



HELIX1-LED150A100

Area Light



IDEAL APPLICATIONS

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

DESCRIPTION:

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.

FEATURES:

- Die cast aluminum housing with polycarbonate lens.
- Compact, low profile design results in reduced wind resistance, lower EPA ratings which allows for more pole options and more fixtures to be mounted on a pole.
- No uplight fixture that limits sky glow and environmental light pollution.
- Rotatable optics in 90° segments to redirect light in a required direction providing more flexibility especially for retrofit jobs(factory installed).
- Easy installation features include 1m cabtire cable.
- Options for lighting controls include PCLS Controller, DHFS Motion sensor, 3 PIN, 7 PIN receptacle for smart control and twist lock photocell.
- PCLS Controller allows the Installer to adjust colour temperature, brightness, and photocontrol settings using a remote control after installation.
- Standard unit has 6kV built into the driver and 10kV external added to each fixture.Optional 20kV surge protection available for 120-277V input voltage.
- House Side cut off (HCO) and Side cut off (SCO) are optional and to be purchased separately. Housing will come with pre-drilled holes and cut off shield (HCO/ SCO) can be installed in the field using supplied hardware.
- Universal mounting options include Slip Fitter, Yoke, Trunnion, Direct Mount for round and square poles and Non-Adjustable Direct Mount (sold separately).
- Fixture can be tilted with any mounting option to direct light where needed.

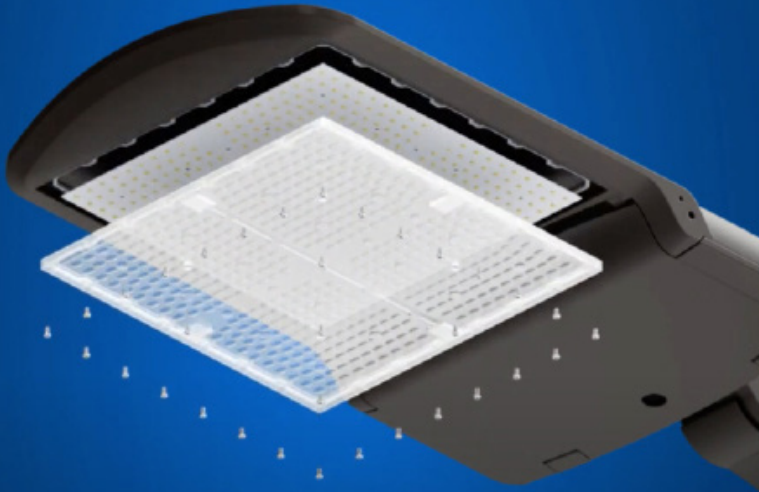
SPECIFICATIONS	HELIX1-LED150A100
Max. Input Power	148.16W
Max. Lumens	21243 lm
Max. Efficacy	143.38 lm/W
Voltage	120-347V
CCT	Colour Selectable: 3000K/4000K/5000K Dedicated CCT: 2200K, 2700K, 3000K
CRI	83
Dimming	0-10V(10%-100%)
Total Harmonic Distortion	4.54%
Power Factor	0.998
Surge Protection	6kV internal and 10kV external
B-U-G Rating	3-0-3
Beam Distribution	Type II, Type III, Type IV, Type V
LED Life (L79)	100,000 Hours
Housing Finish	Bronze*, Custom Colours
Housing Details	Die Cast Aluminum
Lens Details	Polycarbonate
Mounting	Slip fitter, Direct mount for round/square poles, Trunnion mount, Yoke mount
Cable Length	Input Power - 1m Cabtire Cable (SJOW 3x18 AWG) Dimming - 1m Cabtire Cable (SJOW 2x18 AWG)
Operating Temp.	-40°C to +50°C (-40°F to +122°F)
Factory Installed Options	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 Separately	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
Certifications Logos	cULus certified as per UL1598 & CSA C22.2 NO. 250.0:21, IP65, Wet Location, DLC Premium, DLC LUNA

Specs shown are for 120V/4000K
Default factory setting 4000K/150W

Note: DLC LUNA certification applies to 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

AMPERAGE DRAW & SURGE PROTECTION

	CURRENT					SURGE PROTECTION
	120V	208V	240V	277V	347V	120-347V
HELIX1-LED	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 (ft²)

