TECHLIGHT
INNOVATION IN ILLUMINATION

KTN-S SERIES

Katen-Small LED Area Light

Catalog Number	
Project	**Type**

FEATURES & SPECIFICATIONS

APPLICATION — The Katen 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 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 lighting applications. All KTN optics are Full Cutoff design. The new KTN-S LED Area Light delivers maximum value by providing significant energy savings, long life and outstanding photometric performance at an affordable price. The KTN delivers 8,000 to 19,000 nominal lumens.

FINISH — Standard color available: Bronze, Black, White, Green, and Silver. 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 mounted on most existing drill hole patterns including SSA drilled Techlight poles. This "no-drill" solution 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-S	17.6" x 10.4" x 2.3"

ELECTRICAL SYSTEM — Available in up to a 19,000 nominal lumens in most optical distributions with either 3000K Warm White, 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-S C 19L T3 1 BZ

KTN-S							
SERIES	**CCT**	**WATTAGE/NOMINAL LUMENS**	**OPTIC**	**VOLTAGE**	**OPTIC ROTATION**	**FINISH**	**OPTIONS**
KTN-S	**W** = 3000K[1] **N** = 4000K **C** = 5000K	**8L** = 56 watt, 8,000 lumens **10L** = 74 watt, 10,000 lumens **13L** = 98 watt, 13,000 lumens **15L** = 115 watt, 15,000 lumens **19L** = 148 watt, 19,000 lumens	**T3** = Type 3 **T4** = Type 4 **T5** = Type 5	**1** = 120-277V[2] **2** = 347 - 480V[3]	**L** = Left Rotated Optics **R** = Right Rotated Optics (Leave Blank for standard optics)	**BZ** = Bronze **BK** = Black **WH** = White **GR** = Green **SLV** = Silver	**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)** **HOEB**[7] = Battery Back Up, 90 minutes

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
QMB-WM	Quick Mount Bracket - Wall Mount
S265BZ	House Side Shield for 8L - 19L
PSJ163-600	16 Gauge 3 Strand Lead Wire (color coded)

System Wattage	L70 @ 25°C	Amperage Draw					
		120V	**208V**	**240V**	**277V**	**347V**	**480V**
56W	>50K Hrs.	0.5	0.3	0.2	0.2	0.2	0.1
74W	>50K Hrs.	0.6	0.4	0.3	0.3	0.2	0.2
98W	>50K Hrs.	0.8	0.5	0.4	0.4	0.3	0.2
115W	>50K Hrs.	1.0	0.6	0.5	0.4	0.3	0.2
148W	>50K Hrs.	1.2	0.7	0.6	0.5	0.4	0.3

DIMENSIONS

3.3
10.7
6.0
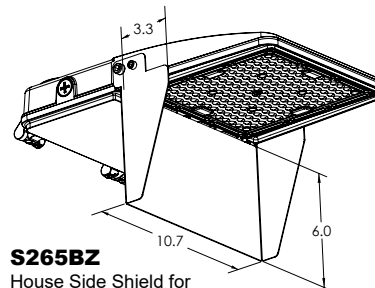
S265BZ
House Side Shield for
8L - 19L

NOTES

1 = Longer than usual lead times for this option. Consult factory.
2 = Built-in 10kA Surge Protection. Different ratings are available.
3 = Longer than usual lead times for this option in 8L and 19L. Consult factory.
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.
7 = HOEB option cannot be ordered along with the **IMS** option.

Mounting Options/Accessories

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

KTN ARM
Arm

KTN B15
Trunnion Mount w/side adaptor

KTN 4RA
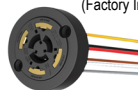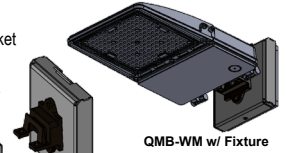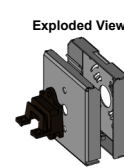4" Round Pole Adapter

