

Catalog Number

Project

Type

FEATURES & SPECIFICATIONS

APPLICATION — The Katen Large Series of high-output LED luminaires is designed for new outdoor lighting installations and serves as a replacement for HID area lights. Its compact, one-piece die-cast housing reduces cost compared to models requiring multiple parts, while the integrated heat sink minimizes component complexity. The standard arm mount features an integral arm compatible with SSA drilled Techlight poles, providing added strength and simplifying installation. Optional twist-lock photocell enables additional energy savings, and an optional PIR motion sensor enhances security and efficiency by reducing power when no motion is detected. Ideal for applications requiring long life, low maintenance, and consistent color rendering, such as parking lots, restaurants, quick-service locations, shopping centers, and general area lighting. The KTN L optics are Full Cutoff design, meeting Dark Sky requirements. This fixture delivers maximum value through energy savings, long life, and outstanding photometric performance at an affordable price, producing 45,000 to 80,000 lumens and replacing HID luminaires up to 1000W.

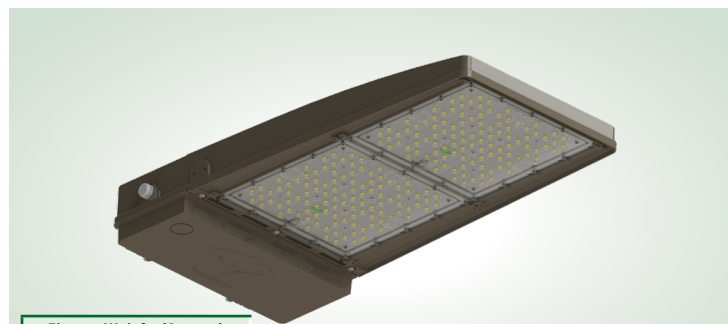
CONSTRUCTION — The KTN L is built with a heavy-duty, one-piece die-cast aluminum housing that incorporates the heat sink into the casting for efficient thermal management. This design eliminates the need for additional parts, reducing complexity and cost. Silicone gaskets provide weather-tight protection, ensuring durability in harsh outdoor environments. The housing includes an easy-access door on the bottom of the mounting arm, allowing wiring without opening the electrical compartment, which simplifies installation and maintenance.

OPTICAL SYSTEM — The KTN L uses Full Cutoff optics to minimize glare and light pollution, meeting or exceeding Dark Sky requirements. Optical assemblies are engineered for precise photometric performance, delivering uniform illumination across large areas. Multiple distribution patterns are available to suit a variety of applications, ensuring flexibility and optimal light coverage. Optical components are constructed from polycarbonate and are UV-rated for long-term durability and clarity.

ELECTRICAL SYSTEM — The KTN L delivers up to 80,000 nominal lumens in most optical distributions, with color temperature options of 4000K Neutral White or 5000K Cool White. It operates on universal input voltage (120–277Vac, 50/60Hz) and offers 277/480Vac high-voltage options. The fixture is rated for an

KTN L SERIES

Katen Large LED Area Light



Fixture Weight (Approx)

KTN-L 29.3 lbs

SERIES	LENGTH / WIDTH / HEIGHT	Fixture Weight (Approx)
KTN L	30" x 14" x 4"	29.3 lbs

operating temperature range of -40°C to 40°C, ensuring reliable performance in extreme conditions. Includes built-in 10kA surge protection and conforms to UL8750 standards.

MOUNTING — The KTN L offers multiple mounting configurations designed for one-for-one and two-for-one retrofit solutions, replacing existing metal halide or high-pressure sodium fixtures. The integral universal mounting mechanism allows the luminaire to be easily installed on most existing drill hole patterns, including SSA drilled Techlight poles, providing significant labor savings. Additional mounting options include a mast arm adapter, adjustable integral slipfitter, and other configurations for custom applications.

