TECHLIGHT
INNOVATION IN ILLUMINATION

Catalog Number	
Project	Type

KTN-L SERIES

## Katen-Large LED Area Light

FEATURES & SPECIFICATIONS

APPLICATION — The Katen Large Series of high output LED luminaires are designed for new outdoor lighting and to be a replacement for HID area lights. A compact, one-piece die cast housing, saving costs versus models that are extruded or cast and require additional parts. The heat sink is included in the actual casting, further minimizing the need for additional parts. Standard Arm Mount features an integral arm compatible with our SSA drilled Techlight poles, increasing strength and simplifying installation. Each fixture can accommodate an optional twist-lock photocontrol which allows for further energy savings and an optional PIR motion sensor allows for security. They are optimal for lighting applications where long life, low maintenance, and consistent color rendering is required. The high lumen output allows the fixture to be used for parking, restaurant, quick service, shopping centers, or general area applications. KTN-L optics are Full Cutoff design. The new KTN-L Area Light delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The KTN-L delivers 45,000 to 82,000 lumens allowing it to replace up to 1000W HID luminaires.

FINISH — Standard colors available. Heavy-duty housing is constructed of cast aluminum with corrosion resistant powder coat finish.

MOUNTING — Available with several or multiple unique mountings, specifically designed to provide one-for-one, and in some cases two-for-one, solutions for replacing existing metal halide or high pressure sodium lighting. Features an integral universal mounting mechanism that allows the luminaire to be easily mounted on most existing drill hole patterns including SSA drilled Techlight poles. This provides significant labor savings. An easy-access door on the bottom of mounting arm allows for wiring without opening the electrical compartment. A mast arm adaptor, adjustable integral slipfitter and other mounting configurations are available.
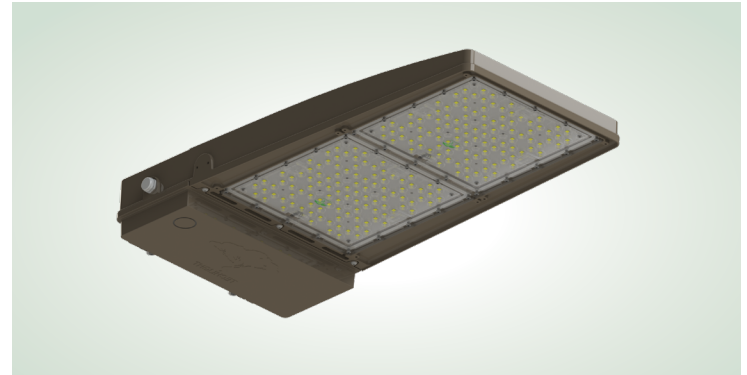
SERIES	LENGTH / WIDTH / HEIGHT
KTN-L	30" x 14" x 4"

ELECTRICAL SYSTEM — Available in up to a 80,000 nominal lumens in most optical distributions with either 4000K Neutral White or 5000K Cool White color temperatures. Universal input votltage 120-277Vac, 50/60Hz; 347/480Vac. Operating temperature range -40°C to 40° C.

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

KTN-L							
SERIES	**CCT**	**NOMINAL LUMENS**	**OPTIC**	**VOLTAGE**	**OPTIC ROTATION**	**FINISH**	**OPTIONS**
KTN-L	**N** = 4000K **C** = 5000K	**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** = 75,0 00 lumens **80L** = 80,000 lumens	**T3** = Type III **T4**³ = Type IV **T5M** = Type V Medium **T5W** = Type V Wide	**1** = 120-277V¹ **2** = 347 - 480V	**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 ANSIC136.41 with Shorting Cap **IMS**⁴ = Fixture Mount Passive Infrared Motion Sensor **(IMS Lenses Below, Ordered Separately)** **TLWSFSP-L3**⁵ = 360° lens, maximum coverage 40' diameter from 20' height **(IMS)** **TLWSFSP-L7**⁵ = 360° lens, maximum coverage 100' diameter from 40' height **(IMS)** **IMSBTM**⁶ = 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	Multip-Tap (105-285V) Twist Lock Photocell
KTN 4RA	4" Round Pole Adapter
KTN 5RA	5" Round Pole Adapter
KTN 2AF	2-3/8" ID Adjustable Slip Fitter
KTN ARM	Arm
KTN B15	Trunnion Mount
S269BK	3 Sided Shield for 45L - 80L
S270BK	House Side Shield for 45L - 80L
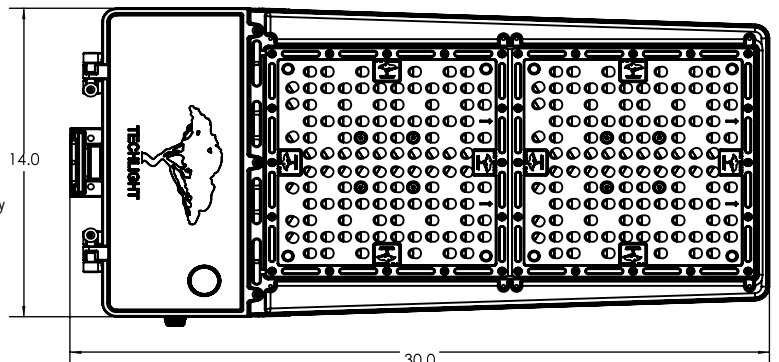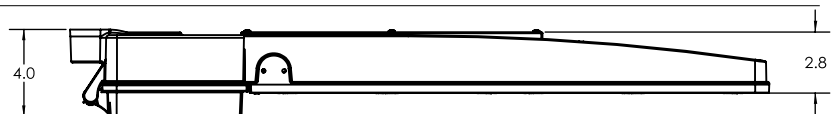
NOTES

