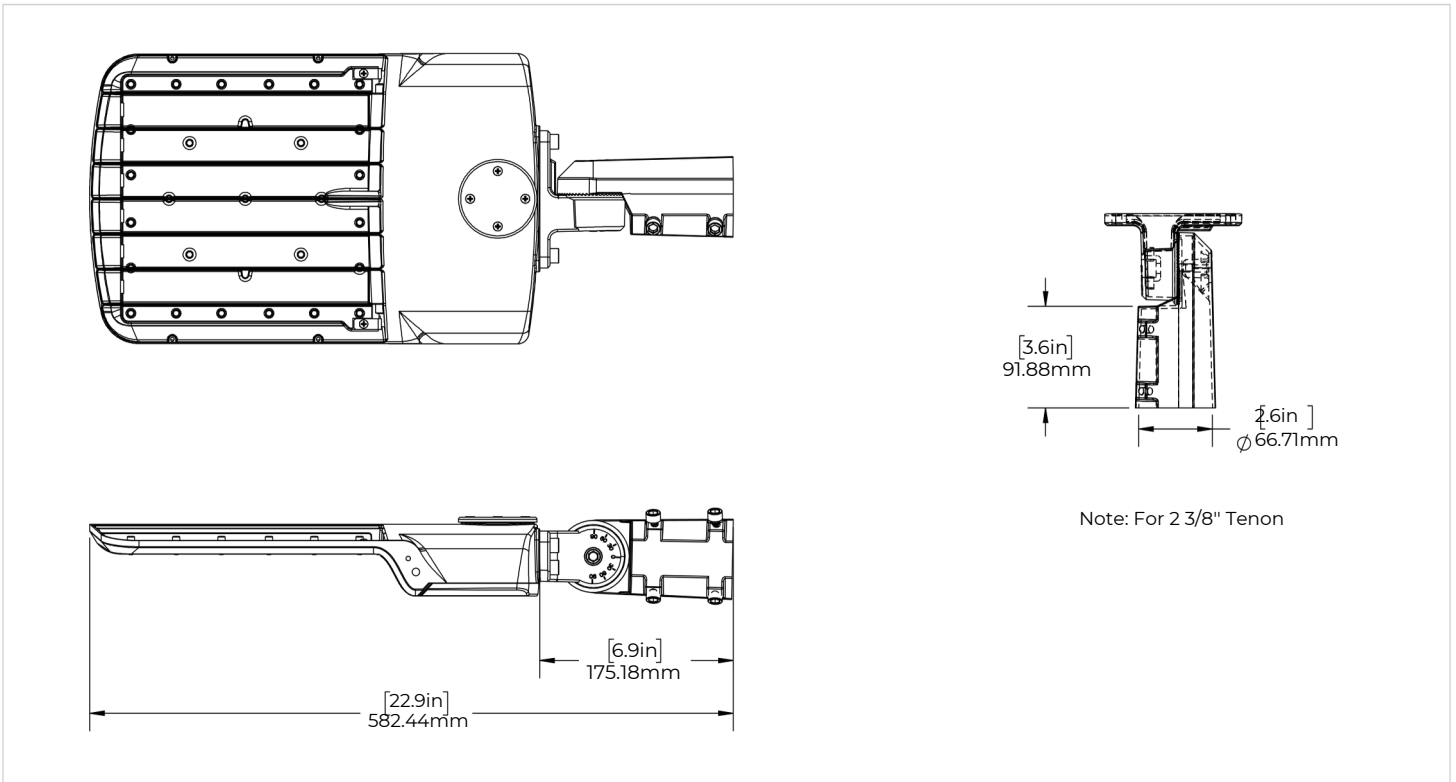
**TRUNNION**



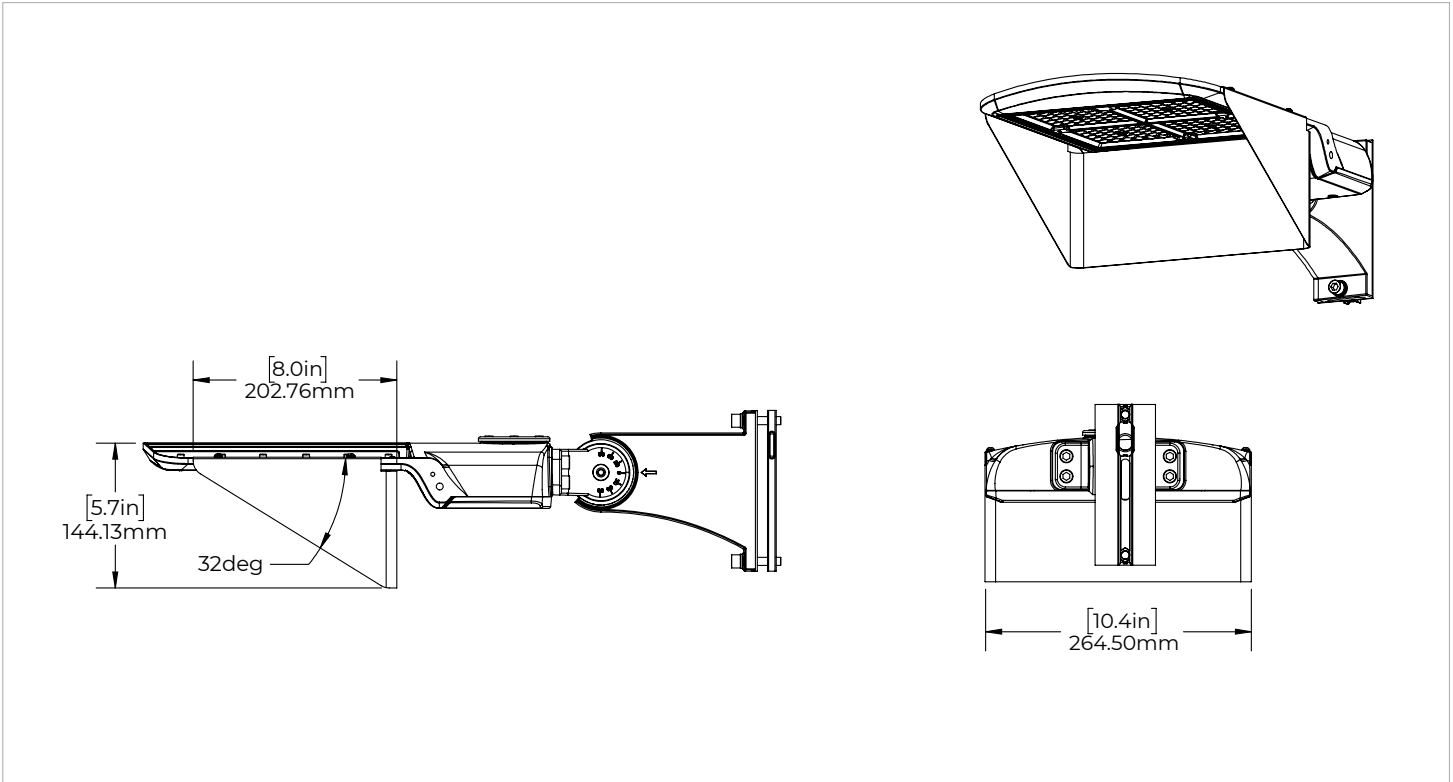
**YOKE**



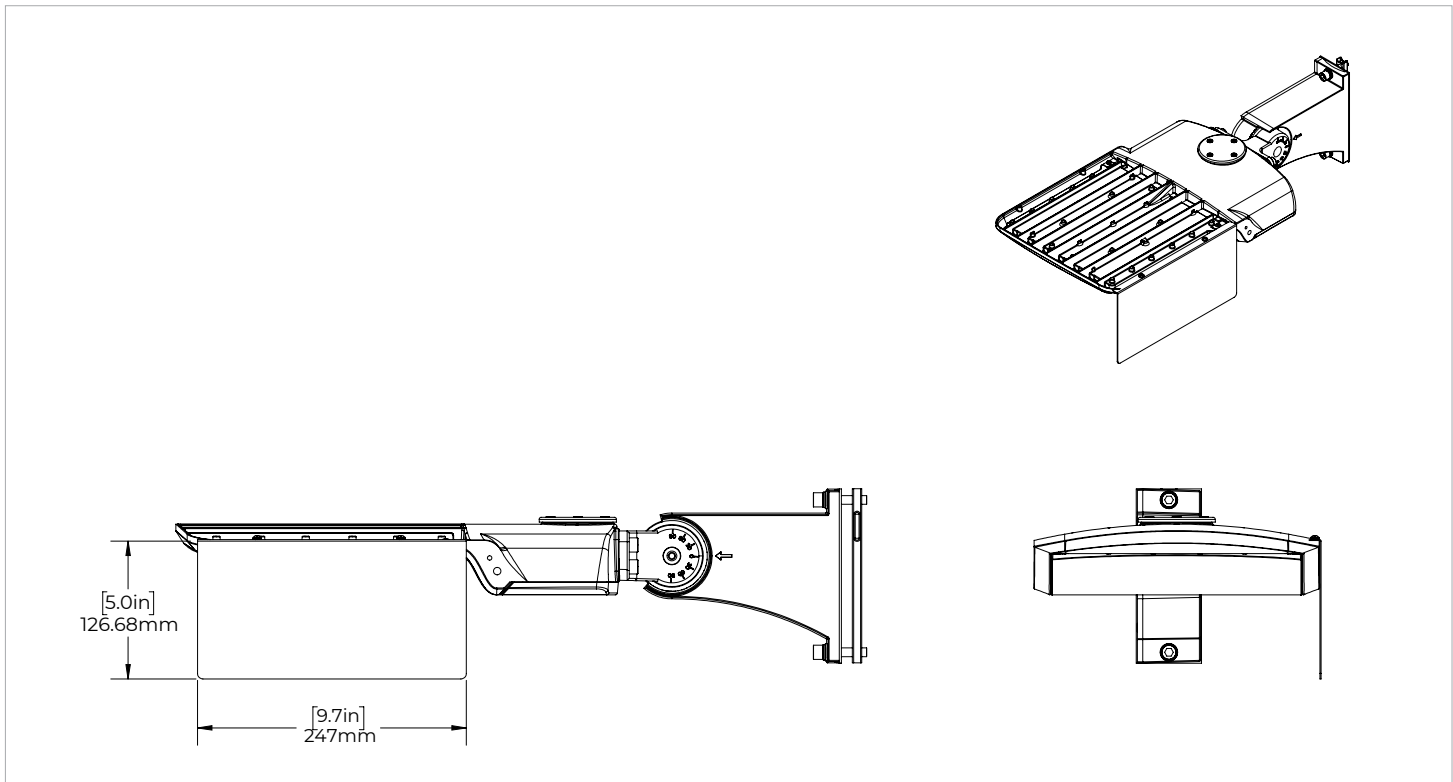
**SLIPFITTER**



**HELIX 1 WITH HOUSE SIDE CUTOFF (HCO)**



**HELIX 1 WITH SIDE CUT OFF (SCO)**



## PHOTOCELL/CCT/LUMEN SENSOR (PCLS)



New PCLS Controller allows the Installer to adjust colour temperature, brightness, and photocontrol settings using a remote control after installation.

SPECIFICATIONS	
INPUT POWER	LED INPUT : MAX . 250VDC 3A; SENSOR INPUT: 10-14VDC, >30M
SINKING CURRENT	MAX. 25MA
CONTROL OUTPUT	0-10V OUTPUT SIGNALS
POWER CONSUMPTION	MAX.0.5W
OPERATE LEVEL	10-20LUX ON, 30-80LUX OFF
