



Catalog Number	
Project	Type

## FEATURES & SPECIFICATIONS

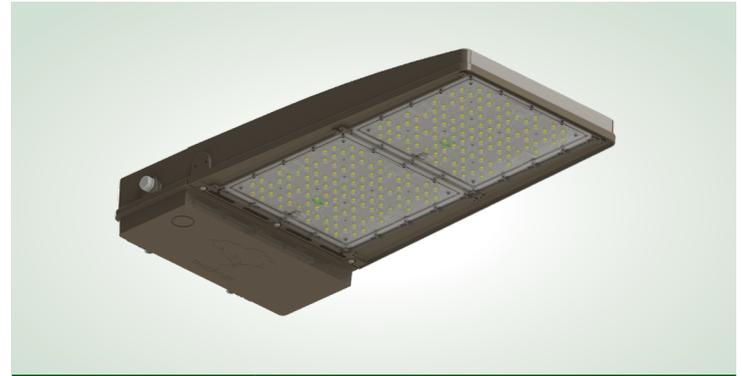
**APPLICATION** — The Katen Large Series of high output LED luminaires are designed for new outdoor lighting and to be a replacement for HID area lights. A compact, one-piece die cast housing, saving costs versus models that are extruded or cast and require additional parts. The heat sink is included 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 80,000 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.

# KTN-L SERIES

## Katen-Large LED Area Light



SERIES	LENGTH / WIDTH / HEIGHT
<b>KTN-L</b>	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 voltage 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:

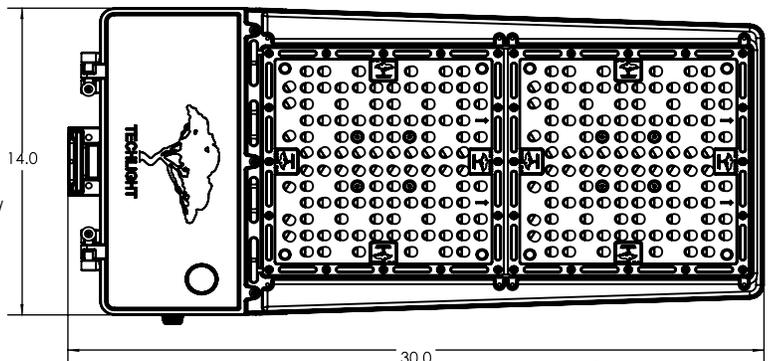
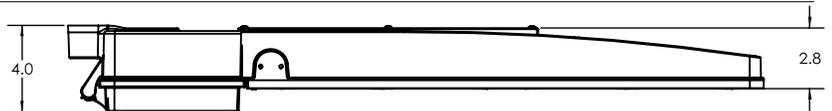
**KTN-L N 80L T5W 1 BK**

KTN-L							
SERIES	CCT	NOMINAL LUMENS	OPTIC	VOLTAGE	OPTIC ROTATION	FINISH	OPTIONS
<b>KTN-L</b>	<b>N</b> = 4000K <b>C</b> = 5000K	<b>45L</b> = 45,000 lumens <b>50L</b> = 50,000 lumens <b>55L</b> = 55,000 lumens <b>60L</b> = 60,000 lumens <b>65L</b> = 65,000 lumens <b>70L</b> = 70,000 lumens <b>75L</b> = 75,000 lumens <b>80L<sup>3</sup></b> = 80,000 lumens	<b>T3</b> = Type III <b>T4<sup>4</sup></b> = Type IV <b>T5M</b> = Type V Medium <b>T5W</b> = Type V Wide	<b>1</b> = 120-277V <sup>1</sup> <b>2</b> = 347 - 480V	<b>L</b> = Left Rotated Optics <b>R</b> = Right Rotated Optics (Leave Blank for standard optics)	<b>BZ</b> = Bronze <b>BK</b> = Black <b>WH</b> = White <b>GR</b> = Green <b>SLV</b> = Silver	<b>BTEC<sup>2</sup></b> = Bluetooth Enabled Control <b>PCR7</b> = 7-Pin Twist-Lock Photocell receptacle ANSIC136.41 with Shorting Cap <b>IMS<sup>5</sup></b> = Fixture Mount Passive Infrared Motion Sensor (IMS Lenses Below, Ordered Separately) <b>TLWSFSP-L3<sup>6</sup></b> = 360° lens, maximum coverage 40' diameter from 20' height (IMS) <b>TLWSFSP-L7<sup>6</sup></b> = 360° lens, maximum coverage 100' diameter from 40' height (IMS) <b>IMSBTM<sup>7</sup></b> = AC Powered Internal Network Wireless PIR & Daylight Harvesting Sensor (IMSBTM Lenses Below, Ordered as a Separate Line Item) <b>WHBL1</b> = 360° PIR lens, maximum coverage 80' dia. from 40' height (IMSBTM)