	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

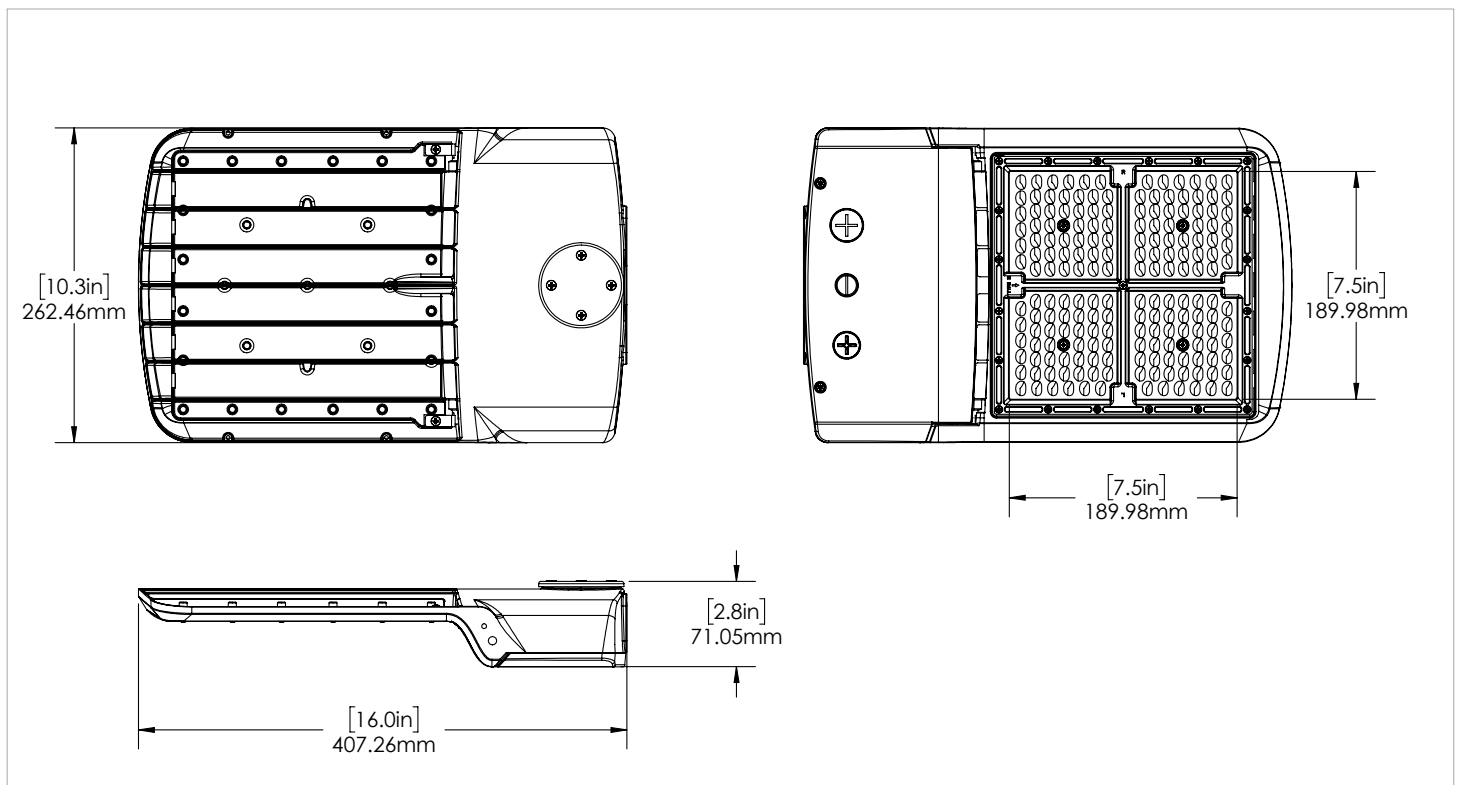
WEIGHT

HELIX1-LED	8.4 lbs
------------	---------