AMBIENT TEMPERATURE	99%RH
OPERATING TEMPERATURE	-40° F- +158° F (-40°C- +70°C)

### PHOTOCELL FUNCTIONS



When the ambient light is above set lux values, fixture will not switch on.



When the ambient light is below set lux values, fixture will switch on.



Light levels can be lowered to 50% after specified time period for improved energy savings.

### CCT FUNCTIONS



Choose between 3000K/4000K/5000K

### LUMEN/BRIGHTNESS FUNCTIONS



Light levels can be dimmed up or down by increments of 10%

Refer to page 9 for more details on the PCLS Remote Control Usability



## RC107 REMOTE SPECIFICATIONS (FOR PCLS CONTROLLER)

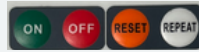
### DEFAULT FACTORY SETTING

TASK LIGHT LEVEL	100%
HOLD TIME	DISABLE
PHOTOCELL	LOW
CCT	CCT LOW (WW - 3000K)

### FEATURES



Detection Range:  
50ft



**ON:**  
Turn on the fixture, the brightness is according to the task level you set.

**OFF:**  
Turn off the fixture, the fixture is permanently off.

**RESET:**  
Task Light Level:100%; Hold Time: Disable; Photocell:Low; CCT:CCT Low (WW - 3000K)

**REPEAT:** Send the same setting to different fixtures installed.



**DIM+:**  
With each push of the button, brightness increases by 10%.

**DIM-:**  
With each push of the button, brightness decreases by 10%;

Select the task brightness of the fixture as needed.