1 = Built-in 10kA Surge Protection. Different ratings are available.

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 = (55L-80L in T4) come standard with the **KTN-SM + HDW Kit** and **C35** extended 35' long cord.

4 = TLWSFSP-L3 or L7 Lens must be ordered along with this sensor.

5 = Photo control shield available upon request. Len's must be ordered with **IMS** option.

6 = WHBL1 Lens must be ordered along with this sensor.

*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.
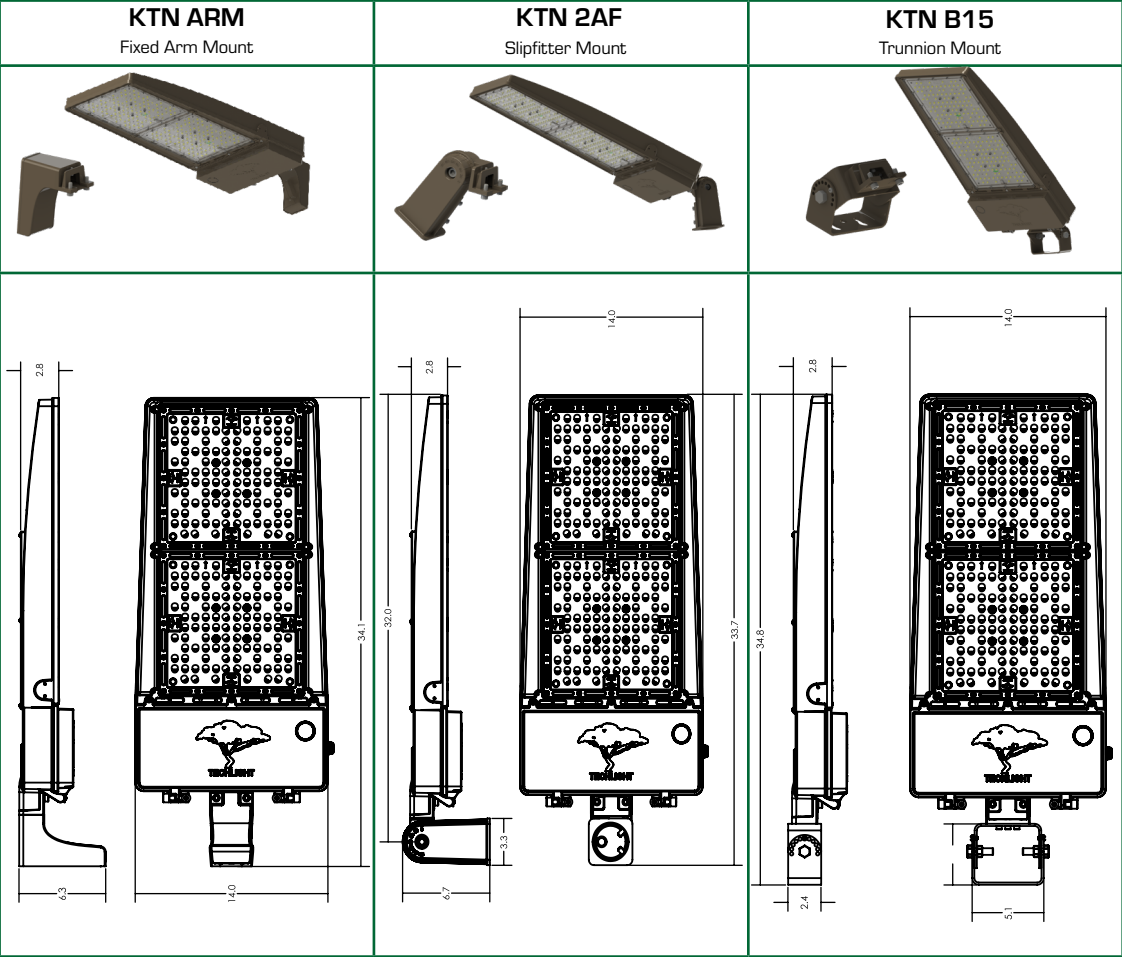
DIMENSIONS

