



HELIX1-LED

Area Light



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 color 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.

IDEAL APPLICATIONS

- ✓ Parking Lots
- ✓ Roadways
- ✓ Schools
- ✓ Dealerships
- ✓ Pathway
- ✓ Commercial Plazas

SPECIFICATIONS

	LED100A60	LED150A100
PERFORMANCE		
Light Output	14400/11500/8600 lm (Lumen Selectable)	21200/17000/14000 lm (Lumen Selectable)
Efficacy	143 lm/W	
CCT	CCT Selectable - 3000K/4000K/5000K Dedicated CCT - 2200K, 2700K, 3000K	
Beam Distribution	Type II, Type III, Type IV, Type V	
LED Lifetime (L80)	100,000 Hours	
CRI	83	
B-U-G	B3-U0-G3	
ELECTRICAL		
Wattage	100/80/60 W	150/120/100 W
Voltage	120-347V	
Surge Protection	6 kV Internal & 10 kV External per UL1449	
Power Factor	0.998	
THD	4.17%	4.54%
Dimming	0-10 V (0-100%)	
Cable Specs	Input Power - 1m Cabtire Cable (SJOW 3x18 AWG) Dimming - 1m Cabtire Cable (SJOW 2x18 AWG)	
AMBIENT OPERATING TEMPERATURE		
Fixture	-40°C to 50°C (-40°F to +122°F)	
CONSTRUCTION		
Housing	Die-cast Aluminum	
Lens	Polycarbonate	
Paint Specs.	Weather and Corrosion Resistant Polyester Powder Coat Finish	
Housing Finish	Bronze, Custom Colours	

LED100A60		LED150A100			
CERTIFICATIONS					
cULus certified as per UL1598 & CSA C22.2 NO. 250.0:21, IP65, Wet Location, DLC Premium, DLC LUNA					
FACTORY INSTALLED CONTROLS					
Smart Bluetooth Controls* (using CONTROLLED mobile app), 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)					
OPTIONS SOLD SEPERATELY					
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, Bluetooth 5-Key Battery Powered Wireless Wall Switch, Bluetooth 3-key Ac Line Voltage Wall Switch					
DEFAULT SETTINGS					
CCT		4000K			
Wattage	100 W	150 W			
WEIGHT (FIXTURE ONLY)					
8.4 lbs					
MAX AMPERAGE DRAW (A)					
	120V	208V	240V	277V	480V
LED100A60	0.86	0.67	0.5	0.49	0.22
LED150A100	1.32	0.76	0.66	0.57	0.33
LUMEN MAINTENANCE					
	50,000 Hrs	75,000 Hrs	100,000 Hrs		
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
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).
*DLC Premium and DLC LUNA classification do not apply to Bluetooth controls.

Specs shown are for 120V/4000K



ORDERING GUIDE

HELIX1		H				DIM		
Fixture	Wattage	Voltage	Colour Temp.	Beam Distribution	Finish	Dimming	Controls	Surge Protection
HELIX1	LED100A60	H - 120-347V	VK- CCT ^a Selectable - 3000K/4000K /5000K	T2 - Type II	BRZ - Bronze ^a	Dim - 0-10V Dimming	Blank - No Controls ^a	SP10 - 10kV Surge Protection ^a
	LED150A100		2.2K - 2200K ^d	T3 - Type III ^a	CST - Custom Finish		PC - Photocontrol	
			2.7K - 2700K ^d	T4 - Type IV			PCLS - Photocell CCT Lumen Sensor ^c	SP20 - 20kV Surge Protection ^b
			3K - 3000K ^d	T5 - Type V			3PIN - 3 PIN Receptacle	
				T2R - Type II Rotated Right			7PIN - 7 PIN Receptacle	
				T2L - Type II Rotated Left			DHFS - Dimming High Frequency Motion Sensor ^c	
				T3R - Type III Rotated Right			BC - Bluetooth ControlLED	
				T3L - Type III Rotated Left				
				T4R - Type IV Rotated Right				
				T4L - Type IV Rotated Left				

^a - Standard Configuration
^b - Available with 120-277V only
^c - One remote control needed for sensor (PCLS-RC107 & DHFS-RC100)
^d - Units qualify for DLC LUNA when ordered in fixed 2200K or 2700K or 3000K CCT and with a non adjustable direct mount arm

STOCK CODE

083664	HELIX1-LED100A60-B-VK-T3-BRZ-DIM-SP10
083782	HELIX1-LED100A60-B-VK-T3-BRZ-DIM-PCLS-SP10
081707	HELIX1-LED150A100-B-VK-T3-BRZ-DIM-SP10
081856	HELIX1-LED150A100-B-VK-T3-BRZ-DIM-PCLS-SP10

ACCESSORIES SOLD SEPARATELY

020038	HELIX1 SELECT SIDE CUTOFF SHIELD BRZ		020014	YOKE MOUNT BRZ F/HELIX1 SELECT	
020037	HELIX1 SELECT HOUSE SIDE CUTOFF SHIELD BRZ		020010	DIRECT MOUNT BRZ F/HELIX1/2	
087016	RC-100 MOTION SENSOR REMOTE CONTROL		020011	DIRECT TRUNNION MOUNT BRZ F/HELIX1/2	
087034	RC-107 PHOTOCONTROL REMOTE CONTROL		020009	SLIP FITTER BRZ F/HELIX1/2	
084633	BLUETOOTH 5-KEY BATTERY POWERED WIRELESS WALL SWITCH & PLATE ¹		020041	NON ADJ DIRECT MOUNT BRZ F/HELIX1/2	
084215	BLUETOOTH 3-KEY AC LINE VOLTAGE WALL SWITCH				

¹ Wireless Bluetooth module can also be used as portable remote control.