FINISH — The fixture features an E-Coated corrosion-resistant epoxy layer applied prior to a super-durable polyester powder coat finish, forming a uniform protective barrier for maximum durability. Standard colors: Black, Bronze, US Green, White. Custom colors available upon request.

WARRANTY — The complete luminaire is covered by a 5-year limited warranty.

ORDERING INFORMATION

Choose the bold face options for the appropriate luminaire configuration for your application and enter on the line above each fixture attribute.

Accessories may be factory installed, depending on the particular accessory chosen, but still be ordered as a separate line item.

EXAMPLE:

KTN L N 80L T5W 1 BK

SERIES	CCT	NOMINAL LUMENS	OPTIC	VOLTAGE	OPTIC ROTATION	FINISH	OPTIONS
KTN L	C = 5000K N = 4000K	45L = 45,000 lumens 50L = 50,000 lumens 55L = 55,000 lumens 60L = 60,000 lumens 65L = 65,000 lumens 70L = 70,000 lumens 75L = 75,000 lumens 80L = 80,000 lumens	T3 = Type III T4 = Type IV T5M = Type V Medium T5W = Type V Wide	1 = 120-277V ¹ 3 = 277 - 480V ¹	L = Left Rotated Optics R = Right Rotated Optics (Leave Blank for standard optics)	BZ = Bronze BK = Black WH = White GR = Green SLV = Silver	BTEC ² = Bluetooth Enabled Control PCR7 = 7-Pin Twist-Lock Photocell receptacle ANSI136.41 with Shorting Cap IMS ³ = Fixture Mount Passive Infrared Motion Sensor (IMS Lenses Below, Ordered Separately) TLWSFSP-L3 ⁴ = 360° lens, maximum coverage 40' diameter from 20' height (IMS) TLWSFSP-L7 ⁴ = 360° lens, maximum coverage 100' diameter from 40' height (IMS) IMSBTM ⁵ = AC Powered Internal Network Wireless PIR & Daylight Harvesting Sensor (IMSBTM Lenses Below, Ordered as a Separate Line Item) WHBL1 = 360° PIR lens, maximum coverage 80' dia. from 40' height (IMSBTM)

ACCESSORIES (Order as separate line items)

TLWSFSIR-100	Remote Handheld Sensor Configuration Tool for IMS
PC2	347-480V Twist-Lock Photocell
PC7	Multi-Tap (105-285V) Twist Lock Photocell
KTN 4RA (XX)	4" Round Pole Adapter
KTN 5RA (XX)	5" Round Pole Adapter
KTN 2AF (XX)	2-3/8" ID Adjustable Slip Fitter
KTN ARM (XX)	Arm
KTN B15 (XX)	Trunnion Mount
KTNSAADPTRKIT* (XX)	SSA Adapter Hardware Kit
S269 (XX)	3 Sided Shield for 45L - 80L
S270 (XX)	House Side Shield for 45L - 80L

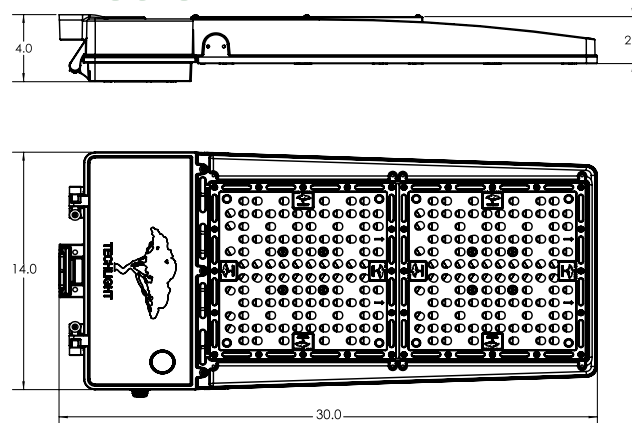
(XX) = Finish Option.