**HOLD TIME:**  
The "hold time" starts to count right after the fixture turns on. When the "hold time is up, the fixture adjusts to 50% brightness until the light fixture turns off.

**DISABLE:**  
When you choose disabled, the fixture maintains the task light level



**LOW:**  
When the ambient lux is less than 30lux, the fixture turn on at the task you set, when the ambient lux is more than 50lux, the fixture turns off.

**MIDDLE:**  
When the ambient lux is less than 80lux, the fixture turn on at the task you set, when the ambient lux is more than 100lux, the fixture turns off.

**HIGH:** When the ambient lux is less than 150lux, the fixture turn on at the task you set, when the ambient lux is more than 180lux, the fixture turns off.

**DISABLE:**  
Photoelectric switch disabled:



**CCT :**  
Adjust CCT(WW - Warm White/3000K, NW - Neutral White/4000K, CW - Cool White/5000K)

Note: Custom settings can be done based on requirements in the Factory.

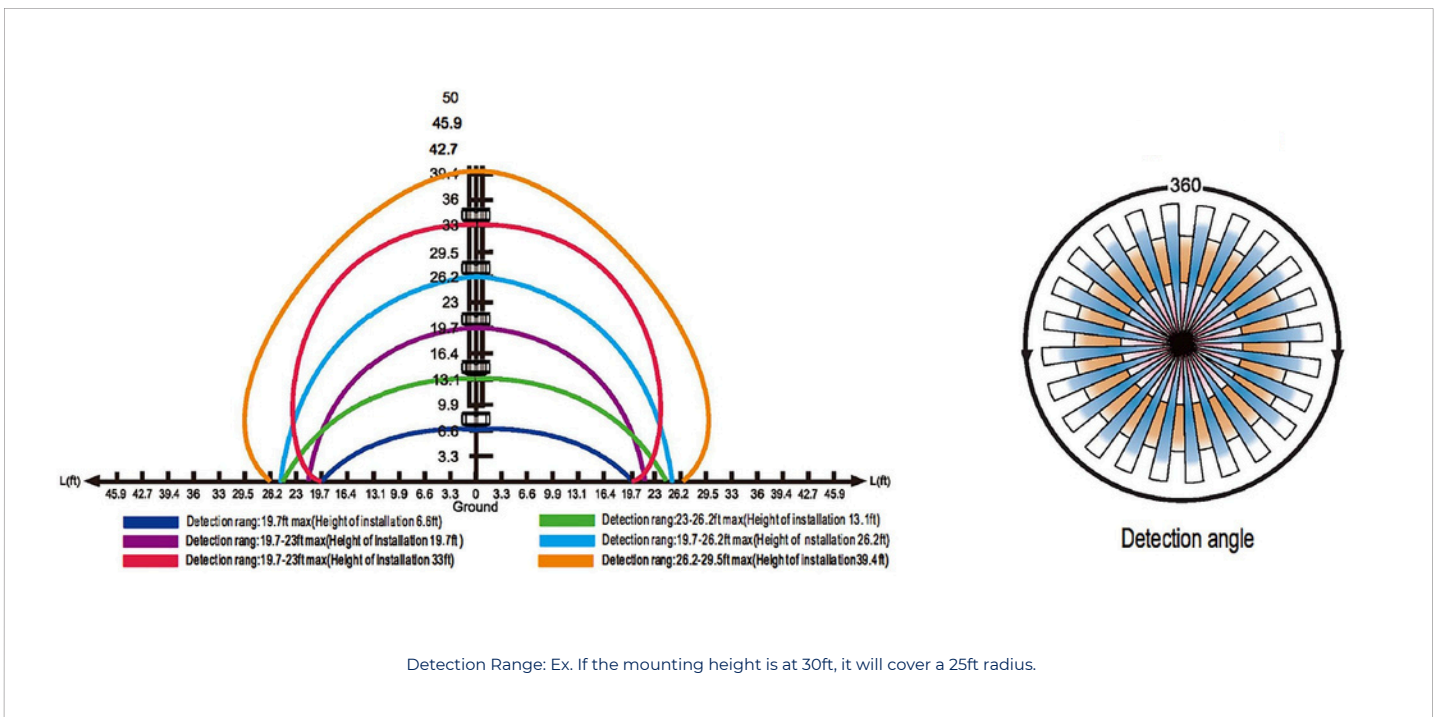
# DIMMING HIGH FREQUENCY MOTION SENSOR (DHFS)



DHFS Microwave motion sensor offers a range of control features based on motion detection allowing the Installer to adjust the brightness of the fixture, hold time and daylight settings using a remote control after installation.