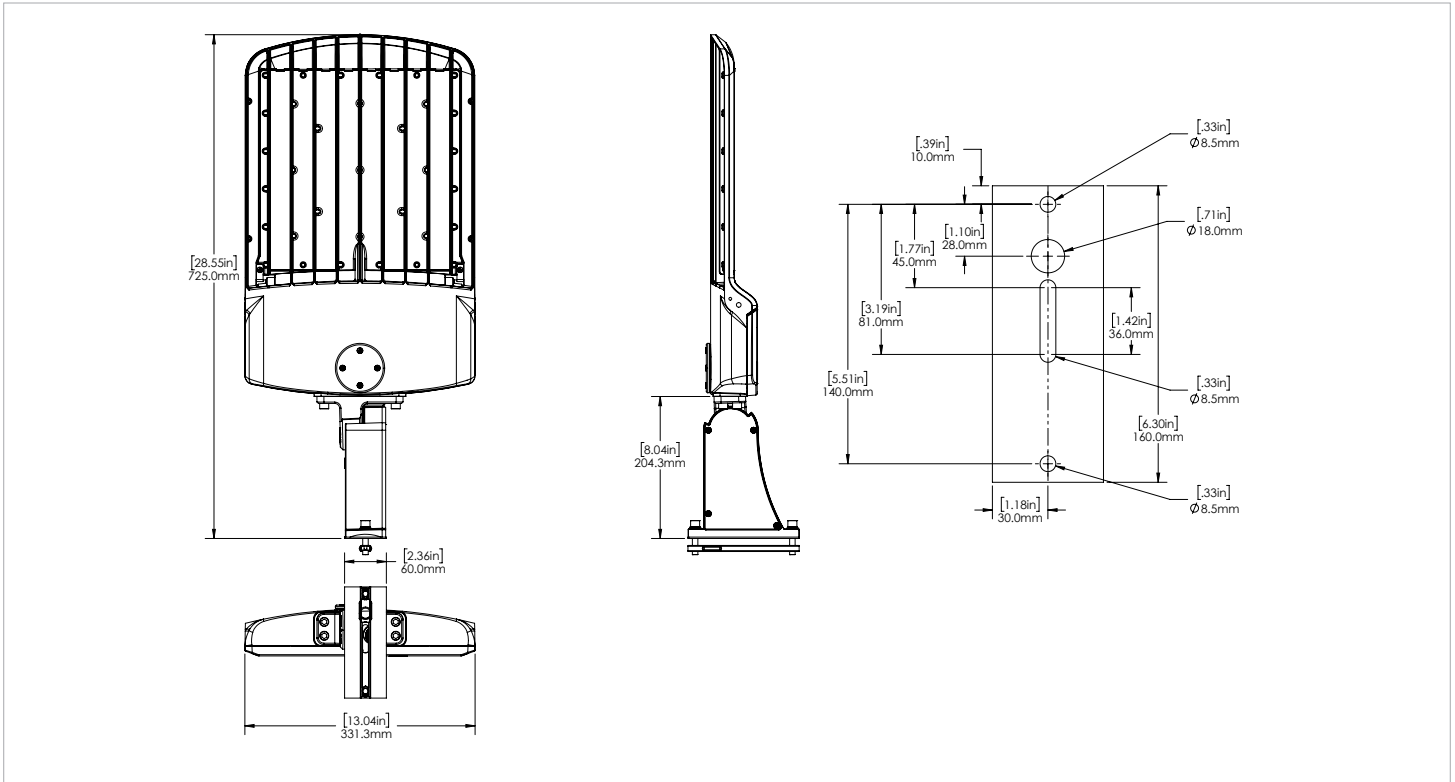
LUMEN ADJUSTABLE SETTINGS

Power	150W	120W	100W
Lumens	21243lm	16994lm	14162lm