ADDITIONAL DETAILS

EPA (ft)			
	Tilt 0°	Tilt 45°	Tilt 90°
HELIX1	0.25	1.16	1.52
HELIX1 (with HCO)	0.63	1.32	1.52
HELIX1 (with SCO)	0.70	1.16	1.52

*EPA calculation includes both fixture and mounting

PHOTOCELL/CCT/LUMEN SENSOR (PCLS)



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, >30MA
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)

FUNCTIONS

PHOTOCELL	CCT	LUMEN
<p>PHOTOCELL CONTROL</p>	<p>CCT 3K/4K/5K</p>	<p>Lumen Adjustable</p>
<p>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.</p>	<p>Choose between 3000K/4000K/5000K</p>	<p>Light levels can be dimmed up or down by increments of 10% Light levels can be lowered to 50% after specified time period for improved energy savings.</p>

RC107 REMOTE SPECIFICATIONS (FOR PCLS CONTROLLER)



DEFAULT FACTORY SETTING

TASK LIGHT LEVEL	100%
HOLD TIME	DISABLE
PHOTOCELL	LOW
CCT	CCT LOW (NW - 4000K)

FEATURES

	<p>ON: Turn on the fixture, the brightness is according to the task level you set.</p> <p>OFF: Turn off the fixture, the fixture is permanently off.</p> <p>RESET: Task Light Level:100%; Hold Time: Disable; Photocell: Low; CCT:CCT Low (NW - 4000K)</p> <p>REPEAT: Send the same setting to different fixtures installed.</p>
	<p>DIM+: With each push of the button, brightness increases by 10%.</p> <p>DIM-: With each push of the button, brightness decreases by 10%;</p>
	<p>Select the task brightness of the fixture as needed.</p>
	<p>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 control turns the light fixture off.</p> <p>DISABLE: When you choose disabled, the fixture maintains the task light level</p>
	<p>LOW: When the ambient lux is less than 30lux, the fixture turn on at the task level you set, when the ambient lux is more than 50lux, the fixture turns off.</p> <p>MIDDLE: When the ambient lux is less than 80lux, the fixture turn on at the task level you set, when the ambient lux is more than 100lux, the fixture turns off.</p> <p>HIGH: When the ambient lux is less than 150lux, the fixture turn on at the task level you set, when the ambient lux is more than 180lux, the fixture turns off;</p> <p>DISABLE: Photoelectric switch disabled:</p>
	<p>CCT : Adjust CCT(WW - 3000K, NW - 4000K, CW - 5000K)</p>

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

DIMMING HIGH FREQUENCY MOTION SENSOR (DHFS)

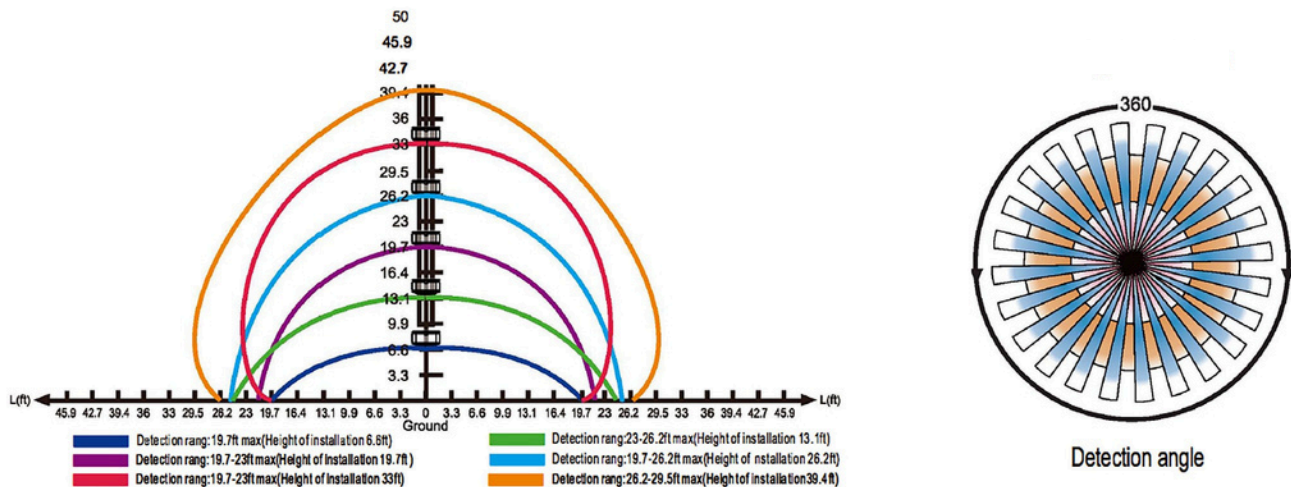


DHFS Microwave motion sensor offers a range of control features based on motion detection allowing the Installer to adjust the brightness of the fixture, hold time and daylight settings using a remote control after installation.

SPECIFICATIONS

POWER SUPPLY	12V-24V DC
HIGH FREQUENCY SYSTEM	5.8GHZ +/-75MHZ
DIM CONTROL OUTPUT	0-10V, 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



Detection Range: Ex. If the mounting height is at 30ft, it will cover a 25ft radius.

Refer to page 6 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



BRIGHTNESS:

Sets the highest light fixture brightness when motion is detected.

SENSITIVITY:

Sets the sensitivity to which the sensor will detect motion.

HOLD TIME:

The time the light fixture will remain at the brightness setting after it detects motion.

DAYLIGHT SENSOR:

The lux setting that the light fixture will turn on/off. If the ambient lux is more than the defined lux setting, the fixture & 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.

STAND-BY DIM:

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.

STAND-BY TIME:

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.