SPECIFICATIONS	
POWER SUPPLY	12V-24V DC
HIGH FREQUENCY SYSTEM	5.8GHZ +/-75MHZ
DIM CONTROL OUTPUT	0-1 0V, MAX. 25MA SINKING CURRENT
DETECTION RADIUS/ANGLE	MAX 26FT (8M)/360°
MOUNTING HEIGHT	MAX 40FT
REMOTE RANGE	50FT. (15M) INDOOR, NO BACKLIGHT
HUMIDITY	MAX. 95% RH
TEMPERATURE	-40°F - 158° F (-40°C - 70°C)

## SENSOR COVERAGE



Refer to page 11 for more details on the DHFS Remote Control Usability

## RC100 REMOTE SPECIFICATIONS (FOR DHFS CONTROLLER)

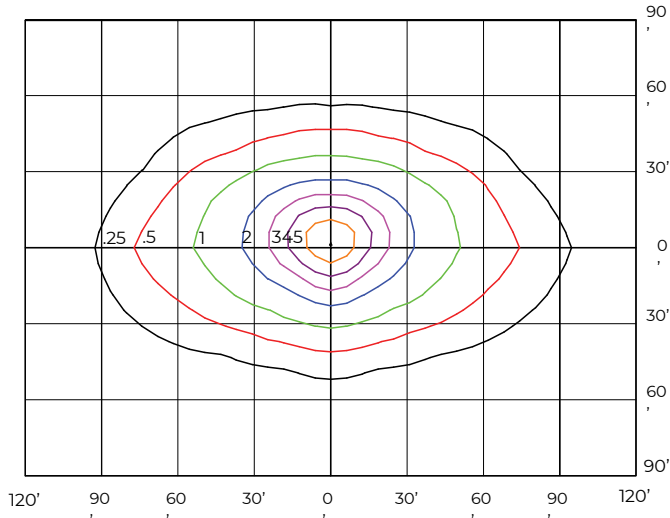
DEFAULT FACTORY SETTING	
BRIGHTNESS	100%
SENSITIVITY	100%
HOLD TIME	5 MINS
DAYLIGHT SENSOR	✱
STAND-BY DIM	30%
STAND-BY TIME	60 MINS

FEATURES	
	<p><b>BRIGHTNESS:</b> Sets the highest light fixture brightness when motion is detected.</p>
	<p><b>SENSITIVITY:</b> Sets the sensitivity to which the sensor will detect motion.</p>
	<p><b>HOLD TIME:</b> The time the light fixture will remain at the brightness setting after it detects motion.</p>
	<p><b>DAYLIGHT SENSOR:</b> The lux setting that the light fixture will turn on/off. If the ambient lux is more than the defined lux setting, the fixture &amp; sensor function will turn off and remain off until the ambient lux is below the setting. To disable the lux sensor, select the SUN icon. To set the lux to match current room conditions, select the EYE icon.</p>
	<p><b>STAND-BY DIM:</b> The Dim level that the light fixture will dim down after the Hold Time has expired. To disable dimming and only have ON/OFF, select the 0% icon.</p>
<p><b>STAND-BY TIME:</b> The time the light fixture will remain in the dim down state before it shuts off. To disable the light from shutting off, select the INFINITY icon.</p>	

RC100REMOTECONTROLSPECIFICATION	
Power Supply	2 x AAA 1.5V Batteries
Communication Protocol	940 nm IR Tx & Rx
Communication Range	Up to 15m (50 ft)
Operating Temp	0 °C to 50°C (32°F to 122°F)
Dimensions	123x70x20.3mm (4.84"x2.76"x0.8")