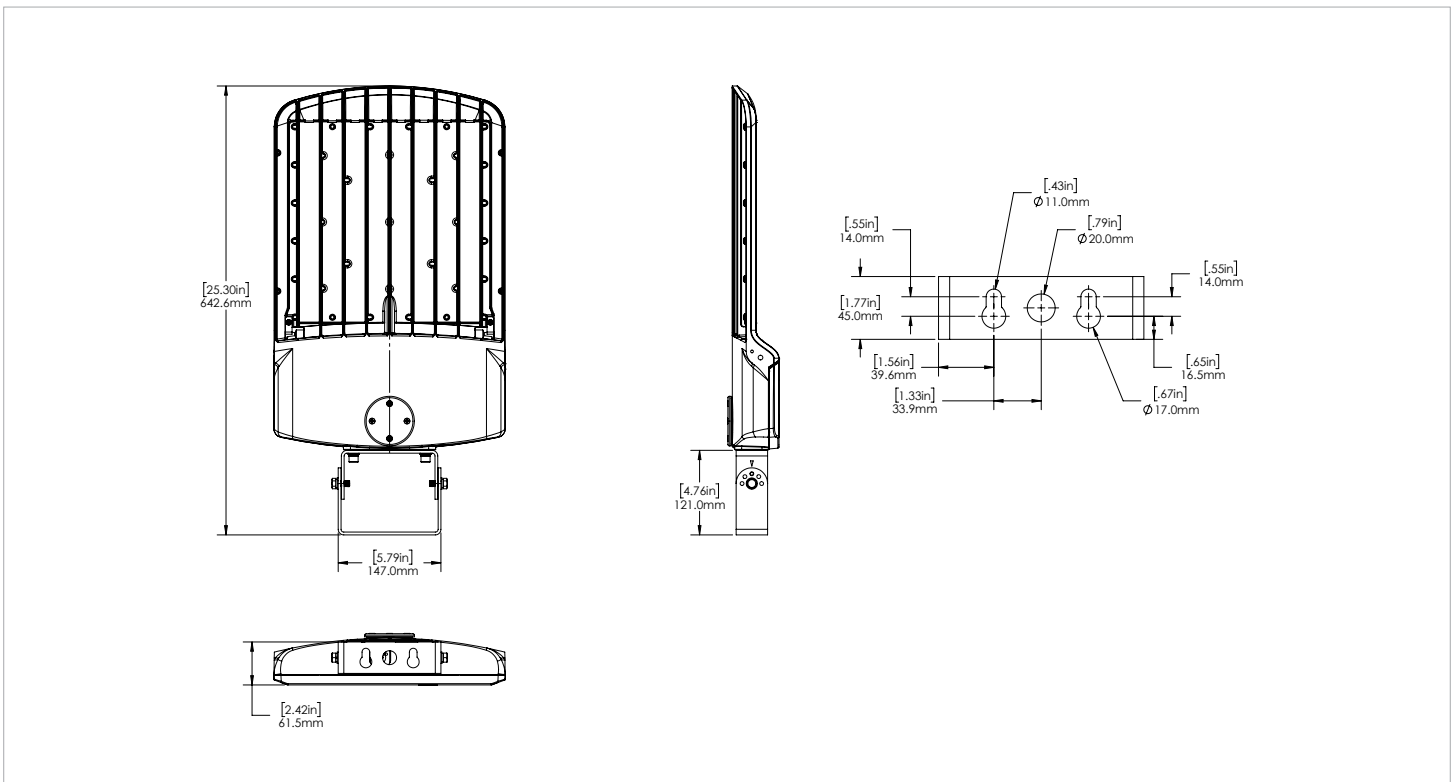
HELIX 1



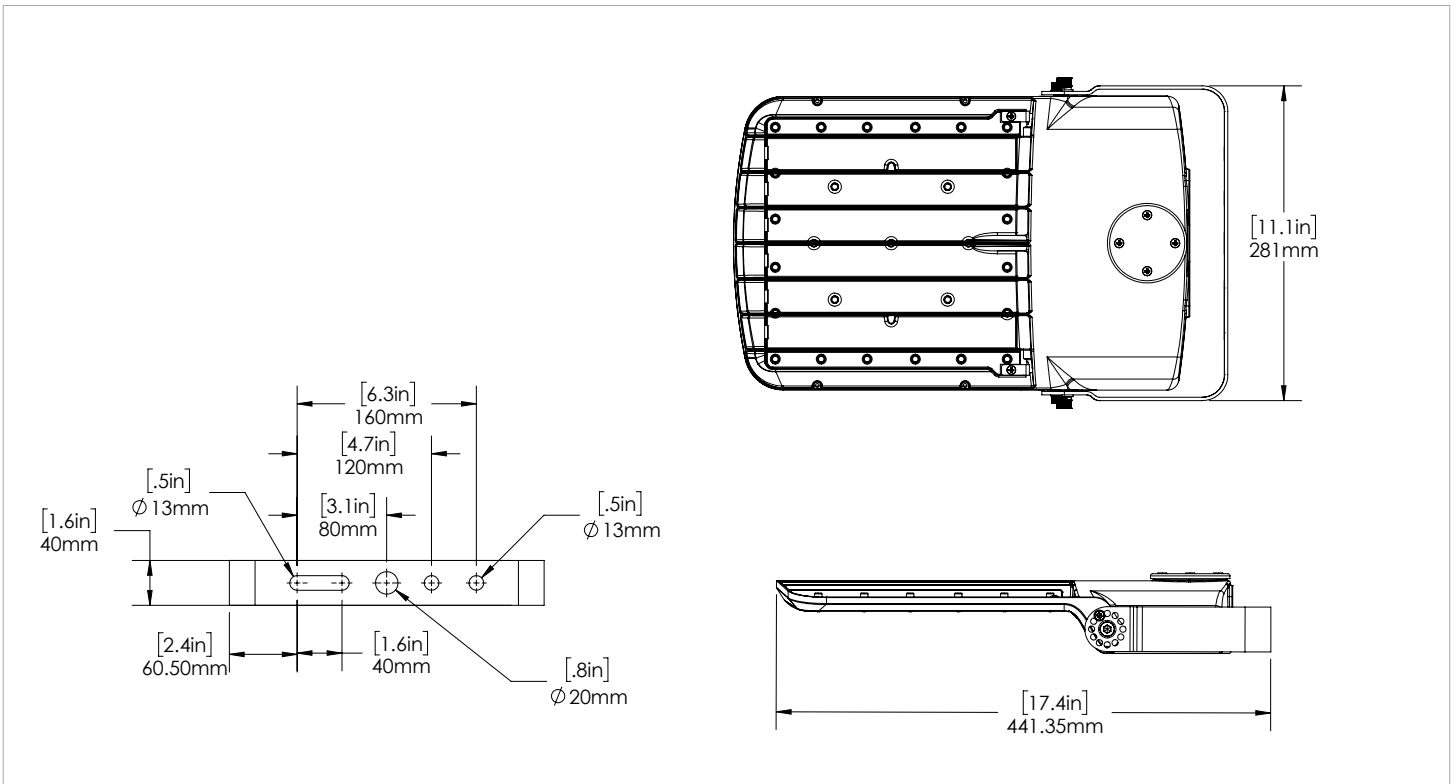
DIRECT MOUNT



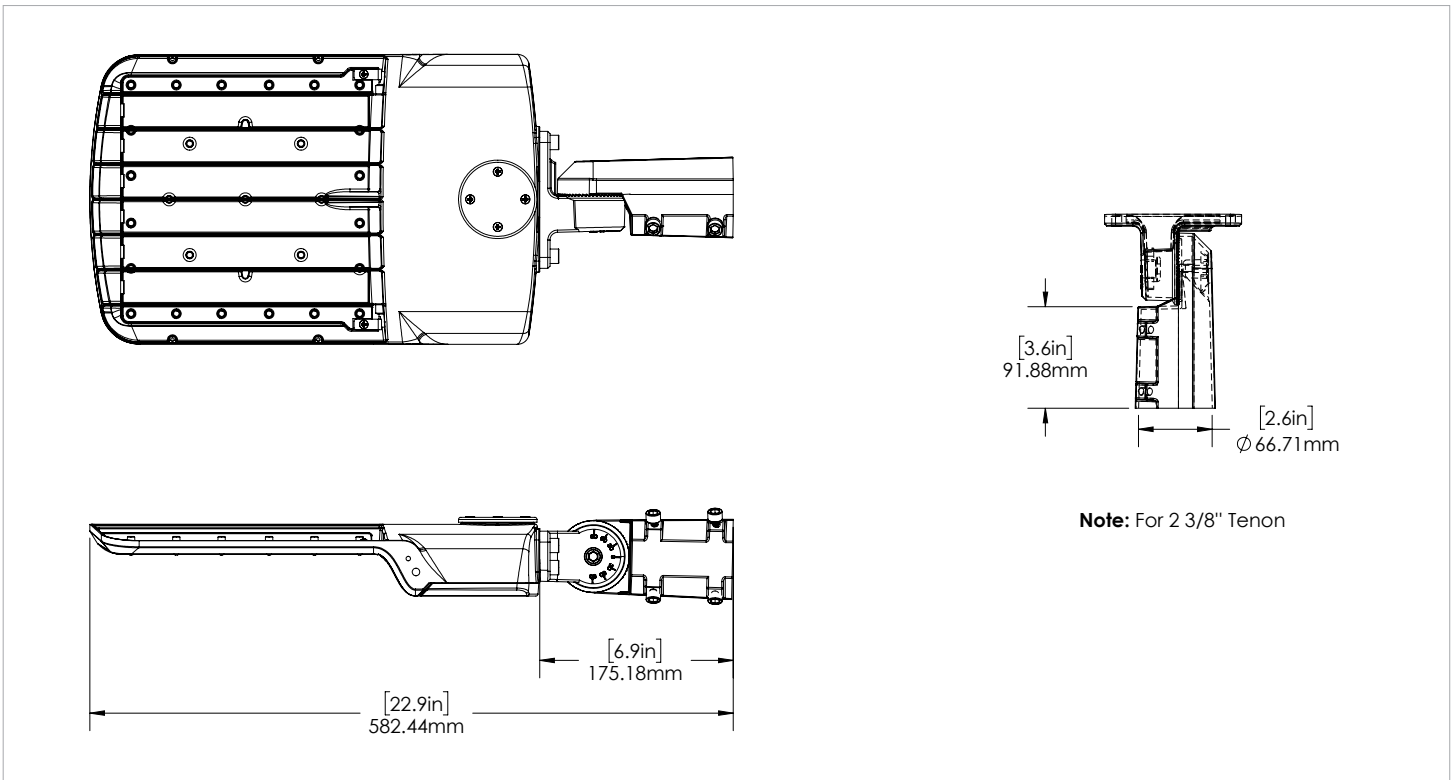
TRUNNION