## ACCESSORIES (Order as separate line items)

<b>TLWSFSIR-100</b>	Remote Handheld Sensor Configuration Tool for IMS
<b>PC2</b>	347-480V Twist-Lock Photocell
<b>PC7</b>	Multi-Tap (105-285V) Twist Lock Photocell
<b>KTN 4RA</b>	4" Round Pole Adapter
<b>KTN 5RA</b>	5" Round Pole Adapter
<b>KTN 2AF</b>	2-3/8" ID Adjustable Slip Fitter
<b>KTN ARM</b>	Arm
<b>KTN B15</b>	Trunnion Mount
<b>S269BK</b>	3 Sided Shield for 45L - 80L
<b>S270BK</b>	House Side Shield for 45L - 80L

## DIMENSIONS



## 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 = 80L only available in certain optics and wattages. See **LUMINAIRE CHARACTERISTICS** chart for details.
- 4 = (55L-80L in T4) come standard with the **KTN-SM + HDW Kit** and **C35** extended 35" long cord.
- 5 = **TLWSFSP-L3** or **L7** Lens must be ordered along with this sensor.
- 6 = Photo control shield available upon request. Len's must be ordered with **IMS** option.
- 7 = **WHBL1** Lens must be ordered along with this sensor.

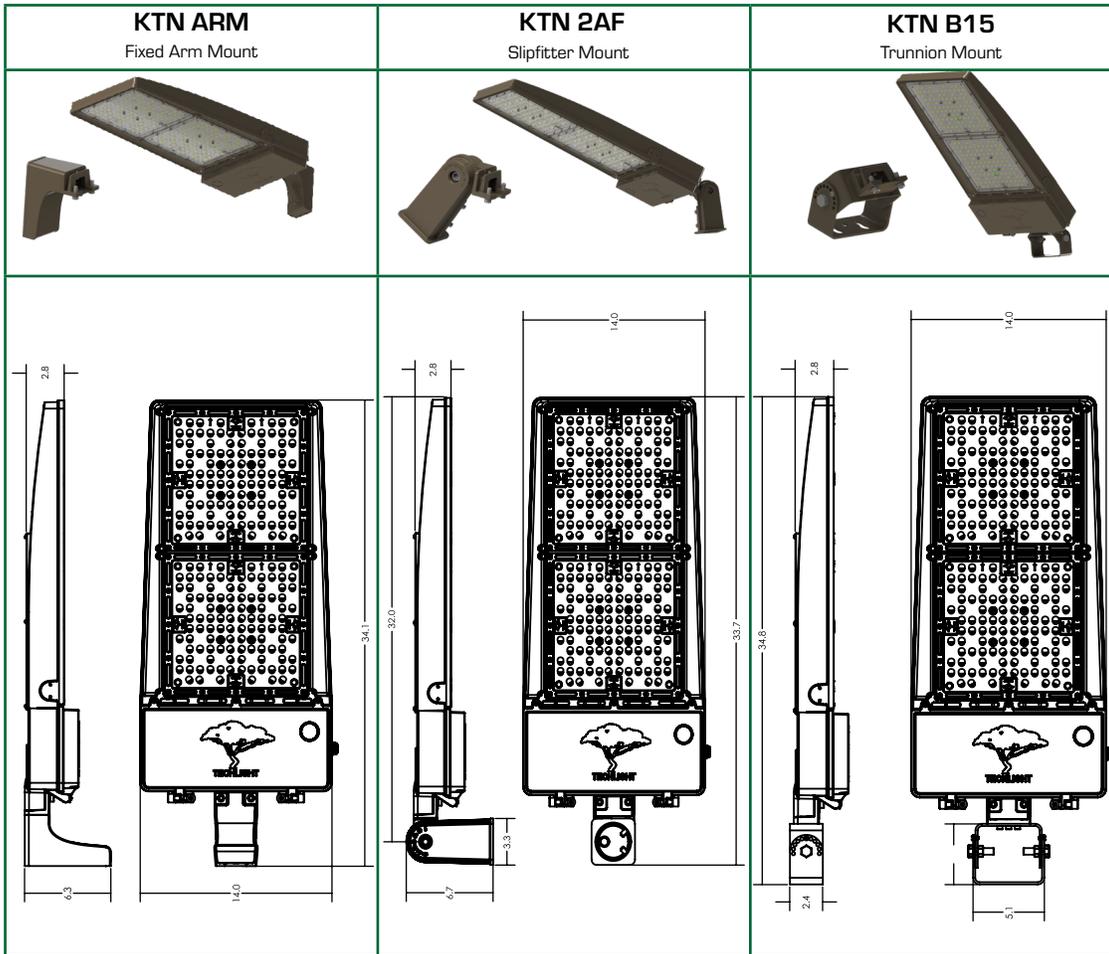
\***STGA7L** = Enables remote access using the Gateway and Sites functionality in the Casambi App. Automatically restores network control settings and provides automatic time back up for the mesh network. This is required as a gateway and can be purchased from a local retailer or online.