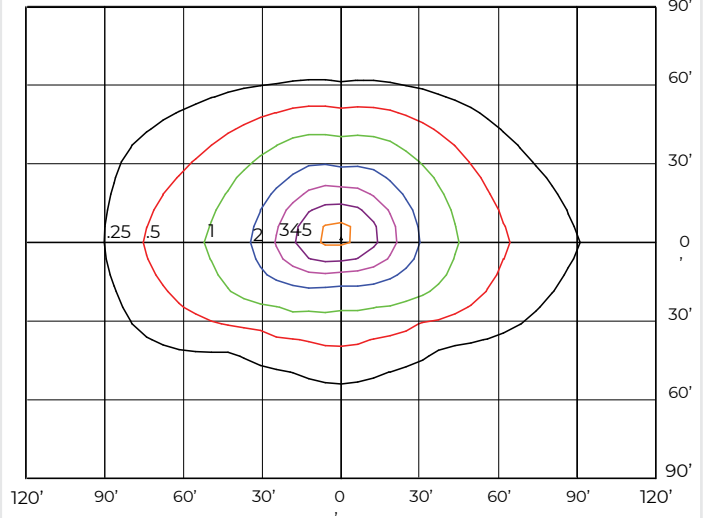
**HELIX-LED150A100-H-VK-T2 (150WATT 4000K)  
MOUNTED AT 30 FEET**

**LUMENS 21200 MAX CALCULATED VALUE 5.82 Fc**



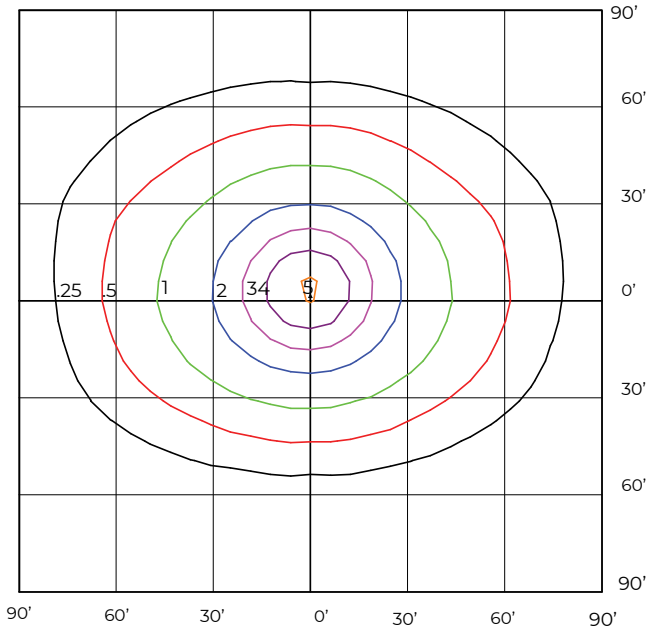
**HELIX-LED150A100-H-VK-T3 (150WATT 4000K)  
MOUNTED AT 30 FEET**

**LUMENS 21200 MAX CALCULATED VALUE 5.19 Fc**



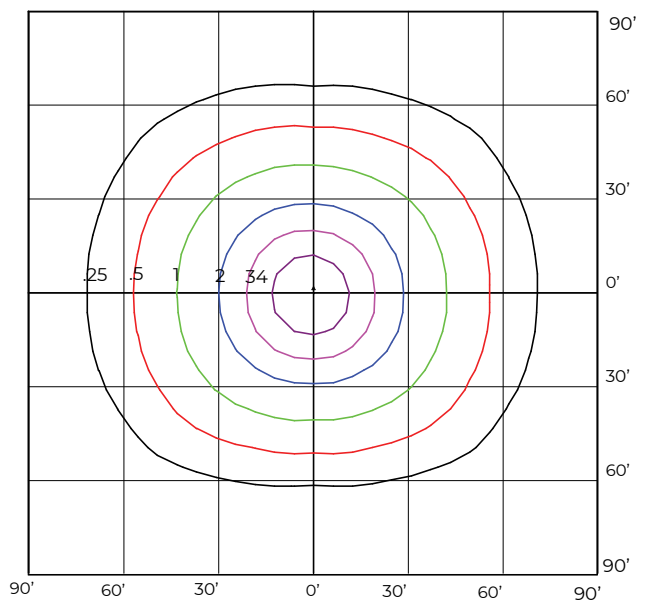
**HELIX-LED150A100-H-VK-T4 (150WATT 4000K)  
MOUNTED AT 30 FEET**