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
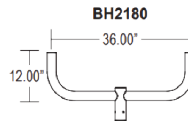(Factory Installed)
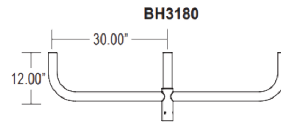
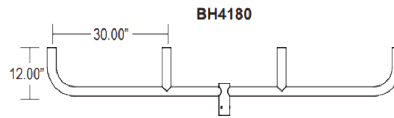**QMB-WM**
Quick Mount Bracket - Wall Mount

Exploded View

QMB-WM w/ Fixture

Assembled View

TV2   TV3   BH2180   BH3180   RV2   RV3
36.00"   30.00"
12.00"   12.00"

TV4   BH4180   RV4
30.00"
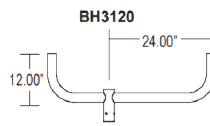12.00"

TV3120   TVC4   BH3120   BH490   RV3120   RVC4
24.00"   17.00"
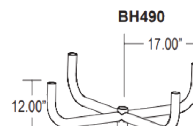12.00"   12.00"

FIXTURE MOUNT 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**
- **Time delay from 5 to 30 minutes**
- **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**
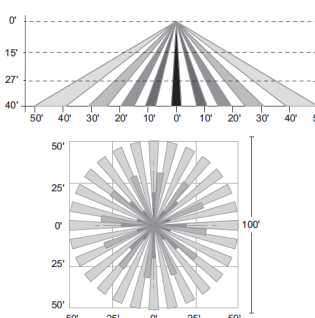- **UL244A and UL508**

SENSOR LENSES FIELD OF VIEW

TLWSFSP-L3

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

40 ft
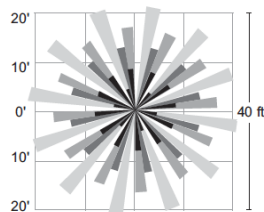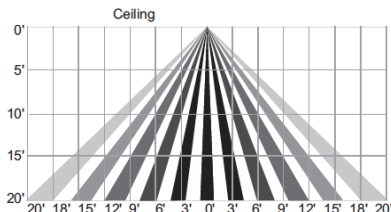
TLWSFSP-L7

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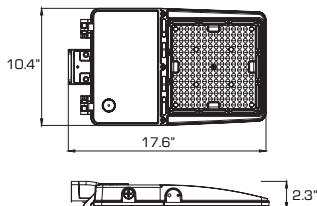
100'

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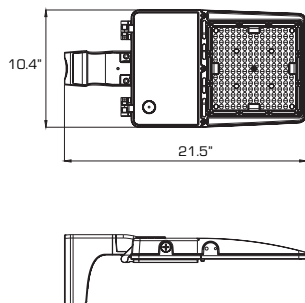# KTN-S Katen-Small LED Area Light

AVAILABLE FIXTURE DIMENSIONS

Dimensions shown are for fixture bodies only. Mounting options must be ordered separately. Fixture shown with arm sold seperately.
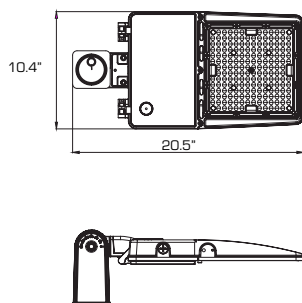
KTN 13L -19L

10.4"
17.6"
2.3"
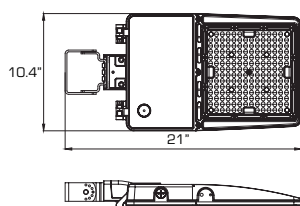
KTN ARM
Fixed Arm Mount

10.4"
21.5"

KTN 2AF
Slipfitter Mount

10.4"
20.5"

KTN B15
Trunnion Mount

10.4"
21"

SSA Drill Measurements

1.675
3.350
⌀ 0.563
⌀ 0.563 (2x)
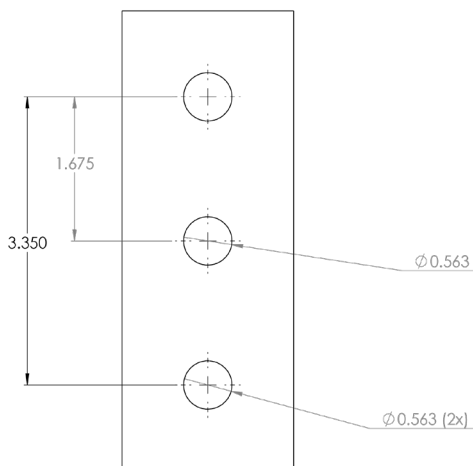
EPA's RATING FOR VARIOUS MOUNTING CONFIGURATIONS [FT²]