# 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.



## EPA's RATING FOR VARIOUS MOUNTING CONFIGURATIONS [FT<sup>2</sup>]

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

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

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

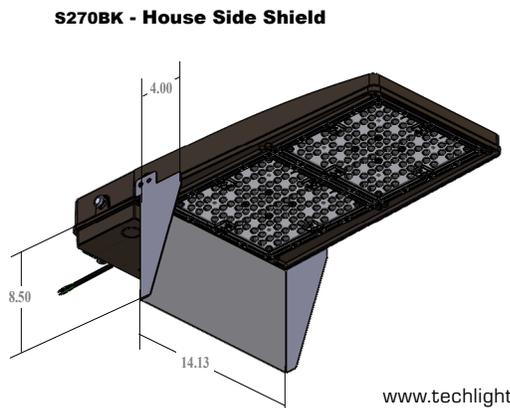
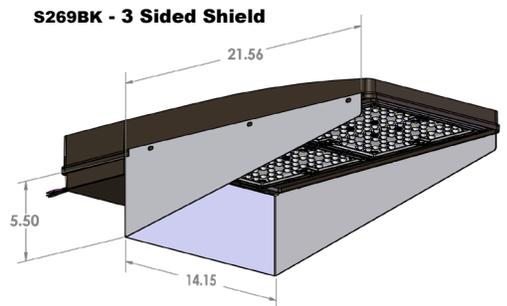
KTN 2AF	0.7	1.2	1.6	2.2	2.6	2.8	3.5
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Angle	0	20	30	45	60	75	90
KTN B15	0.7	1.2	1.6	2.2	2.6	2.8	3.5