RC100 REMOTE CONTROL SPECIFICATION

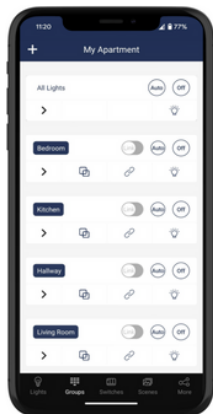
POWER SUPPLY	2 x AAA 1.5V Batteries
COMMUNICATION PROTOCOL	940 nm IR Tx & Rx
COMMUNICATION RANGE	Up to 15m (50 ft)
OPERATING TEMP	0 °C to 50°C (32°F to 122°F)
DIMENSIONS	123x70x20.3mm (4.84"x2.76"x0.8")

CONTROLLED

RAB
DESIGN

ControlLED Network Lighting Controls (NLC) delivers secure, wireless lighting management with Bluetooth Mesh and the ControlLED App. Integrated sensors enable automatic adjustments for comfort, safety, and efficiency.

Maximum Bluetooth transmittance of 860ft between fixtures (unobstructed) and 200ft between user and any one fixture.



Organized Fields:
Create Zones and Groups



Dimming Lights:
Set dim level for groups or individual lights.



Scenes:
Create custom scenes for different scenarios.



Schedules:
Create custom schedules for recurring events.



Share Access:
Share access using QR codes.

BLUETOOTH CONTROL

FEATURES

- Bluetooth mesh network
- DLC - Networked Lighting Control (NLC) & Luminaire Level Lighting Control (LLLC)
- Group and Individual fixture dimming
- Scenes & Schedules

SPECIFICATIONS

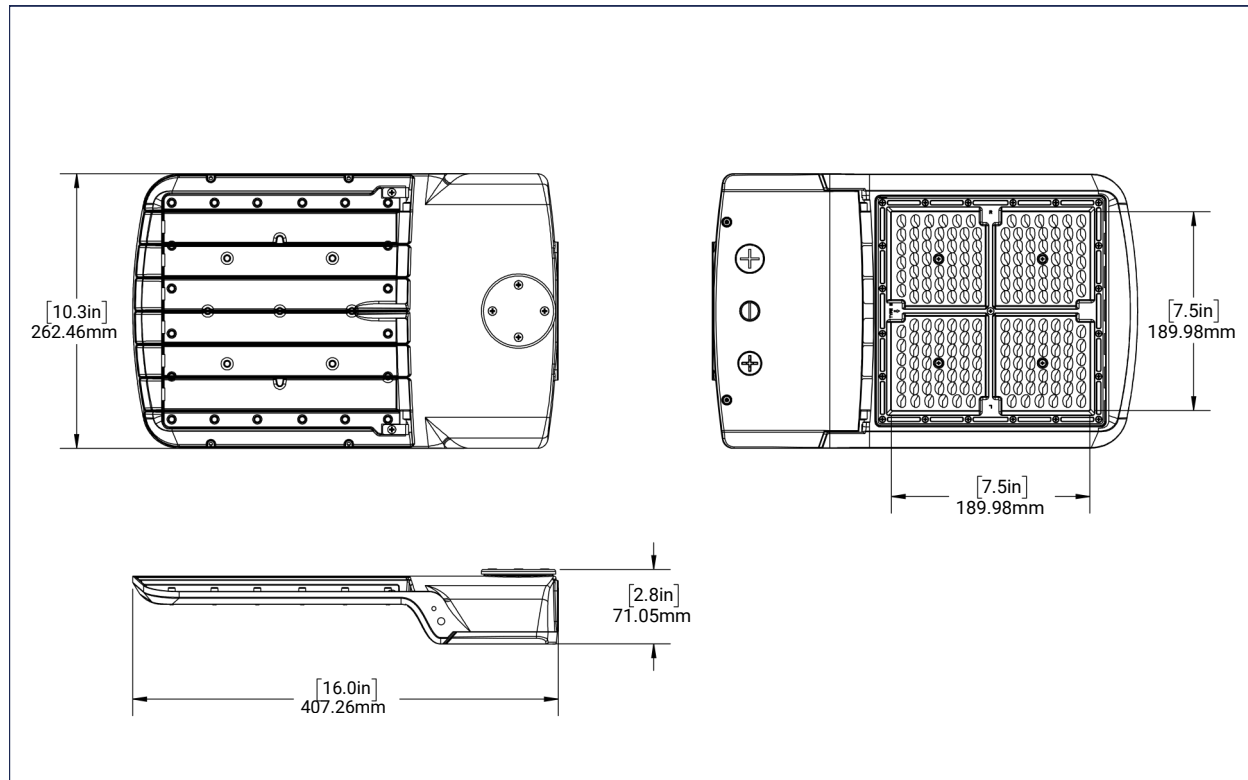
Input Voltage	12 VDC
Input Current	Min 150mA
Output Current	10mA Max.
Dimming	Class 2, 0-10 VDC
Bluetooth Transmit	860ft Max.
Radio Frequency	2.4GHz ±75MHz
Bluetooth Version	5.0

Get the App!