Angle	100W - 150W				
	0	20	30	45	60
TV2	1.50	1.90	2.30	2.70	3.10
TV3	2.50	3.20	3.70	4.40	5.00
TV3120	1.70	2.30	2.60	3.10	3.50
TV4	3.60	4.40	5.20	6.10	6.80
TVC4	2.20	2.70	3.10	3.60	3.90
KTN ARM	0.40	n/a	n/a	n/a	n/a
KTN ARM 2180	0.80	n/a	n/a	n/a	n/a
KTN ARM 290	0.70	n/a	n/a	n/a	n/a
KTN ARM 3120	1.10	n/a	n/a	n/a	n/a
KTN ARM 3121	1.10	n/a	n/a	n/a	n/a
KTN ARM 490	1.40	n/a	n/a	n/a	n/a
KTN 2AF	0.40	0.60	0.80	1.10	1.20
RV2	0.90	1.40	1.70	2.20	2.60
RV3	1.50	2.20	2.70	3.40	3.90
RV3120	1.20	1.70	2.10	2.50	2.90
RV4	2.10	3.00	3.70	4.60	5.30
RVC4	1.50	2.00	2.40	2.80	3.20
KTN B15	0.40	0.60	0.80	1.00	1.20
BH2180	1.00	1.40	1.80	2.30	2.60
BH3180	1.50	2.20	2.70	3.40	4.00
BH3120	1.20	1.80	2.20	2.60	3.00
BH4180	2.20	3.10	3.80	4.80	5.50
BH490	1.60	2.10	2.50	3.00	3.30

KTN-S Katen-Small LED Area Light

LUMINAIRE CHARACTERISTICS

3000K

Output ID	Nominal Lumens	TYPE III OPTIC			TYPE IV OPTIC			TYPE V OPTIC		
		Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W
		BUG Rating			BUG Rating			BUG Rating		
8L	8,000	7,319	56	131	7,187	56	128	7,246	56	129
		B2-U0-G1			B3-U0-G4			B2-U0-G1		
10L	10,000	9,342	74	126	9,174	74	124	9,248	74	125
		B2-U0-G2			B3-U0-G5			B2-U0-G2		
13L	13,000	12,376	98	126	12,154	98	124	12,253	98	125
		B2-U0-G2			B4-U0-G4			B2-U0-G2		
15L	15,000	14,399	115	125	14,140	115	123	14,255	115	124
		B2-U0-G2			B3-U0-G4			B2-U0-G2		
19L	19,000	18,445	148	125	18,113	148	122	18,260	148	123
		B3-U0-G3			B4-U0-G4			B3-U0-G3		

4000K

Output ID	Nominal Lumens	TYPE III OPTIC			TYPE IV OPTIC			TYPE V OPTIC		
		Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W
		BUG Rating			BUG Rating			BUG Rating		
8L	8,000	7,713	56	138	7,574	56	135	7,635	56	136
		B2-U0-G1			B3-U0-G4			B2-U0-G1		
10L	10,000	9,844	74	133	9,667	74	131	9,746	74	132
		B2-U0-G2			B3-U0-G5			B2-U0-G2		
13L	13,000	13,042	98	133	12,807	98	131	12,911	98	132
		B2-U0-G2			B4-U0-G4			B2-U0-G2		
15L	15,000	15,173	115	132	14,900	115	130	15,022	115	131
		B2-U0-G2			B4-U0-G5			B2-U0-G2		
19L	19,000	19,436	148	131	19,086	148	129	19,242	148	130
		B3-U0-G3			B4-U0-G4			B3-U0-G3		