Substitute XX w/ Finish Codes w/in part #'s above

NOTES

- 1 = Built-in 10kA Surge Protection.
- 2 = Control Modules are installed and luminaires are commissioned at the factory. Lighting control system via the Casambi app for Apple iOS and Android devices provides diverse functionality for a control hierarchy capable of managing multiple schedules and scenes and incorporating a variety of energy saving accessories. **STGA7L*** (Wi-Fi ready tablet/Gateway Samsung Tab A7 Lite) is required as a gateway and can be purchased from a local retailer or online.
- 3 = **TLWSFSP-L3** or **L7** Lens must be ordered along with this sensor.
- 4 = Photo control shield available upon request. Len's must be ordered with **IMS** option.
- 5 = **WHBL1** Lens must be ordered along with this sensor.
- 6 = Required for select **SSA extension arms**, **CCS7** arm, and **LDV** arm mounting applications. Not required for standard fixture mounting configurations. **Consult factory for compatibility.**

DIMENSIONS



***STGA7L** = Enables remote access using the Gateway and Sites functionality in the Casambi App. Automatically restores network control settings and provides automatic time back up for the mesh network. This is required as a gateway and can be purchased from a local retailer or online.

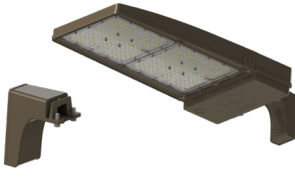
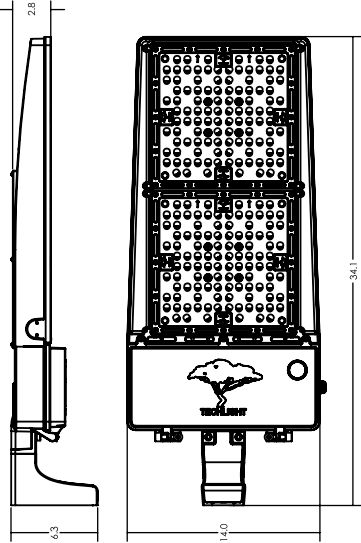
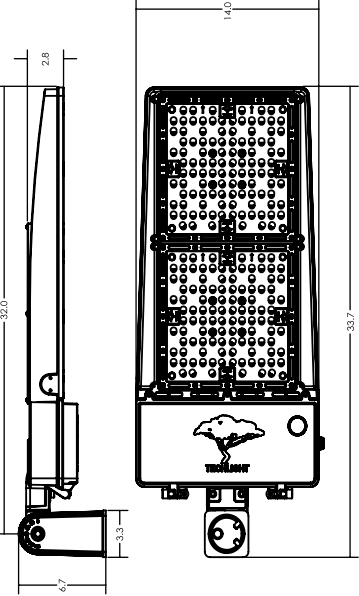
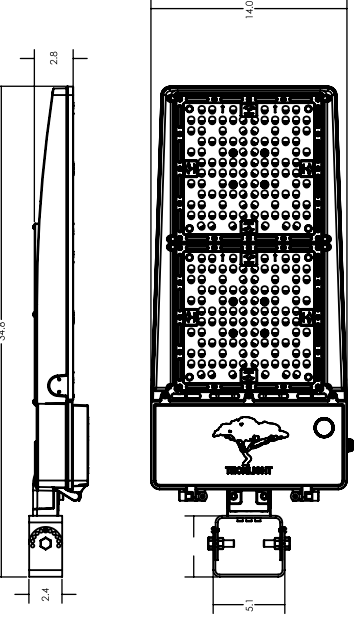