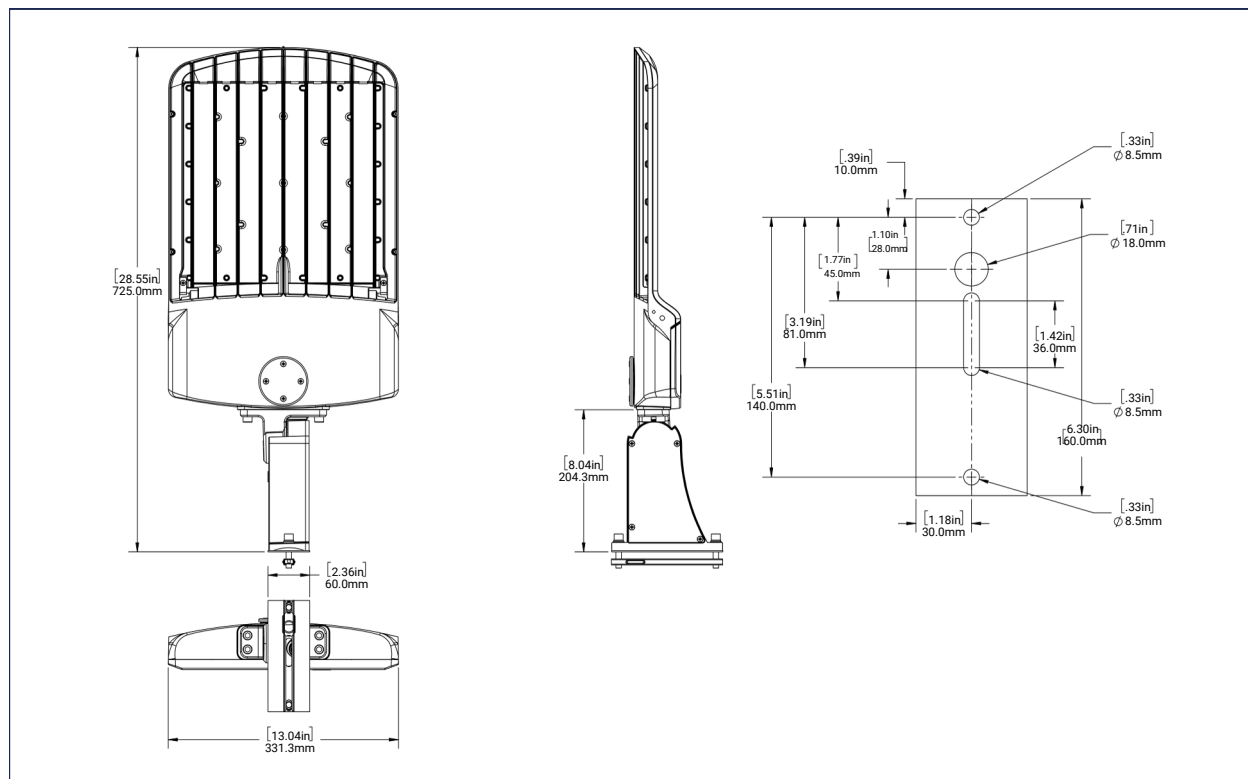


DIMENSIONS

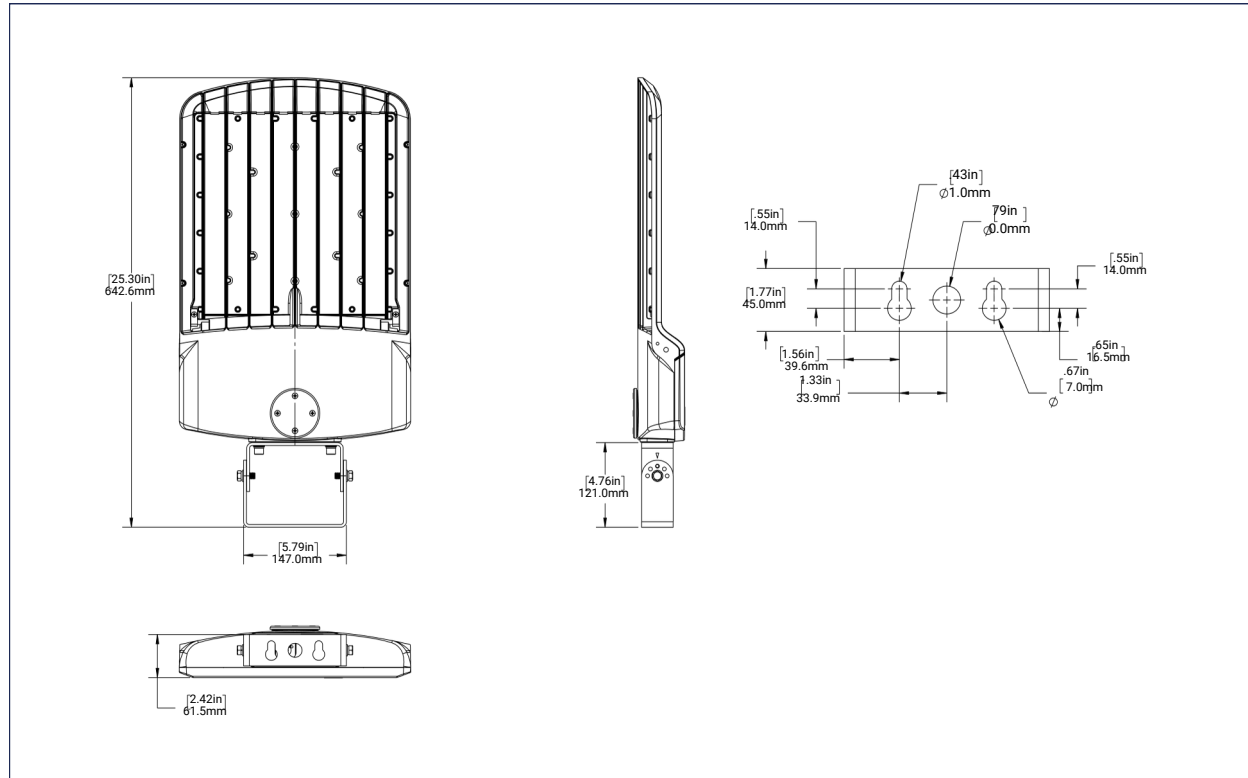
HELIX1 (WITHOUT MOUNTING)