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

## SHIELD DIMENSIONS



# KTN-L Katen-Large LED Area Light

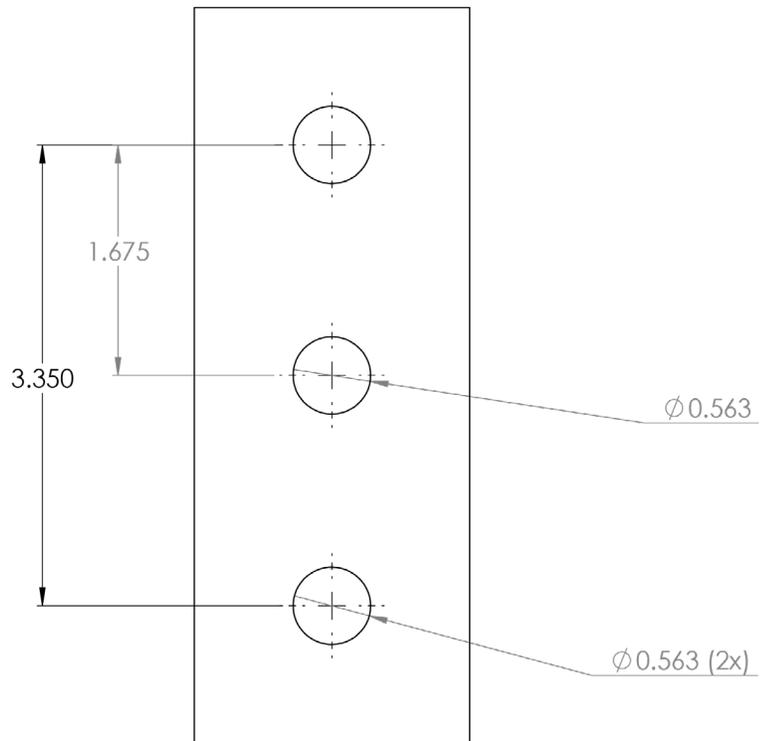
## LUMINAIRE CHARACTERISTICS

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

Nominal Lumens	Delivered Lumens and Wattage/Optic Type											
	TYPE III			TYPE IV			TYPE 5M			TYPE 5W		
	Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W
45L	45,166	276W	164	45,484	276W	165	44,892	276W	163	45,285	254W	178
50L	50,026	311W	161	50,378	311W	162	49,723	311W	160	49,718	282W	176
55L	54,807	345W	159	55,192	345W	160	55,259	351W	157	54,958	316W	174
60L	60,285	387W	156	59,927	381W	157	59,919	387W	155	60,113	351W	171
65L	64,894	423W	153	65,350	423W	154	65,256	429W	152	65,182	387W	168
70L	70,171	466W	151	69,912	460W	152	69,746	466W	150	70,166	423W	166
75L	75,341	511W	147	75,133	504W	149	74,884	511W	147	75,064	460W	163
80L	N/A			N/A			N/A			79,877	498W	160

System Wattage	L70 @ 25°C	Amperage Draw					
		120V	208V	240V	277V	347V	480V
254W	>50K Hrs.	2.12	1.22	1.06	0.92	0.73	0.53
259W	>50K Hrs.	2.16	1.25	1.08	0.94	0.75	0.54
276W	>50K Hrs.	2.30	1.33	1.15	1.00	0.80	0.58
282W	>50K Hrs.	2.35	1.36	1.18	1.02	0.81	0.59
293W	>50K Hrs.	2.44	1.41	1.22	1.06	0.84	0.61
311W	>50K Hrs.	2.59	1.50	1.30	1.12	0.90	0.65
316W	>50K Hrs.	2.63	1.52	1.32	1.14	0.91	0.66
328W	>50K Hrs.	2.73	1.58	1.37	1.18	0.95	0.68
345W	>50K Hrs.	2.88	1.66	1.44	1.25	0.99	0.72
351W	>50K Hrs.	2.93	1.69	1.46	1.27	1.01	0.73
363W	>50K Hrs.	3.03	1.75	1.51	1.31	1.05	0.76
381W	>50K Hrs.	3.18	1.83	1.59	1.38	1.10	0.79
387W	>50K Hrs.	3.23	1.86	1.61	1.40	1.12	0.81
399W	>50K Hrs.	3.33	1.92	1.66	1.44	1.15	0.83
423W	>50K Hrs.	3.53	2.03	1.76	1.53	1.22	0.88
429W	>50K Hrs.	3.58	2.06	1.79	1.55	1.24	0.89
441W	>50K Hrs.	3.68	2.12	1.84	1.59	1.27	0.92
460W	>50K Hrs.	3.83	2.21	1.92	1.66	1.33	0.96
466W	>50K Hrs.	3.88	2.24	1.94	1.68	1.34	0.97
479W	>50K Hrs.	3.99	2.30	2.00	1.73	1.38	1.00
498W	>50K Hrs.	4.15	2.39	2.08	1.80	1.44	1.04
504W	>50K Hrs.	4.20	2.42	2.10	1.82	1.45	1.05
511W	>50K Hrs.	4.26	2.46	2.13	1.84	1.47	1.06
517W	>50K Hrs.	4.31	2.49	2.15	1.87	1.49	1.08