4.0 | 2.8
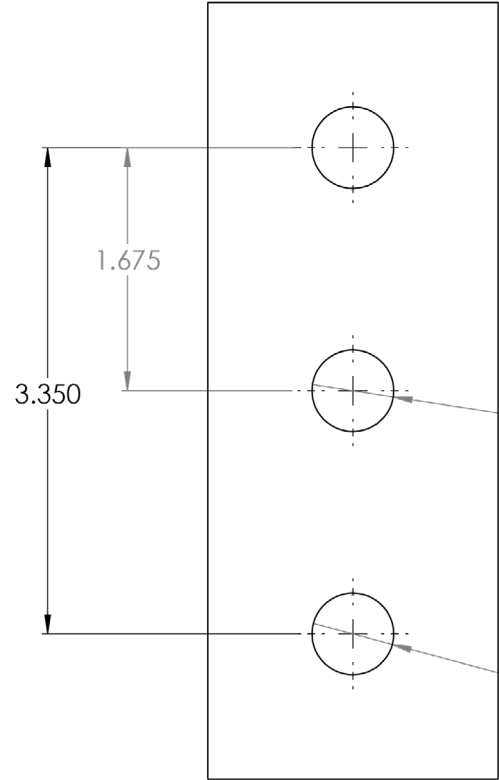
14.0

30.0

ETL

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 seperately.

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

SSA Drill Measurements

1.675
3.350
⌀ 0.563
⌀ 0.563 (2x)

EPA's RATING FOR VARIOUS MOUNTING CONFIGURATIONS [FT²]

Angle	0	20	30	45	60	75	90
TVAX	0.7	1.2	1.6	2.2	2.6	2.8	3.5
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

	0	20	30	45	60	75	90
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	0.7	1.2	1.6	2.2	2.6	2.8	3.5

	0	20	30	45	60	75	90
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

	0	20	30	45	60	75	90
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

	0	20	30	45	60	75	90
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

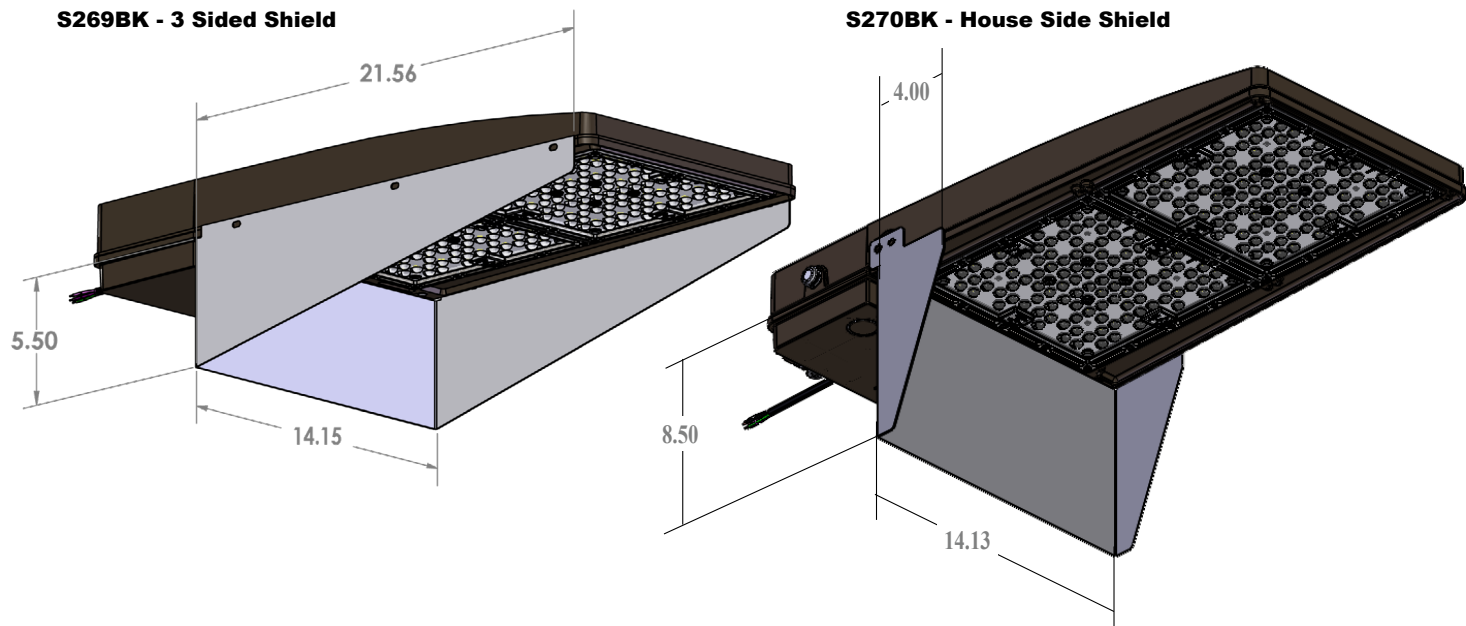|	0	20	30	45	60	75	90
KTN 2AF	0.7	1.2	1.6	2.2	2.6	2.8	3.5