www.techlight.com

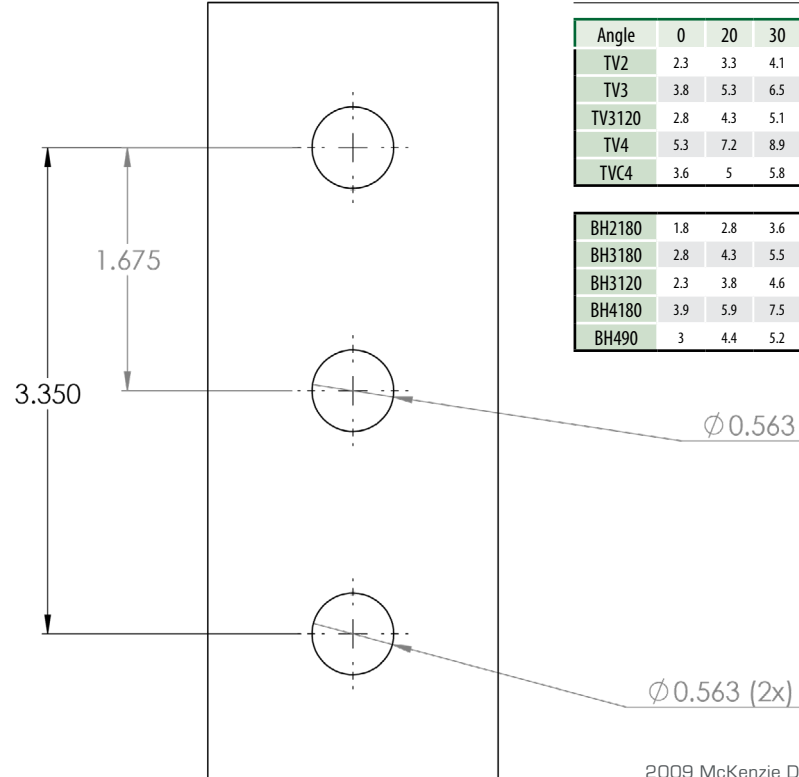
KTN L Katen Large LED Area Light

AVAILABLE FIXTURE DIMENSIONS

Dimensions shown are for fixture bodies only. Mounting options must be ordered separately. Fixture shown with arm sold separately.

KTN ARM Fixed Arm Mount	KTN 2AF Slipfitter Mount	KTN B15 Trunnion Mount
		
		

SSA Drill Measurements



EPA's RATING FOR VARIOUS MOUNTING CONFIGURATIONS [FT²]

Angle	0	20	30	45	60	75	90
TV2	2.3	3.3	4.1	5.2	6.1	6.6	7.9
TV3	3.8	5.3	6.5	8.2	9.4	10.2	12.1
TV3120	2.8	4.3	5.1	6.2	7	7.5	8.3
TV4	5.3	7.2	8.9	11.1	12.8	13.7	16.4
TVC4	3.6	5	5.8	6.9	7.7	8.2	9.6

BH2180	1.8	2.8	3.6	4.7	5.6	6.1	7.4
BH3180	2.8	4.3	5.5	7.2	8.4	9.2	11.1
BH3120	2.3	3.8	4.6	5.7	6.5	7	7.8
BH4180	3.9	5.9	7.5	9.8	11.4	12.4	15
BH490	3	4.4	5.2	6.3	7.1	7.6	9

Angle	0	20	30	45	60	75	90
KTN B15	0.8	1.3	1.7	2.3	2.7	2.9	3.6

KTN ARM	0.9	n/a	n/a	n/a	n/a	n/a	n/a
KTN ARM 2180	1.7	n/a	n/a	n/a	n/a	n/a	n/a
KTN ARM 290	1.4	n/a	n/a	n/a	n/a	n/a	n/a
KTN ARM 3120	2.2	n/a	n/a	n/a	n/a	n/a	n/a
KTN ARM 3121	2.2	n/a	n/a	n/a	n/a	n/a	n/a
KTN ARM 490	2.8	n/a	n/a	n/a	n/a	n/a	n/a

DV 1@90	1.6	n/a	n/a	n/a	n/a	n/a	n/a
DV 2@180	2.8	n/a	n/a	n/a	n/a	n/a	n/a
DV 2@90	2.2	n/a	n/a	n/a	n/a	n/a	n/a
DV 3@90	3.4	n/a	n/a	n/a	n/a	n/a	n/a
DV 4@90	3.9	n/a	n/a	n/a	n/a	n/a	n/a