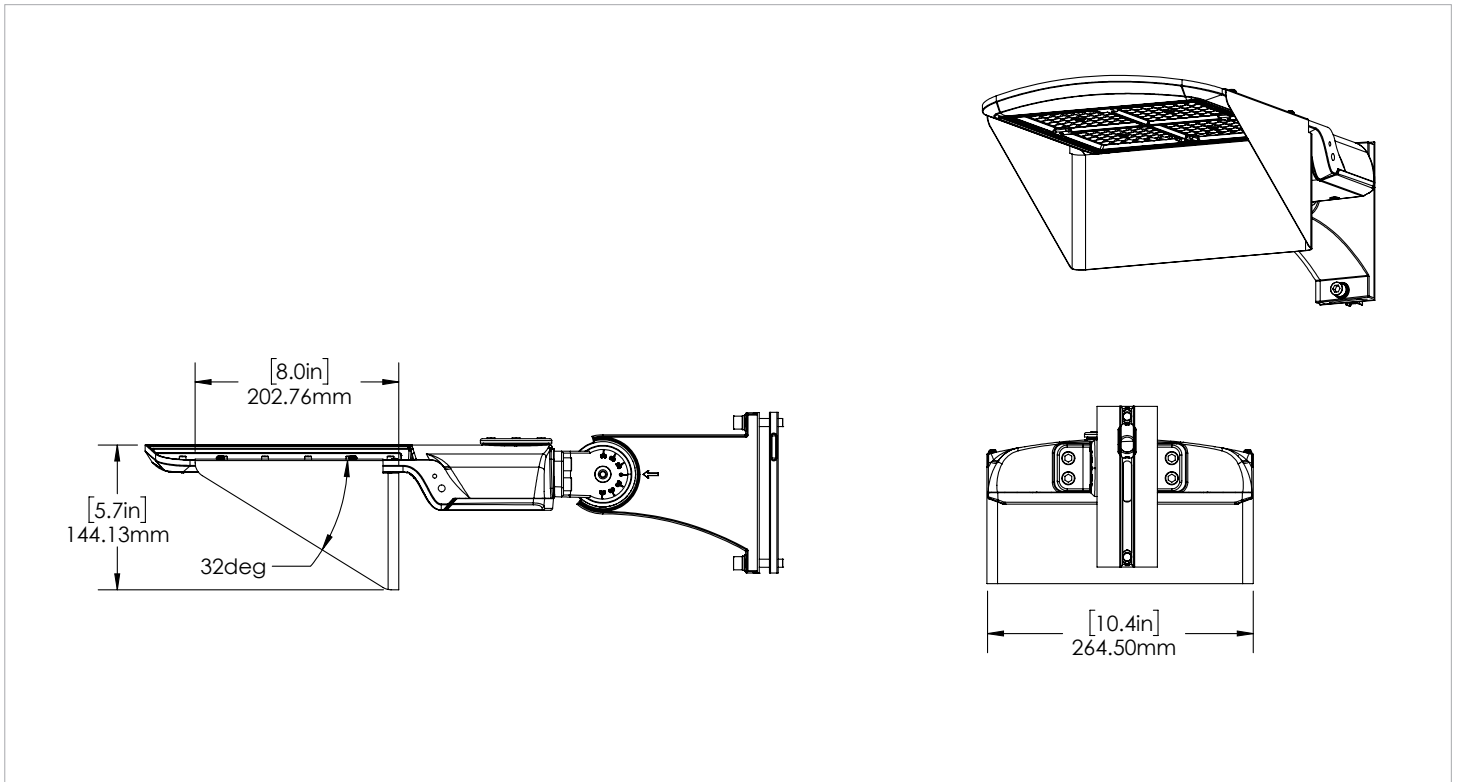
YOKE



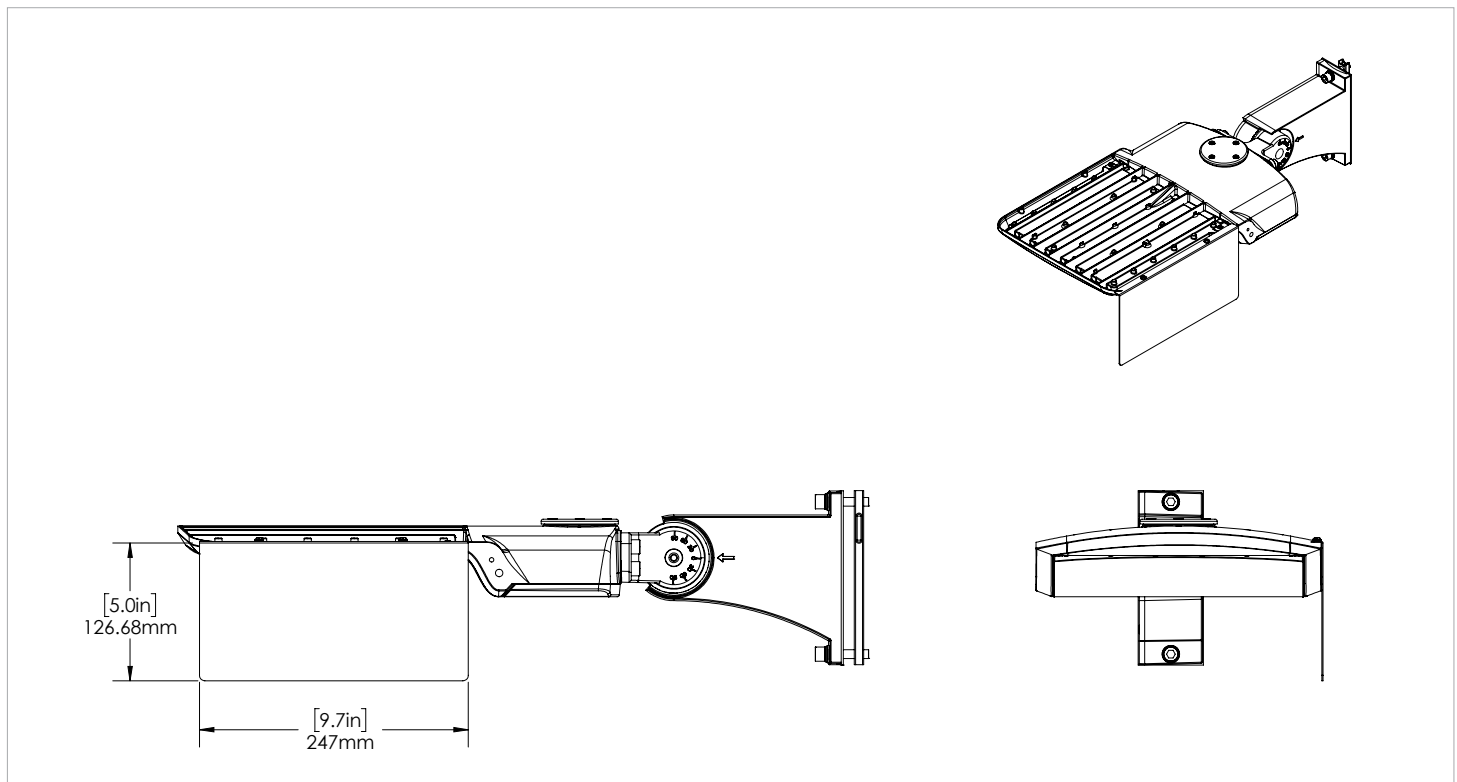
SLIPFITTER



HELIX 1 WITH HOUSE SIDE CUTOFF (HCO)