REV: 20250521-10

KTN-L Katen-Large LED Area Light

LUMINAIRE CHARACTERISTICS

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

Nominal Lumens	System Wattage	Delivered Lumens and Wattage/Optic Type							
		TYPE III		TYPE IV		TYPE 5M		TYPE 5W	
		Lumens	Lm/W	Lumens	Lm/W	Lumens	Lm/W	Lumens	Lm/W
45L	269W	44,638	166	45,604	170	46,499	173	47,344	176
50L	304W	49,856	164	51,072	168	51,984	171	52,592	173
55L	340W	55,080	162	56,440	166	57,460	169	57,800	170
60L	376W	60,160	160	61,664	164	62,416	166	62,792	167
65L	412W	65,096	158	66,332	161	67,516	163	67,980	165
70L	448W	69,888	156	70,784	158	71,680	160	73,024	163
75L	484W	74,052	153	75,170	155	75,998	157	77,924	161
80L	520W	78,351	151	79,560	153	80,600	155	82,575	159

System Wattage	L70 @ 25℃	Amperage Draw				
		120V	208V	277V	347V	480V
269W	>50K Hrs.	2.25	1.3	0.97	0.78	0.56
304W	>50K Hrs.	2.53	1.46	1.1	0.88	0.63
340W	>50K Hrs.	2.83	1.63	1.23	0.98	0.71
376W	>50K Hrs.	3.13	1.81	1.36	1.08	0.78
412W	>50K Hrs.	3.43	1.98	1.49	1.19	0.86
448W	>50K Hrs.	3.73	2.15	1.62	1.29	0.93
484W	>50K Hrs.	4.03	2.33	1.75	1.39	1.01
520W	>50K Hrs.	4.33	2.5	1.88	1.5	1.08