TVAXR	0.7	1.2	1.6	2.2	2.6	2.8	3.5
RV2	1.8	2.8	3.6	4.7	5.5	6	7.3
RV3	2.8	4.3	5.5	7.2	8.4	9.1	11.1
RV3120	2.2	3.7	4.5	5.6	6.4	6.9	7.7
RV4	3.8	5.7	7.4	9.6	11.3	12.3	14.9
RVC4	2.8	4.2	5.1	6.2	7	7.5	8.8

KTN 2AF	0.8	1.3	1.7	2.3	2.7	3.0	3.6
---------	-----	-----	-----	-----	-----	-----	-----

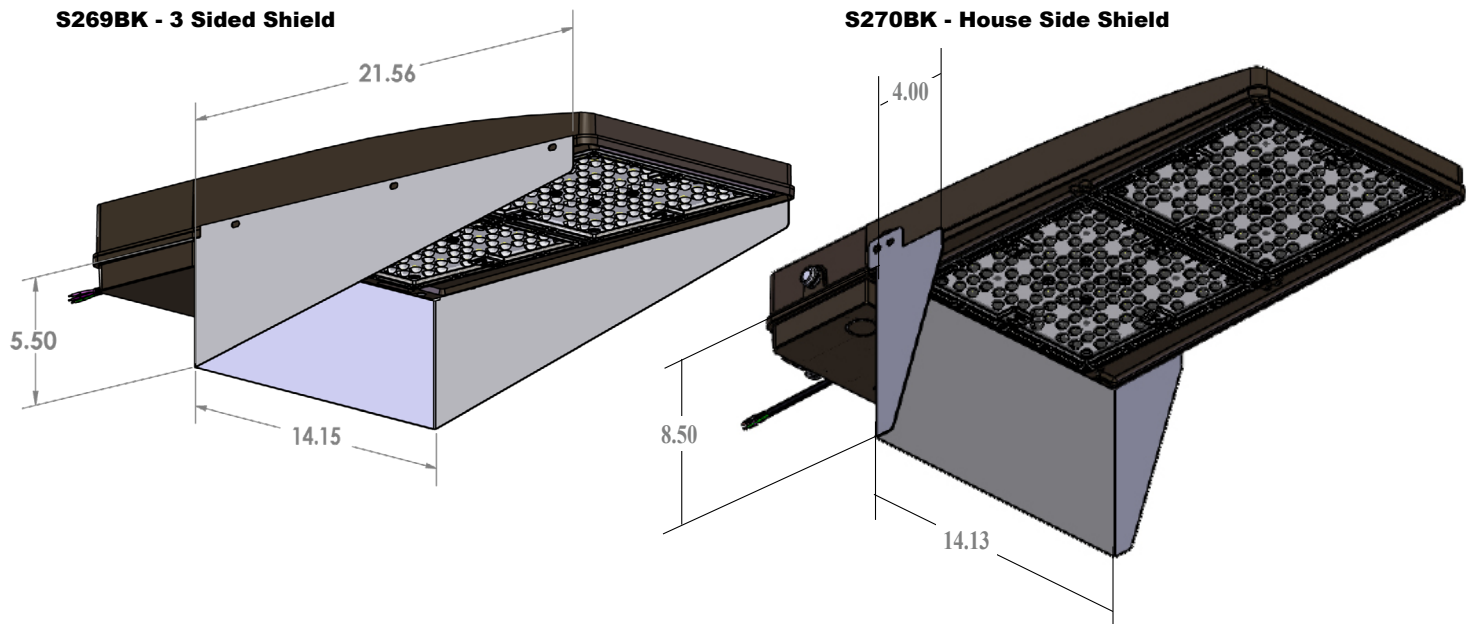
KTN L Katen Large LED Area Light

LUMINAIRE CHARACTERISTICS

Data below is for Cool White (5000K) and Neutral White (4000K)