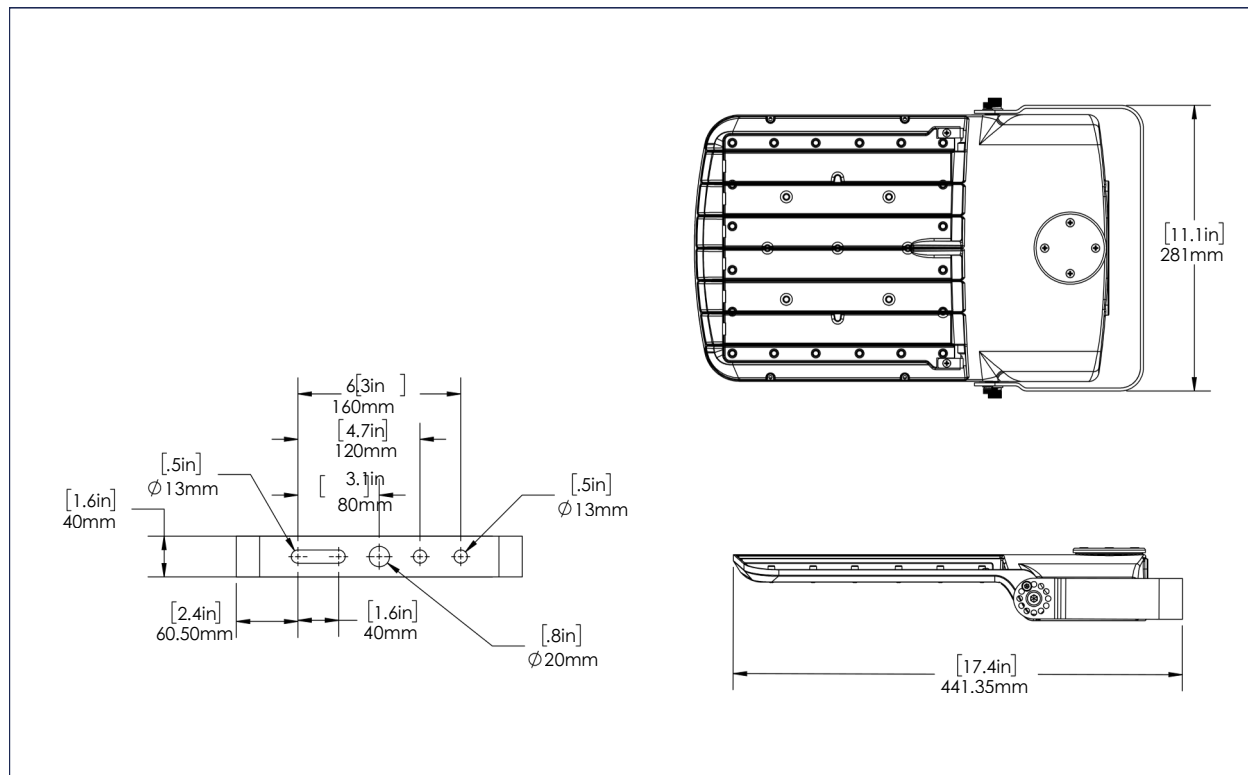
DIRECT MOUNT



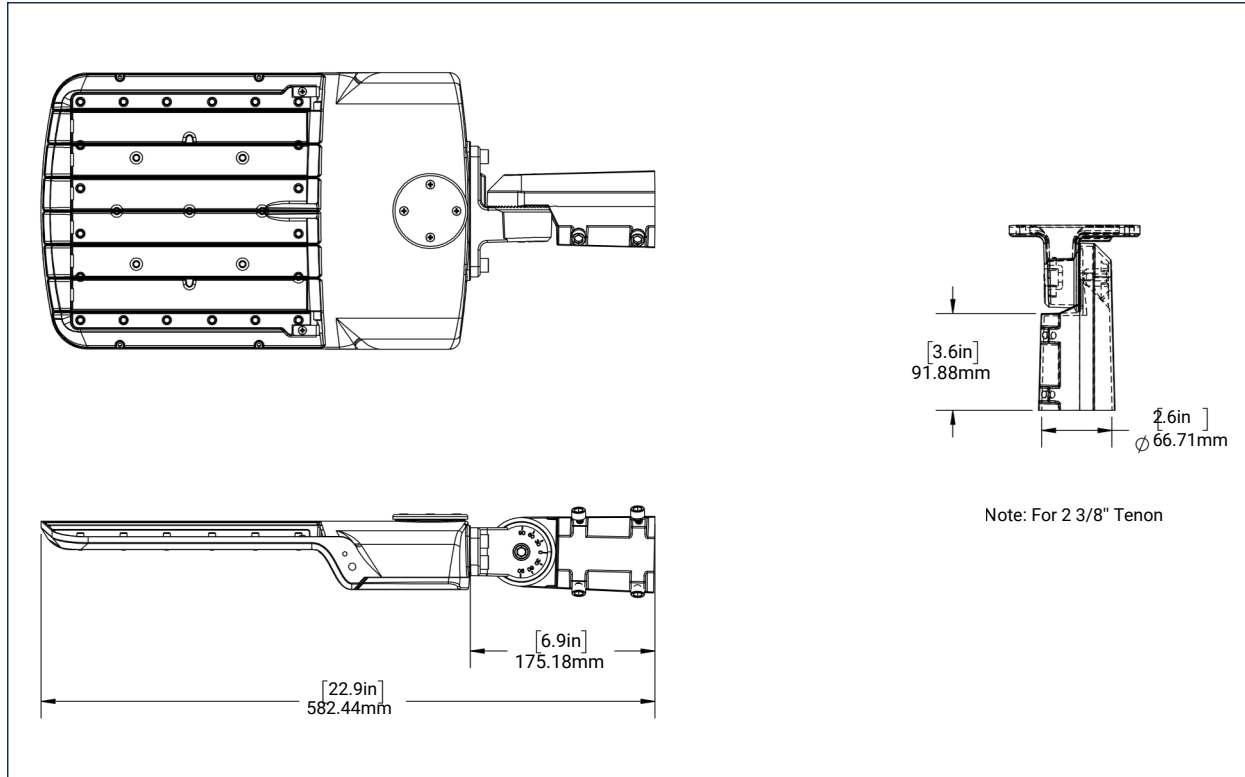
TRUNNION