### SSA Drill Measurements



## 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



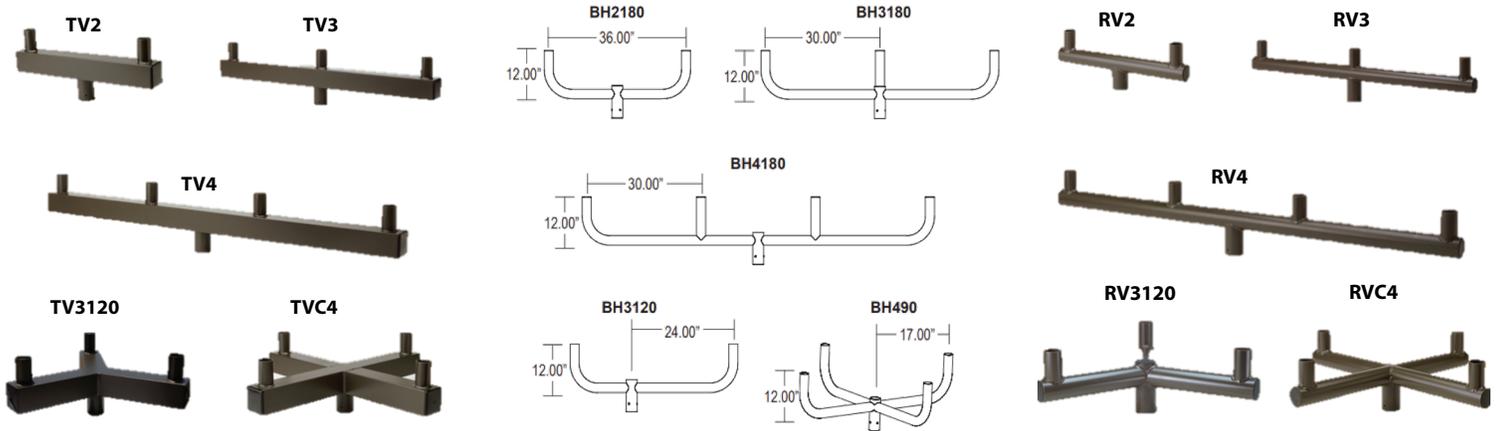
### WHBL1

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



# 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.

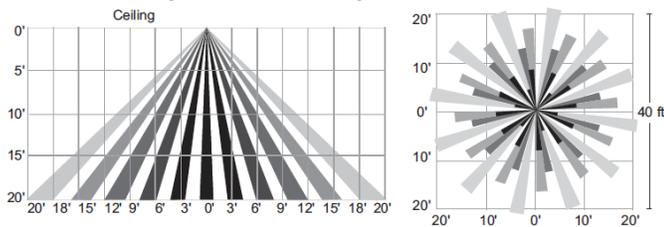
### FEATURES —

- 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

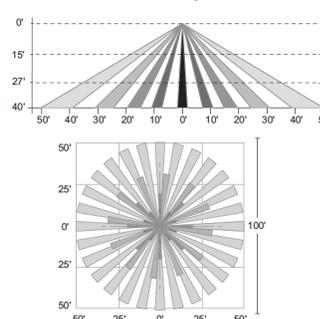
### TLWSFSP-L3

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



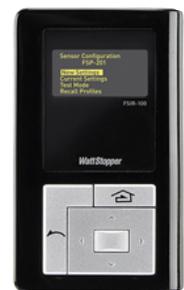
### TLWSFSP-L7

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



### TLWSFSIR-100

Remote Handheld Sensor Configuration Tool



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www.techlight.com

# 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 aislesways. 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.

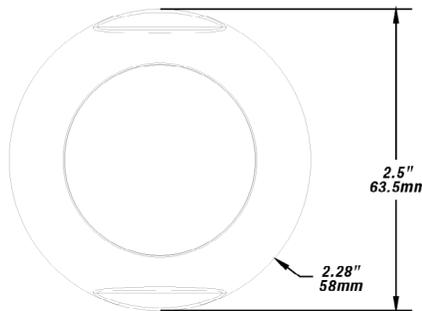
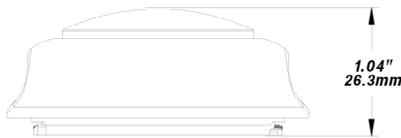
### ADDITIONAL FEATURES

- **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.

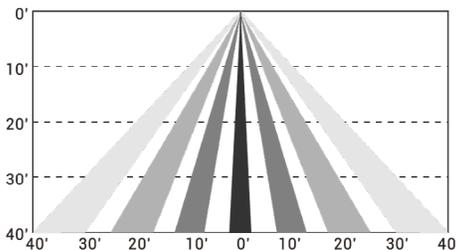


## SENSOR LENS FIELD OF VIEW AND DIMENSIONS

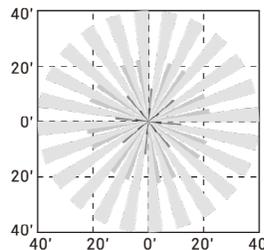
### WHBL1



Coverage Side View

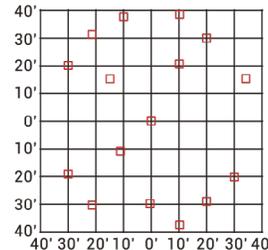


Coverage Top View



Height 40ft

Detecting Spots For Ref



### 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>