HELIX 1 WITH SIDE CUT OFF (SCO)



SPECIFICATIONS

Model Number	Voltage	Power	Light Output	Efficacy	THD	PF	CCT	B-U-G
HELIX1-LED150A100-H-VK-T2-BRZ-DIM-SP10(3000K)	120-347V	154.01W	19333.2lm	125.53lm/w	4.51%	0.998	3065K	4-0-4
HELIX1-LED150A100-H-VK-T2-BRZ-DIM-SP10(4000K)	120-347V	148.16W	21243.2lm	143.38lm/W	4.54%	0.998	3970K	4-0-4
HELIX1-LED150A100-H-VK-T2-BRZ-DIM-SP10(5000K)	120-347V	153.68W	20626.9lm	134.22lm/W	4.49%	0.999	5219K	4-0-4
HELIX1-LED150A100-H-VK-T3-BRZ-DIM-SP10(3000K)	120-347V	154.29W	19534.8lm	126.61lm/W	3.89%	0.998	3057K	4-0-4
HELIX1-LED150A100-H-VK-T3-BRZ-DIM-SP10(4000K)	120-347V	148.2W	21234.1lm	143.28LM/w	3.79%	0.999	3966K	4-0-4
HELIX1-LED150A100-H-VK-T3-BRZ-DIM-SP10(5000K)	120-347V	154.65W	21029.3lm	135.98lm/W	3.89%	0.998	5233K	4-0-4
HELIX1-LED150A100-H-VK-T4-BRZ-DIM-SP10(3000K)	120-347V	153.61W	19028.9lm	123.88lm/W	3.84%	0.998	3060K	3-0-3
HELIX1-LED150A100-H-VK-T4-BRZ-DIM-SP10(4000K)	120-347V	147.62W	20854.3lm	141.27lm/W	3.86%	0.997	3959K	3-0-3
HELIX1-LED150A100-H-VK-T4-BRZ-DIM-SP10(5000K)	120-347V	153.48W	20429.7lm	133.11lm/W	3.98%	0.999	5206K	3-0-3
HELIX1-LED150A100-H-VK-T5-BRZ-DIM-SP10(3000K)	120-347V	153.8W	19490.8lm	126.71lm/W	3.93%	0.998	3063K	4-0-3
HELIX1-LED150A100-H-VK-T5-BRZ-DIM-SP10(4000K)	120-347V	147.69W	21168.4lm	143.33lm/W	4.03%	0.998	3973K	4-0-3
HELIX1-LED150A100-H-VK-T5-BRZ-DIM-SP10(5000K)	120-347V	153.68W	20831.3lm	135.55lm/W	3.80%	0.999	5211K	4-0-3
HELIX1-LED150A100-H-2.2K-T2-BRZ-DIM-SP10	120-347V	145.51	17125	117.69	3.9	0.998	2200K	4-0-4
HELIX1-LED150A100-H-2.7K-T2-BRZ-DIM-SP10	120-347V	147.46	18327	124.20	3.7	0.998	2700K	4-0-4
HELIX1-LED150A100-H-3K-T2-BRZ-DIM-SP10	120-347V	149.40	19528	130.71	3.8	0.998	3000K	4-0-4
HELIX1-LED150A100-H-2.2K-T3-BRZ-DIM-SP10	120-347V	145.92W	17249lm	118.21lm/W	3.70%	0.998	2200K	3-0-3
HELIX1-LED150A100-H-2.7K-T3-BRZ-DIM-SP10	120-347V	147.88W	18815lm	127.11lm/W	3.70%	0.998	2700K	3-0-3
HELIX1-LED150A100-H-3K-T3-BRZ-DIM-SP10	120-347V	149.84W	20381lm	136lm/W	3.60%	0.998	3000K	3-0-3
HELIX1-LED150A100-H-2.2K-T4-BRZ-DIM-SP10	120-347V	144.32W	16637lm	115.28lm/W	3.90%	0.998	2200K	3-0-3
HELIX1-LED150A100-H-2.7K-T4-BRZ-DIM-SP10	120-347V	146.97W	18292lm	124.3lm/W	3.90%	0.998	2700K	3-0-3
HELIX1-LED150A100-H-3K-T4-BRZ-DIM-SP10	120-347V	149.62W	19947lm	133.32lm/W	3.80%	0.998	3000K	3-0-3
HELIX1-LED150A100-H-2.2K-T5-BRZ-DIM-SP10	120-347V	144.39	16741	115.94	3.8	0.998	2200K	3-0-3
HELIX1-LED150A100-H-2.7K-T5-BRZ-DIM-SP10	120-347V	147.01	18356	124.70	3.8	0.998	2700K	3-0-3
HELIX1-LED150A100-H-3K-T5-BRZ-DIM-SP10	120-347V	149.63	19970	133.46	3.9	0.998	3000K	3-0-3

LEGEND

H - 120-347V
 VK - Colour Selectable (3000K/4000K/5000K), 2.2K - 2200K,
 2.7K - 2700K, 3K - 3000K
 T2-Type I, T3-Type III, T4-Type IV, T5-Type V
 BRZ - Bronze
 DIM - 0-10V Dimming
 SP10 - 10kV Surge Protection

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, >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)

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 control turns the light fixture 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 level 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 level 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 level 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.