5000K

Output ID	Nominal Lumens	TYPE III OPTIC			TYPE IV OPTIC			TYPE V OPTIC		
		Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W	Lumens	Wattage	Lm/W
		BUG Rating			BUG Rating			BUG Rating		
8L	8,000	7,870	56	141	7,728	56	138	7,791	56	139
		B2-U0-G1			B2-U0-G1			B2-U0-G1		
10L	10,000	10,045	74	136	9,864	74	133	9,945	74	134
		B2-U0-G2			B2-U0-G2			B2-U0-G2		
13L	13,000	13,308	98	136	13,068	98	133	13,175	98	134
		B2-U0-G2			B2-U0-G2			B2-U0-G2		
15L	15,000	15,483	115	135	15,204	115	132	15,328	115	133
		B2-U0-G2			B2-U0-G2			B2-U0-G2		
19L	19,000	19,833	148	134	19,476	148	132	19,635	148	133
		B3-U0-G3			B3-U0-G3			B3-U0-G3		

KTN-S Katen-Small LED Area Light
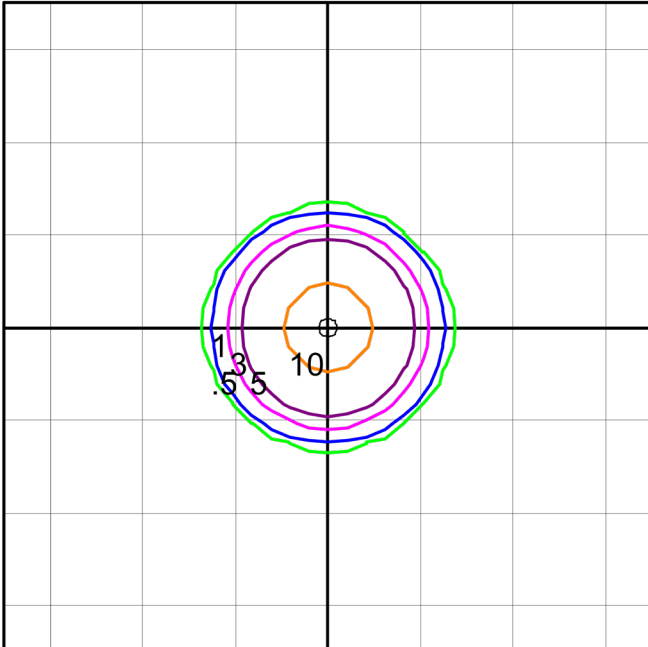
PHOTOMETRIC CHARACTERISTICS

TYPE III OPTIC
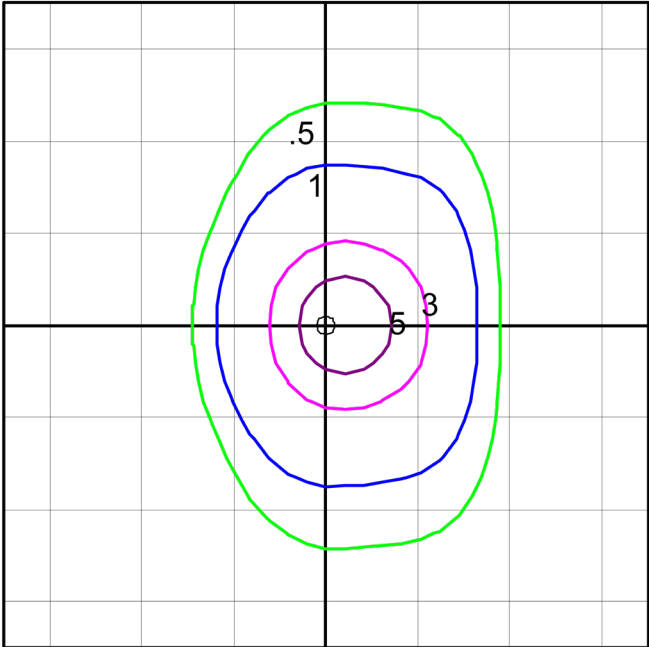
www.TECHLIGHT.com
KTN S C 19L T3
Katen LED Parking Roadway Luminaire
LED