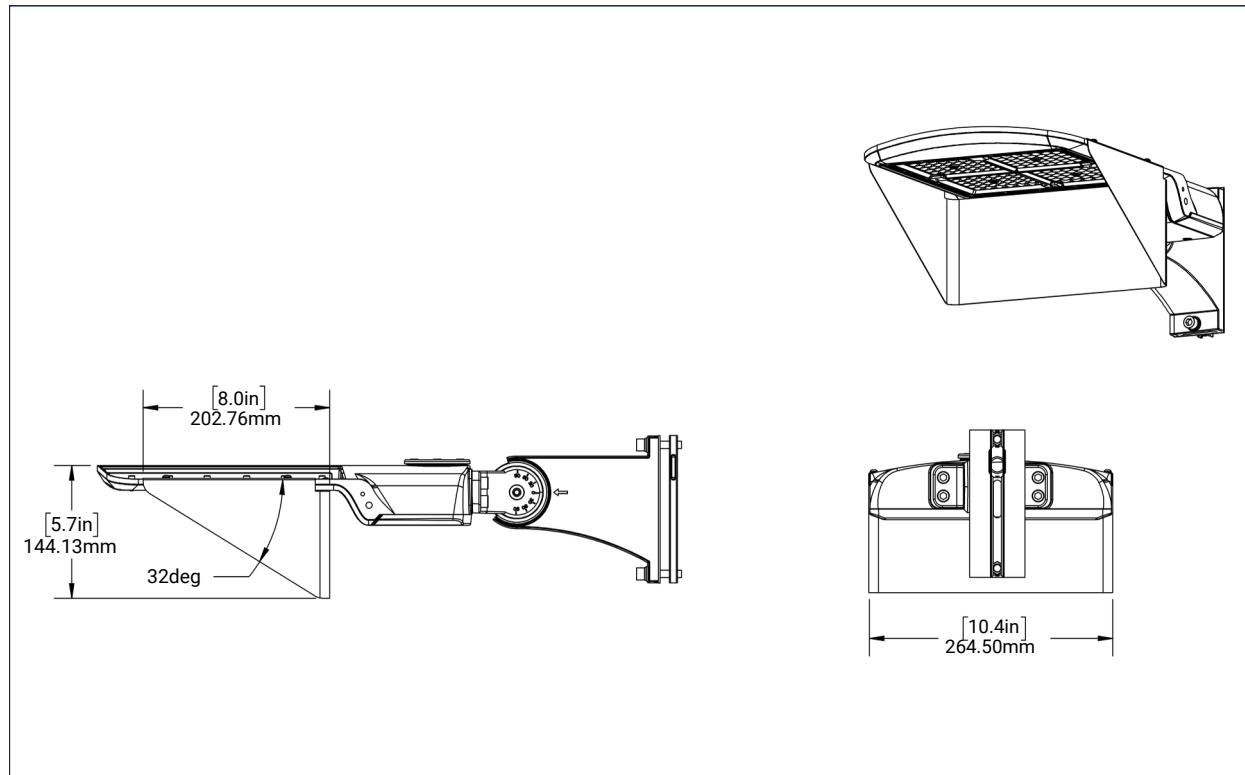
YOKE



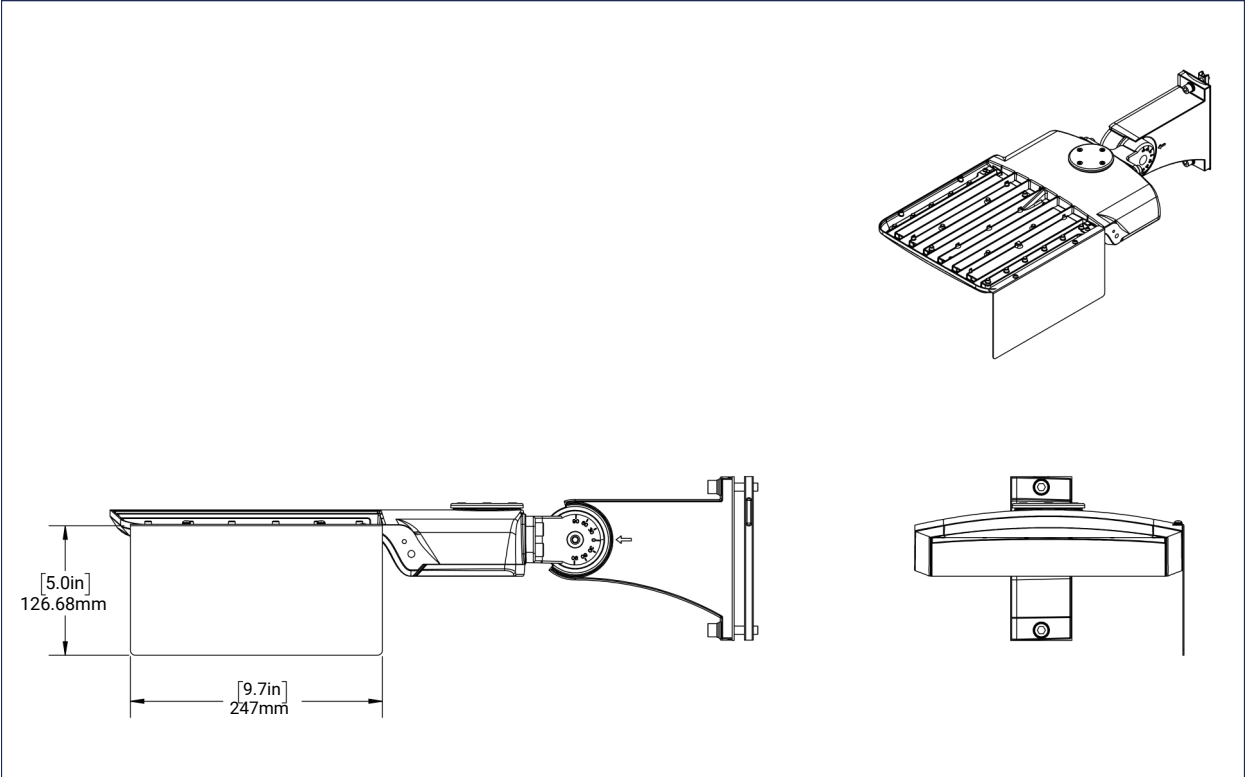
SLIPFITTER



HELIX1 WITH HOUSE SIDE CUTOFF (HCO)