**LUMENS 20800 MAX CALCULATED VALUE 5.11 Fc**



**HELIX-LED150A100-H-VK-T5 (150WATT 4000K)  
MOUNTED AT 30 FEET**

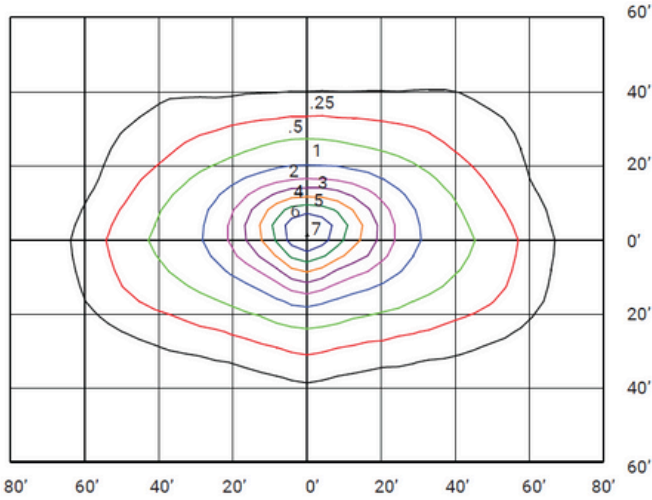
**LUMENS 21100 MAX CALCULATED VALUE 4.76 Fc**



HELIX1-LED100A60-H-VK-T2-DIM-SP10 (100W 120V 4k)  
MOUNTED AT 20 FEET

LUMENS 14516.6

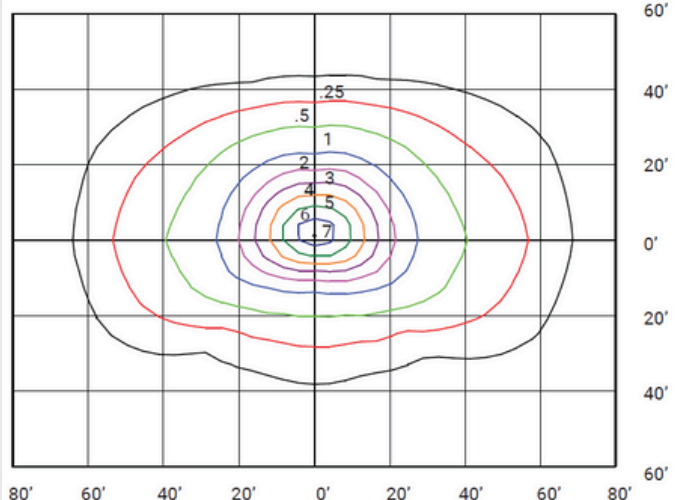
MAX CALCULATED VALUE 8 Fc



HELIX1-LED100A60-H-VK-T3-DIM-SP10 (100W 120V 4k)  
MOUNTED AT 20 FEET

LUMENS 14380.6

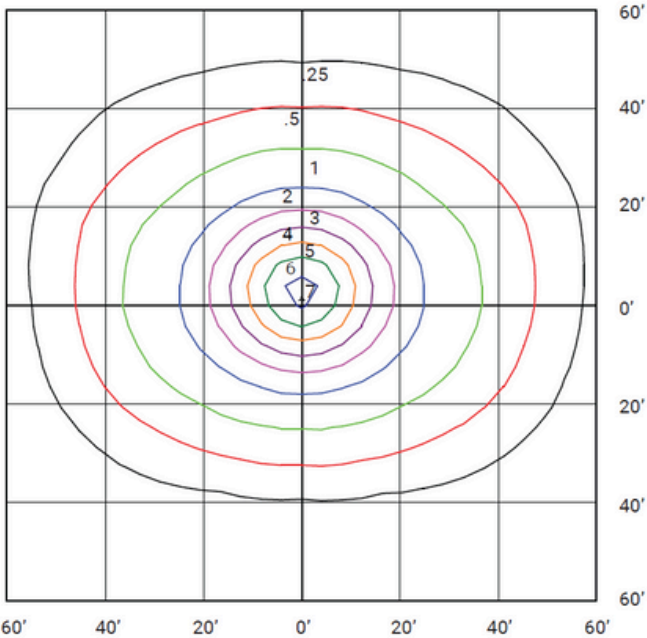
MAX CALCULATED VALUE 7.49 Fc



HELIX1-LED100A60-H-VK-T4-DIM-SP10 (100W 120V 4k)  
MOUNTED AT 20 FEET

LUMENS 14333.5

MAX CALCULATED VALUE 7.35 Fc



HELIX1-LED100A60-H-VK-T5-DIM-SP10 (100W 120V 4k)  
MOUNTED AT 20 FEET

LUMENS 14386.5

MAX CALCULATED VALUE 5.90 Fc