Nominal Lumens	System Wattage	Delivered Lumens and Wattage/Optic Type								System Wattage	L70 @ 25°C	Amperage Draw				
		TYPE III		TYPE IV		TYPE 5M		TYPE 5W				120V	208V	277V	347V	480V
		Lumens	Lm/W	Lumens	Lm/W	Lumens	Lm/W	Lumens	Lm/W							
45L	269W	44,638 B4-U0-G4	166	45,604 B4-U0-G4	170	46,499 B5-U0-G3	173	47,344 B5-U0-G5	176	269W	>50K Hrs.	2.25	1.3	0.97	0.78	0.56
50L	304W	49,856 B4-U0-G4	164	51,072 B4-U0-G4	168	51,984 B5-U0-G4	171	52,592 B5-U0-G5	173	304W	>50K Hrs.	2.53	1.46	1.1	0.88	0.63
55L	340W	55,080 B5-U0-G5	162	56,440 B4-U0-G5	166	57,460 B5-U0-G4	169	57,800 B5-U0-G5	170	340W	>50K Hrs.	2.83	1.63	1.23	0.98	0.71
60L	376W	60,160 B5-U0-G5	160	61,664 B4-U0-G5	164	62,416 B5-U0-G4	166	62,792 B5-U0-G5	167	376W	>50K Hrs.	3.13	1.81	1.36	1.08	0.78
65L	412W	65,096 B5-U0-G5	158	66,332 B5-U0-G5	161	67,516 B5-U0-G4	163	67,980 B5-U0-G5	165	412W	>50K Hrs.	3.43	1.98	1.49	1.19	0.86
70L	448W	69,888 B5-U0-G5	156	70,784 B5-U0-G5	158	71,680 B5-U0-G4	160	73,024 B5-U0-G5	163	448W	>50K Hrs.	3.73	2.15	1.62	1.29	0.93
75L	484W	74,052 B5-U0-G5	153	75,170 B5-U0-G5	155	75,998 B5-U0-G5	157	77,924 B5-U0-G5	161	484W	>50K Hrs.	4.03	2.33	1.75	1.39	1.01
80L	520W	78,351 B5-U0-G5	151	79,560 B5-U0-G5	153	80,600 B5-U0-G5	155	82,575 B5-U0-G5	159	520W	>50K Hrs.	4.33	2.5	1.88	1.5	1.08

SHIELD DIMENSIONS



Arms & Accessories

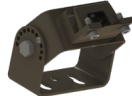
KTN 2AF
2-3/8" ID Adjustable Slip Fitter



KTN ARM
Arm



KTN B15
Trunnion Mount w/side adaptor



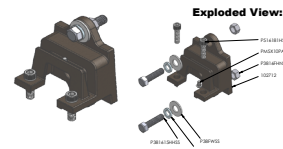
KTN 4RA
4" Round Pole Adapter



KTN 5RA
5" Round Pole Adapter



KTNSSAADPTRKIT
SSA Adapter Hardware Kit



PC2
347-480V Twist-Lock Photocell



PCR7
7-Pin Twist-Lock Photocell Receptacle ANSI C136.41 and Receptacle Shorting Cap (Factory Installed)