HELIX1 WITH SIDE CUTOFF (SCO)

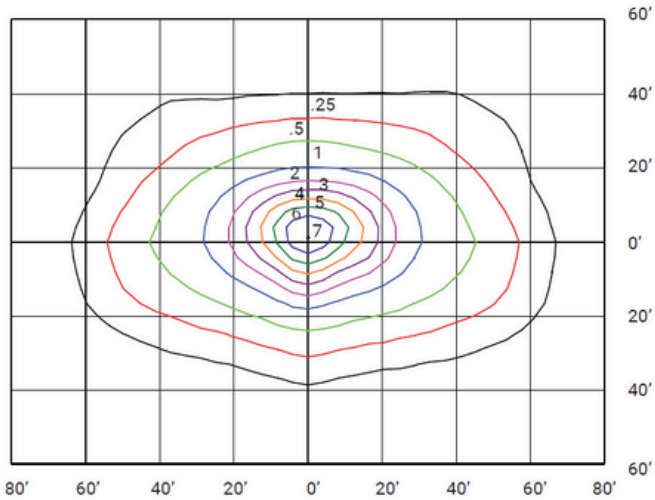


PHOTOMETRIC PLOTS

HELIX1-LED100A60-H-VK-T2-BRZ-DIM-SP10
(100W, 120V, 4000K)
MOUNTED AT 20 FEET

LUMENS 14516.6

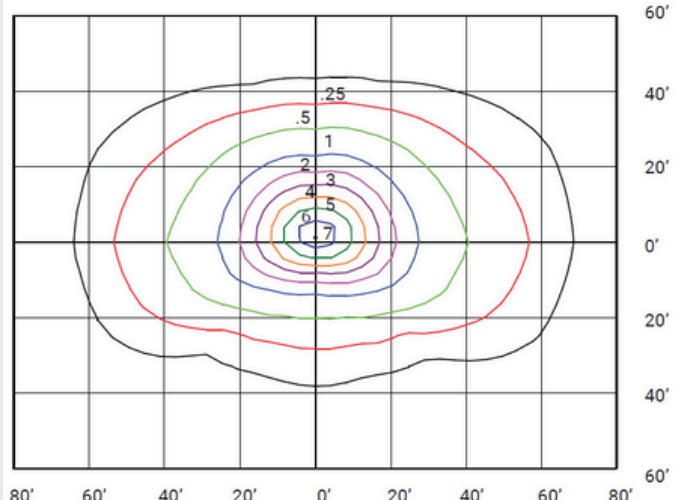
MAX CALCULATED VALUE 8 Fc



HELIX1-LED100A60-H-VK-T3-BRZ-DIM-SP10
(100W, 120V, 4000K)
MOUNTED AT 20 FEET

LUMENS 14380.6

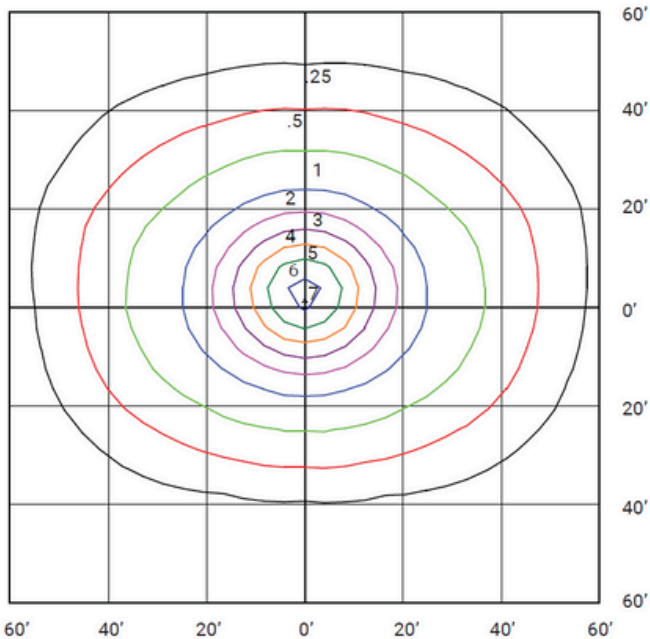
MAX CALCULATED VALUE 7.49 Fc



HELIX1-LED100A60-H-VK-T4-BRZ-DIM-SP10
(100W, 120V, 4000K)
MOUNTED AT 20 FEET

LUMENS 14333.5

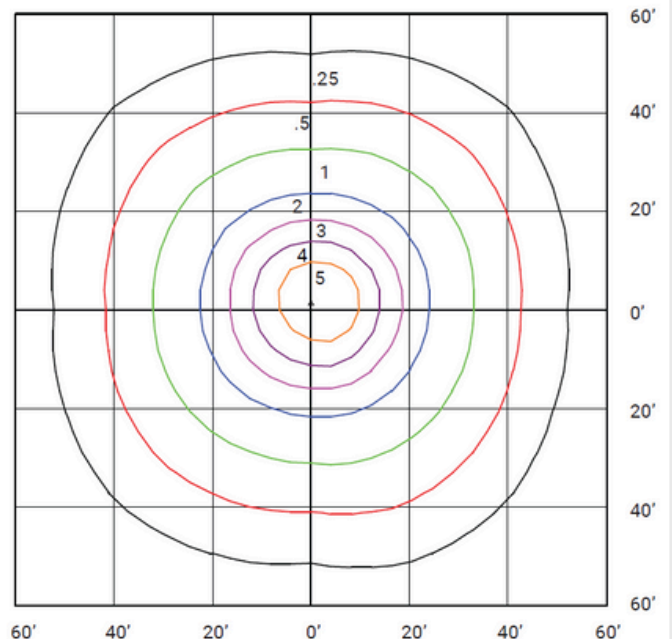
MAX CALCULATED VALUE 7.35 Fc



HELIX1-LED100A60-H-VK-T5-BRZ-DIM-SP10
(100W, 120V, 4000K)
MOUNTED AT 20 FEET