SHIELD DIMENSIONS

S269BK - 3 Sided Shield

21.56
5.50
14.15

S270BK - House Side Shield

4.00
8.50
14.13

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

PC2
347-480V Twist-Lock Photocell

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

IMSBTM
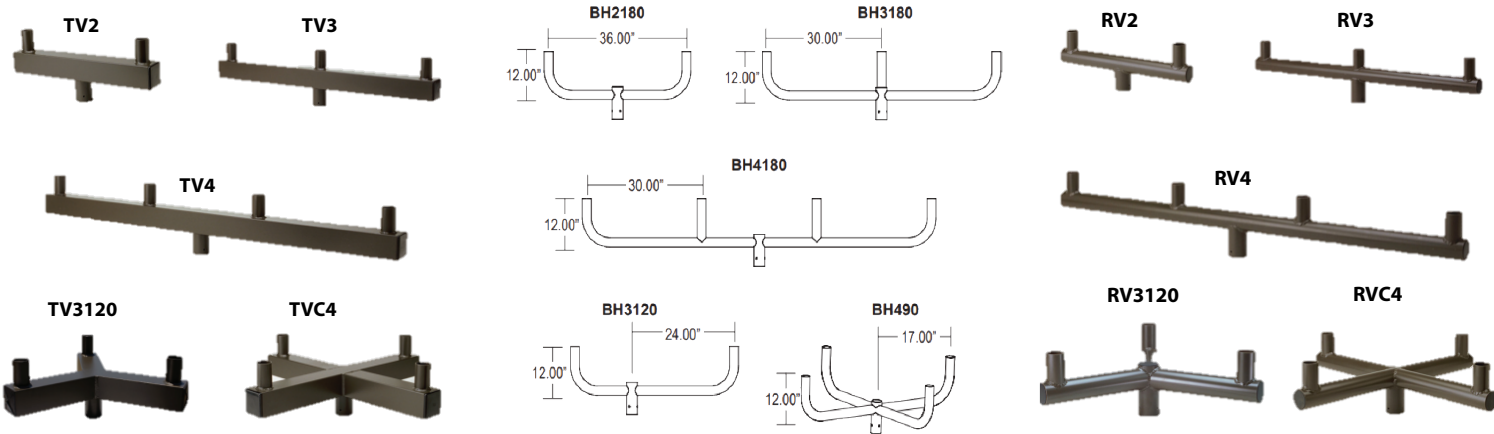AC Powered Internal Network Wireless PIR & Daylight Harvesting Sensor

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

REV: 20250521-10

KTN-L Katen-Large LED Area Light

Mounting Options

| TV2 | TV3 | BH2180 | BH3180 | RV2 | RV3 |

TV2   **TV3**   **BH2180** (36.00", 12.00")   **BH3180** (30.00", 12.00")   **RV2**   **RV3**

TV4   **BH4180** (30.00", 12.00")   **RV4**

TV3120   **TVC4**   **BH3120** (24.00", 12.00")   **BH490** (17.00", 12.00")   **RV3120**   **RVC4**

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**

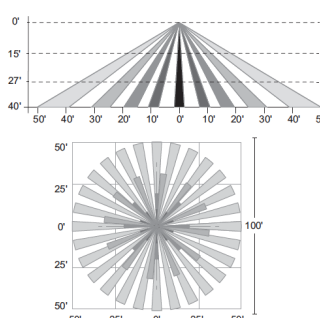## MOTION SENSOR LENSES - FIELD OF VIEW

TLWSFSP-L3

360° lens, maximum coverage 40' diameter from 20' height
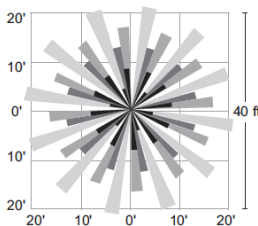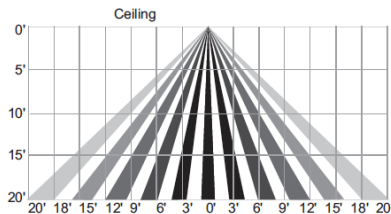
TLWSFSP-L7

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

TLWSFSIR-100
Remote Handheld Sensor
Configuration Tool

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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 aisleways. 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.
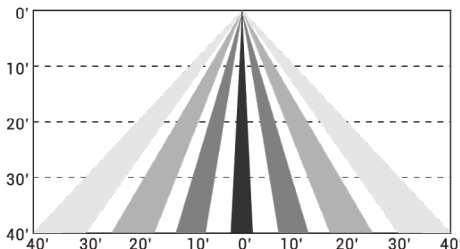
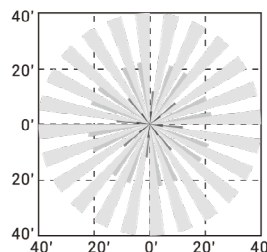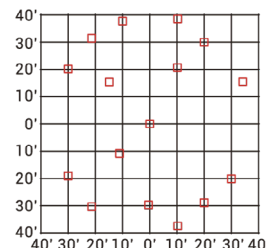## SENSOR LENS FIELD OF VIEW AND DIMENSIONS

WHBL1

1.04"
26.3mm

2.5"
63.5mm

2.28"
58mm
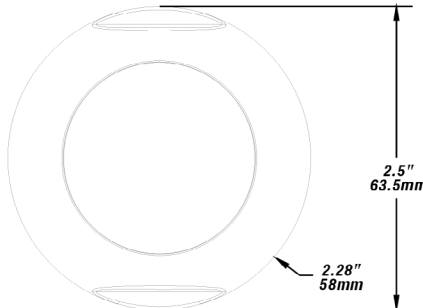
Coverage Side View

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