Horizontal Footcandles
Scale: 1 Inch = 25 Ft.
Light Loss Factor = 1.00
Lumens Per Lamp = N.A. (absolute photometry)
Luminaire Lumens = 19833
Mounting Height = 25.00 Ft
Maximum Calculated Value = 7.03 Fc
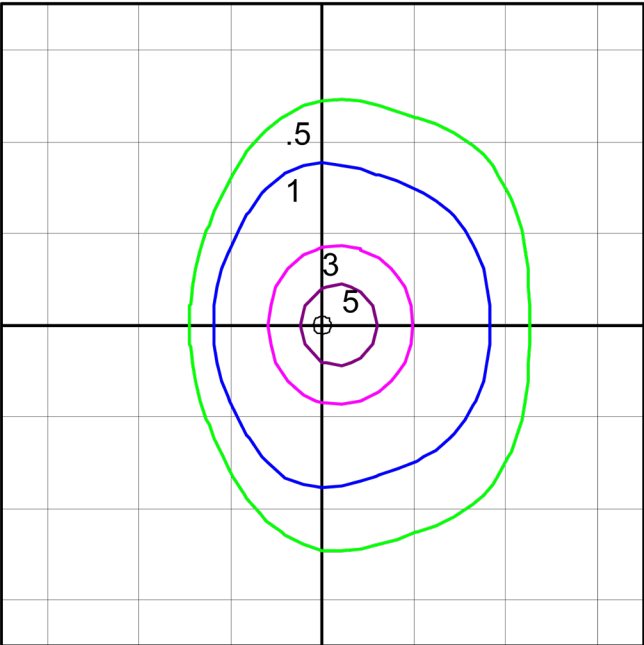Arrangement: Single

TYPE V OPTIC

www.TECHLIGHT.com
KTN S C 19L T5
Katen LED Parking Roadway Luminaire
LED

Horizontal Footcandles
Scale: 1 Inch = 25 Ft.
Light Loss Factor = 1.00
Lumens Per Lamp = N.A. (absolute photometry)
Luminaire Lumens = 19635
Mounting Height = 25.00 Ft
Maximum Calculated Value = 12.78 Fc
Arrangement: Single

TYPE IV OPTIC

www.TECHLIGHT.com
KTN S C 19L T4
Katen LED Parking Roadway Luminaire
LED

Horizontal Footcandles
Scale: 1 Inch = 25 Ft.
Light Loss Factor = 1.00
Lumens Per Lamp = N.A. (absolute photometry)
Luminaire Lumens = 19476
Mounting Height = 25.00 Ft
Maximum Calculated Value = 6.42 Fc
Arrangement: Single

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KTN-S Katen-Small 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.
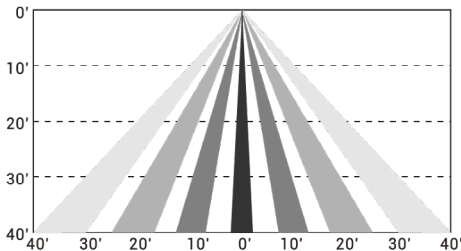
Download on the App Store

GET IT ON Google Play

SENSOR LENS FIELD OF VIEW AND DIMENSIONS

WHBL1

1.04" 26.3mm
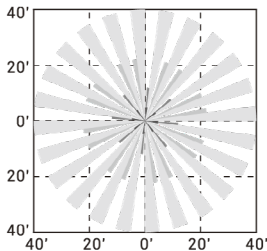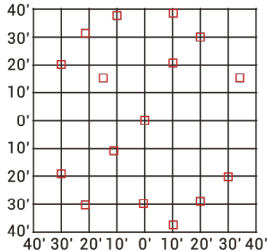
2.5" 63.5mm

2.28" 58mm
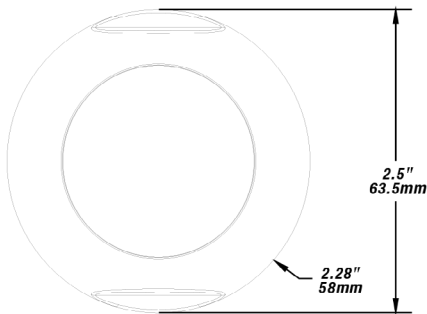
Coverage Side View

Coverage Top View

Height 40ft

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

INTRODUCTION

www.techlight.com