LUMENS 14386.5

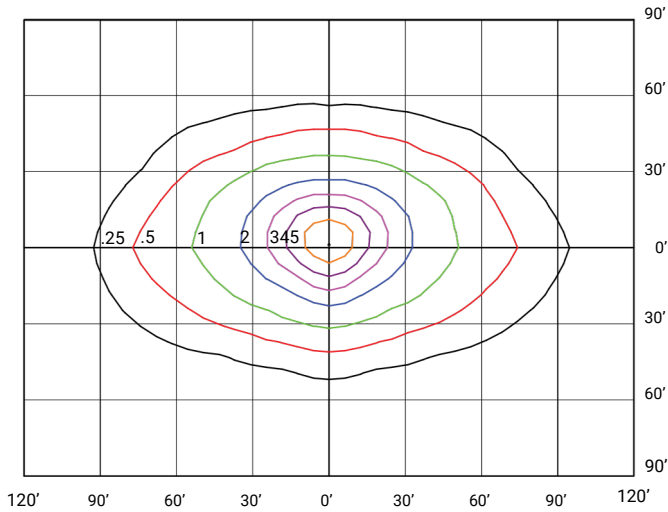
MAX CALCULATED VALUE 5.90 Fc



HELIX1-LED150A100-B-VK-T2-BRZ-DIM-SP10
(150W, 120V, 4000K)
MOUNTED AT 30 FEET

LUMENS 21200

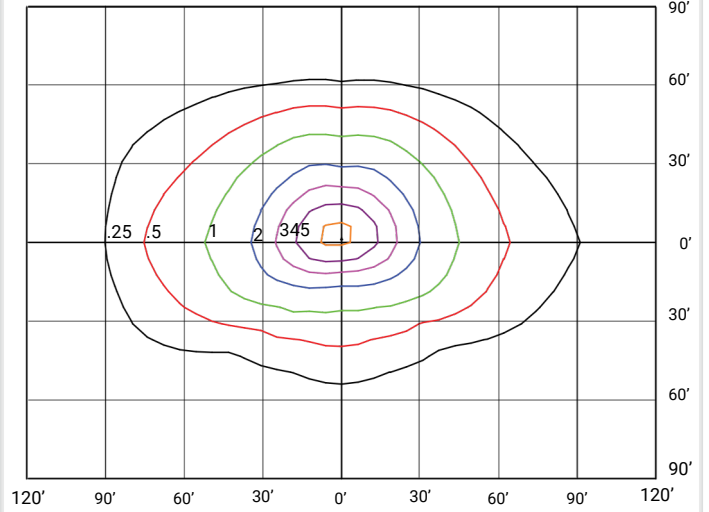
MAX CALCULATED VALUE 5.82 Fc



HELIX1-LED150A100-B-VK-T3-BRZ-DIM-SP10
(150W, 120V, 4000K)
MOUNTED AT 30 FEET

LUMENS 21200

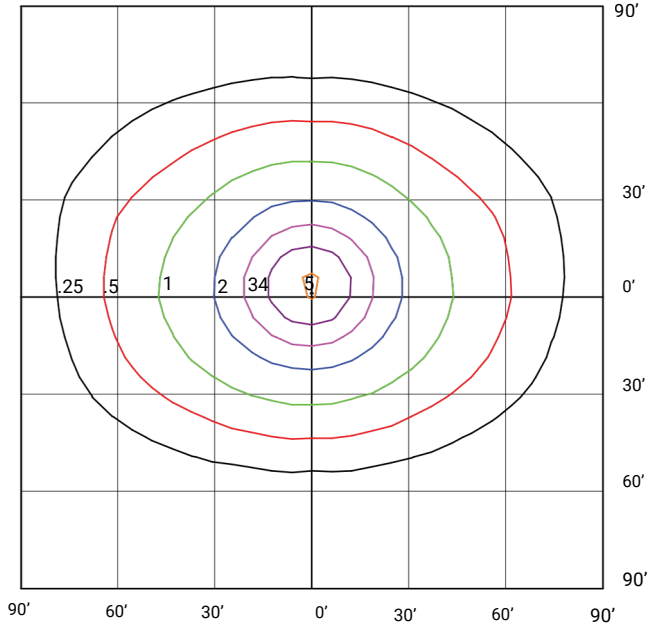
MAX CALCULATED VALUE 5.19 Fc



HELIX1-LED150A100-B-VK-T4-BRZ-DIM-SP10
(150W, 120V, 4000K)
MOUNTED AT 30 FEET

LUMENS 20800

MAX CALCULATED VALUE 5.11 Fc



HELIX1-LED150A100-B-VK-T5-BRZ-DIM-SP10
(150W, 120V, 4000K)
MOUNTED AT 30 FEET

LUMENS 21100

MAX CALCULATED VALUE 4.76 Fc