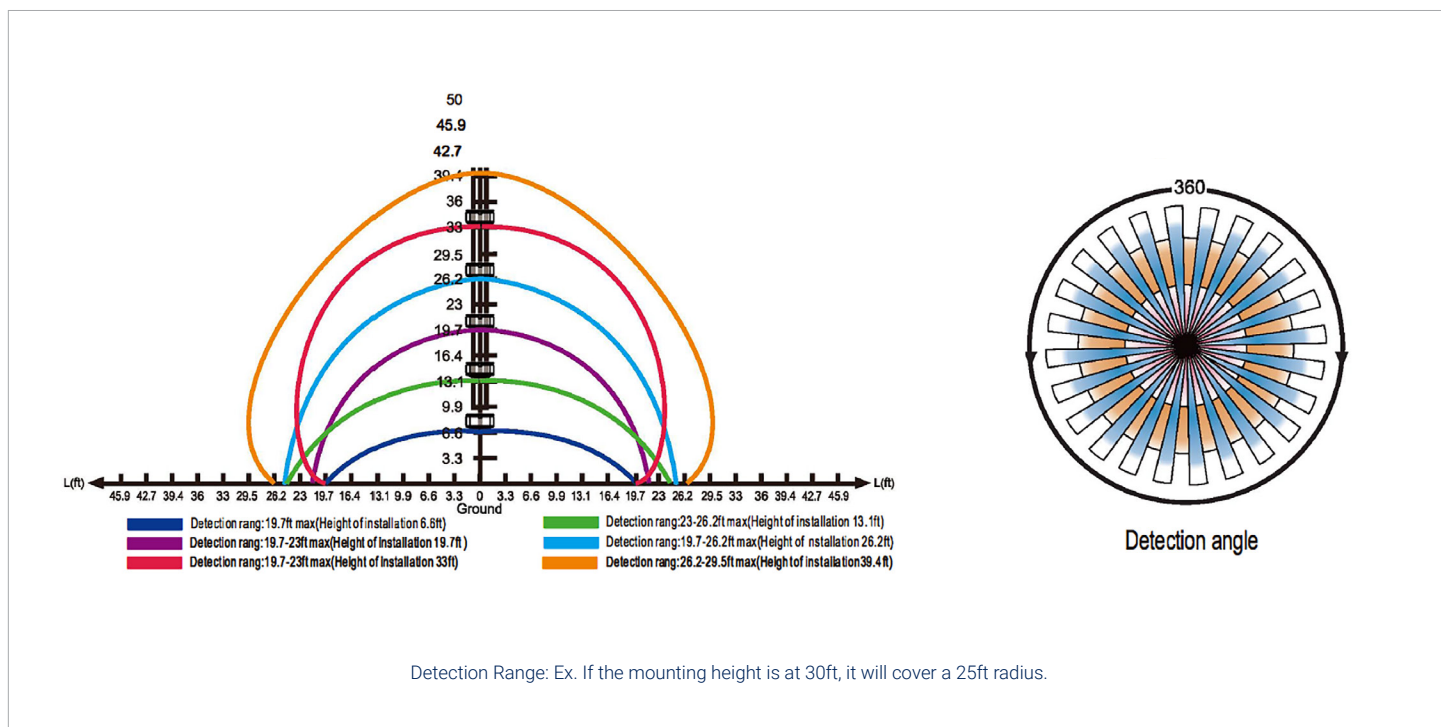
DIMMING HIGH FREQUENCY MOTION SENSOR (DHFS)



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

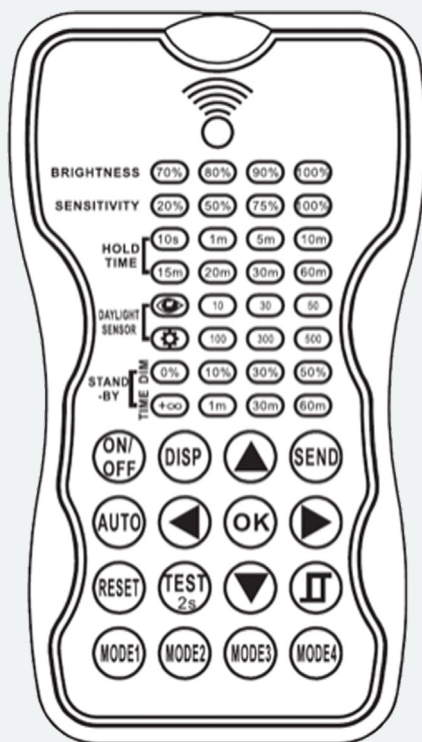


Refer to page 11 for more details on the DHFS Remote Control Usability

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



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.

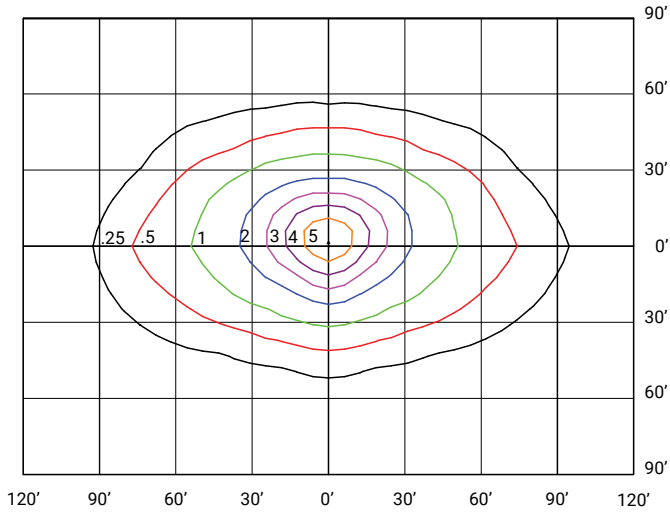
RC100 REMOTE CONTROL SPECIFICATION

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")