IMSBTM
AC Powered Internal Network Wireless PIR & Daylight Harvesting Sensor

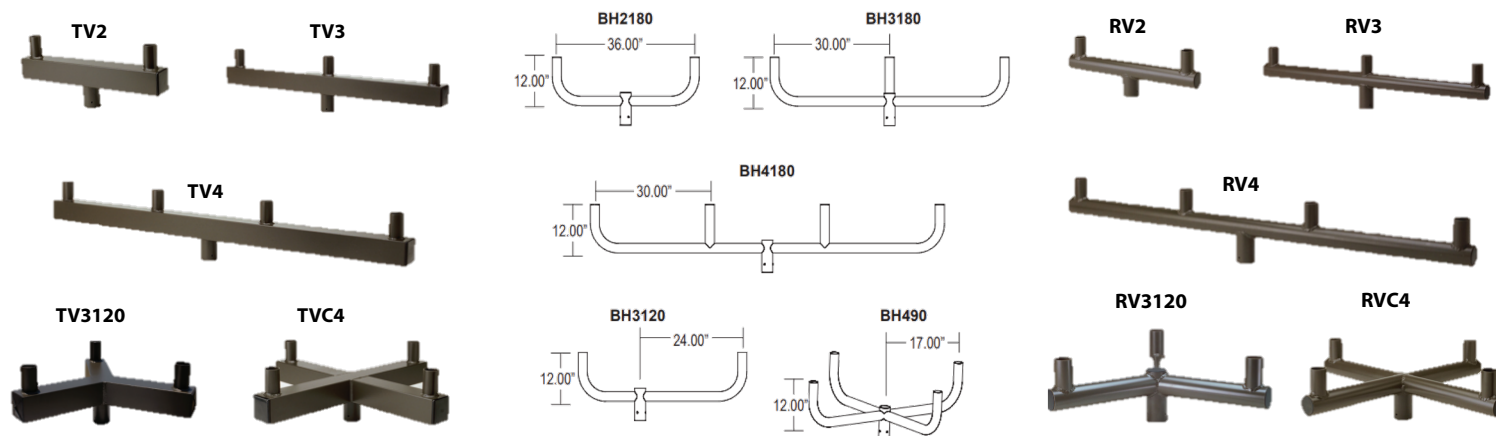


WHBL1
360° PIR lens, maximum coverage 80' dia. from 40' height



KTN L Katen Large LED Area Light

Mounting Options



FIXTURE MOUNT MOTION SENSOR (IMS)

APPLICATION — The sensor is ideal for areas such as parking facilities, gas stations, pedestrian pathways, and warehouses. A choice of four lenses ensures complete coverage for mounting heights up to 40'.

OPERATION — Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

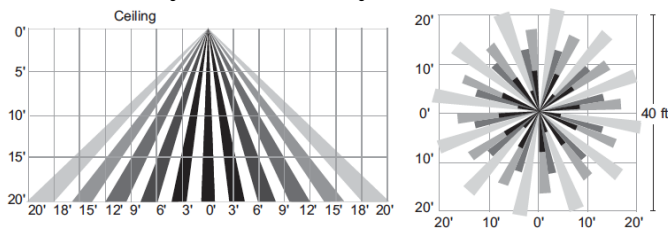
FEATURES —

- Provides line voltage On/Off switching
- High and low modes fully adjustable from 0 to 10V
- Optional cut off delay
- Adjustable ramp up and fade down times
- Optional daylighting setpoints feature automatic calibration, or permit manual adjustment
- Polycarbonate construction; flame retardant, UV resistant, impact resistant, recyclable
- UL244A and UL508

MOTION SENSOR LENSES - FIELD OF VIEW

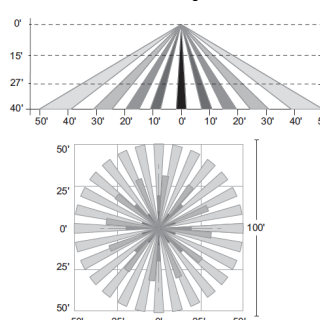
TLWSFSP-L3

360° lens, maximum coverage 40' diameter from 20' height



TLWSFSP-L7

360° lens, maximum coverage 100' diameter from 40' height



TLWSFSIR-100

Remote Handheld Sensor Configuration Tool



TECHLIGHT
INNOVATOR AND LEADER IN THE LIGHTING INDUSTRY

KTN L Katen Large LED Area Light

Integral Motion Sensor Blue Tooth Module (IMSBTM)

APPLICATION — The IMSBTM is an AC-powered, Integral Motion Sensor Blue Tooth Module, that is highly versatile for various indoor and outdoor lighting fixtures. It provides **360° coverage**, making it optimal for open spaces and aisles. This sensor is particularly suitable for environments such as parking lots, fuel stations, walkways, and storage facilities. The WHBL1 lens is crafted for fixtures at mounting heights ranging from **20 to 40 feet**, ensuring a coverage span of up to **80 feet in diameter** at the maximum height of **40 feet**. These lenses are designed with multiple cells and tiers, creating a dense pattern of coverage.

- Analog Sensor Built-in
- Replaceable lens options
- 120-277V Line Voltage input
- Daylight harvesting available

OPERATION — Typically, the sensor ramps lighting On to the selected High mode level when motion is detected and the ambient light level is below the hold off setpoint. After the sensor stops detecting movement and the time delay elapses, lights fade to the Low mode level. If there is no motion during the subsequent cut off time delay, the lights will turn Off. For dusk to dawn control, the integral photocell can switch the lights On and Off based on the ambient light level so that lighting remains on overnight even without motion detection.

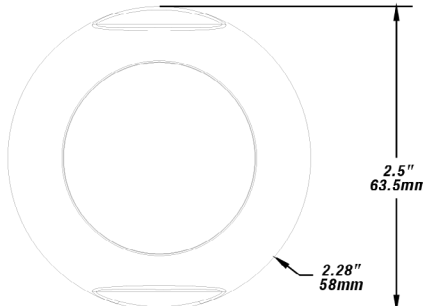
ADDITIONAL FEATURES

- **Wireless Control System:** Bluetooth® Low Energy Mesh 4.2 & 5.0 protocols. Enables individual or group control of luminaires.
- **Mobile App Operation:** Intuitive interface for easy management.
- **Flexible Commissioning:** Components commissioned via the Mobile App. No need for a gateway during commissioning.
- **Sensor Integration:** Works seamlessly with various sensors. Enhances energy efficiency and responsive lighting.
- **Mesh Network Range:** Wireless communication up to 100 feet or more between devices. Ideal for diverse spatial configurations.
- **Internet Independence:** Commissioning and operation without internet access. Ensures functionality in various environments.
- **Security Measures:** Data encryption for mesh network security. Device access restricted without encrypted QR codes.
- **UL 1376 Verification:** LiteTrace, the manufacturer, has UL 1376 verification. Ensures adherence to stringent security standards.
- **In-House R&D Capabilities:** Full-stack, in-house R&D for networked sensors and controllers. Reflects a high level of control and innovation.
- **Industry Recognition:** One of the first systems listed to DLC's Networked Lighting Controls (NLC5). Compliance with industry standards and specifications.

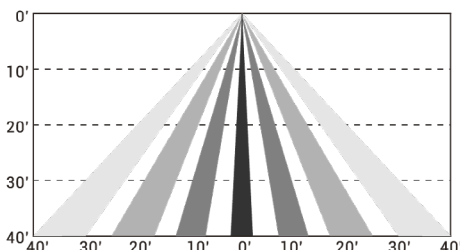


SENSOR LENS FIELD OF VIEW AND DIMENSIONS

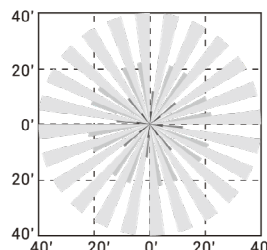
WHBL1



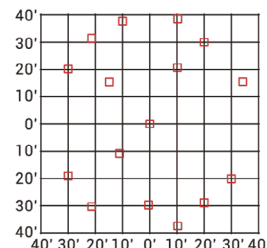
Coverage Side View



Coverage Top View



Height 40ft



Network Lighting Control App Instruction Manual

located on the Techlight Website -> Resources Page.
Location shown below, or scan the QR code to the right.
<https://techlight.com/pdf/IMSBTM%20Manual.pdf>

www.techlight.com