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

LUMENS 21200

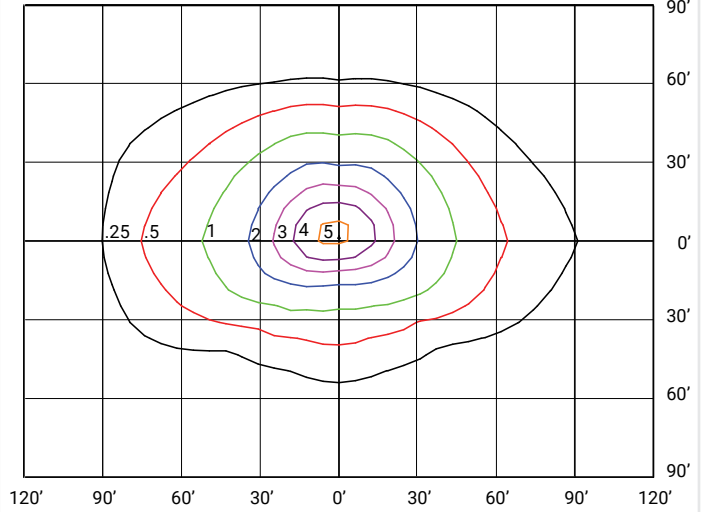
MAX CALCULATED VALUE 5.82 Fc



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

LUMENS 21200

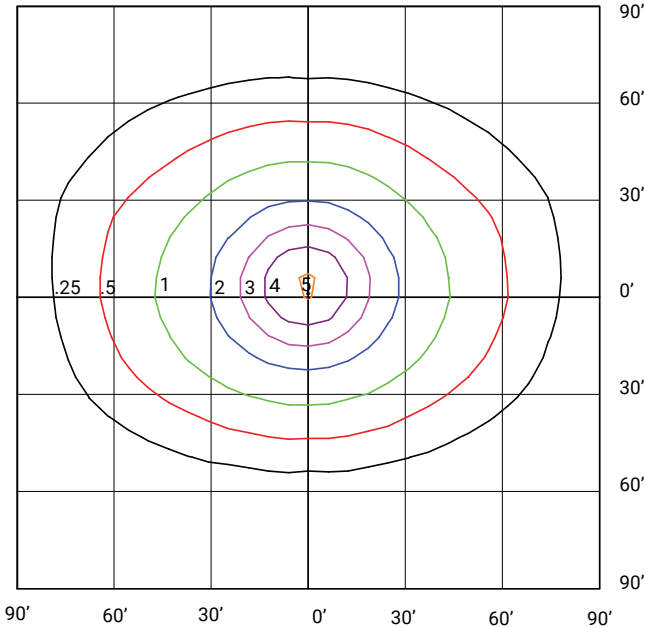
MAX CALCULATED VALUE 5.19 Fc



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

LUMENS 20800

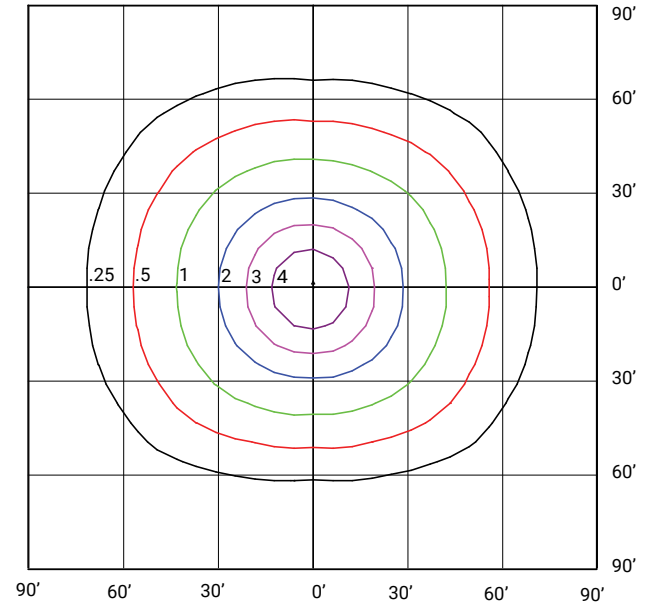
MAX CALCULATED VALUE 5.11 Fc



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

LUMENS 21100

MAX CALCULATED VALUE 4.76 Fc



ORDERING GUIDE:










HELIX1	LED150A100	H							DIM
Fixture	Wattage	Voltage	Colour Temp.	Optics	Paint Finish	Dimming	Controls	Misc.	
	LED150A100	H - 120-347V	VK - Selectable 3000K/4000K*/ 5000K	T2 - Type II	BRZ - Bronze*	DIM - 0-10V Dimming	Blank	SP10 - 10kV Surge Protector*	
			2.2K - 2200K****	T3 - Type III*	CST - Custom Colour		PC - Photocontrol		
			2.7K - 2700K****	T4 - Type IV			DHFS- Dimming High Frequency Sensor***	SP20 - 20kV Surge Protector**	
			3K - 3000K****	T5 - Type V			PCLS - Photocell CCT Lumen Sensor***		
				T2R -Type II Rotated Right			3PIN - 3 PIN Receptacle w/ Shorting Cap		
				T2L -Type II Rotated Left			7PIN - 7 PIN Receptacle w/ Shorting Cap		
				T3R -Type III Rotated Right					
				T3L -Type III Rotated Left					
				T4R - Type IV Rotated Right					
				T4L -Type IV Rotated Left					

STOCK CODE	
081707	HELIX1-LED150A100-H-VK- T3-BRZ-DIM-SP10
081856	HELIX1-LED150A100-H-VK-T3- BRZ-DIM-PCLS-SP10***

Note: Default factory setting is 4000K
 * Standard Configuration
 **Available with 120-277V only
 *** One remote control needed for sensor (PCLS - RC107 & DHFS - RC100)
 **** Units qualify for DLC LUNA when ordered in fixed 2200K or 2700K or 3000K CCT and with a Non Adjustable Direct Mount Arm.

Ordering Guide For Accessories

Check the items that you wish to order:

		
<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"/> 020001 - 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)