English

INTEGRITY LED

LED NSF LINEAR HIGH BAY WITH Q-BASE

WFS-ST series

▸ **DESIGN** - NSF LED LINEAR HIGH BAY WITH Q-BASE STANDARD SERIES is highly efficient with a 170lm/W output. It has a built-in Q-base, allowing you to install the microwave motion or PIR sensor. The corrosion-resistant aluminum housing provide excellent heat dissipation. Surge protection 6kV protects the fixture from voltage spikes and current surges.

▸ **NSF CERTIFIED FOOD GRADE** - Certified by the National Sanitation Foundation, ensuring it meets rigorous standards for safety and sanitation in food service and processing facilities that require elevated levels of cleanliness.

▸ **COLOR AND POWER SELECTABLE** - You can choose either a 3500K neutral white, 4000K cool white or 5000K daylight color temperature, and change the power with a simple switch.

▸ **IP69K** - Rating provides protection against ingress of dust and high temperature, high pressure water.

▸ **ADVANTAGES** - With calculated lifespan up to 167 000 hours, these fixtures are made to last decades under normal operation! Integrity LED provides a 5-year limited warranty along with UL and DLC Premium certifications to guarantee top quality products and safety!



Motion Sensor

IP69K

NSF

PRODUCT PRESENTATION:

Model	Power	Sensor base	Voltage	Dimming	Lumens	CCT	Finish	Dimensions	Pre-Installed	Certification
IL-WFS-ST-160	100/130/160 W	3-pin	120-277V	0-10V	26,246 lm	3,500/4,000/5,000 K	White	16-13/16" x 12-3/8" x 3-7/8"	Cord 10 ft	UL(E473804), DLC Premium
IL-WFS-ST-240	180/210/240 W	3-pin	120-277V	0-10V	39,987 lm	3,500/4,000/5,000 K	White	24-1/8" x 12-3/8" x 3-7/8"	Cord 10 ft	UL(E473804), DLC Premium

For detailed luminous flux information please refer to Annex 1, page 2.

ORDERING INFORMATION

Model	Product dimensions	Weight	Pcs. per carton	Carton size	Carton weight	UPC
IL-WFS-ST-160	16-13/16" x 12-3/8" x 3-7/8"	9.1 lbs (4.1 kg)	1	19.80" x 15.67" x 6.50"	11.6 lbs	81019020227
IL-WFS-ST-240	24-1/8" x 12-3/8" x 3-7/8"	12.5 lbs (5.7 kg)	1	27.13" x 15.67" x 6.50"	16.4 lbs	81019020228

ACCESSORIES:

Model	Product dimensions	Pcs. in middle box	Middle box size	Middle box weight	Pcs. per carton	Carton size	Carton weight	UPC	GTIN 14 in middle box	GTIN 14 in carton
IL-09MW-WH	2-1/8" x 2-1/8" x 1-5/16"	10	5.5" x 2.6" x 11.4"	1.2 lbs	120	17.3" x 11.8" x 11"	12.1 lbs	810128113700	20810128113704	30810128113701
IL-09IR-WH	2-1/8" x 2-1/8" x 1-11/16"	10	5.5" x 2.6" x 11.4"	1.2 lbs	120	17.3" x 11.8" x 11"	12.1 lbs	810128113694	20810128113698	30810128113695
IL-09IR50-WH	2-1/8" x 2-1/8" x 1-11/16"	10	5.5" x 2.6" x 11.4"	0.9 lbs	120	17.3" x 11.8" x 11"	10.7 lbs	810128116794	10810128116791	20810128116798

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TECHNICAL PARAMETERS:

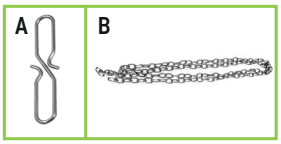
Model	Max input current	Inrush current	Work environment	Operating temperature	Power factor	Beam Angle	Surge protection	Housing	Lens	CRI
IL-WFS-ST-160	1.63 A	80 A	Wet location	-40°F to 122°F (-40°C to 50°C)	> 0,9	90°	6 kV	Aliminum	PC	> 80
IL-WFS-ST-240	1.27 A	80 A	Wet location	-40°F to 122°F (-40°C to 50°C)	> 0,9	90°	6 kV	Aliminum	PC	> 80

DIMMING COMPATIBLE CONTROLS:

Brand	Lutron	Leviton
Models	DVSTV-453P	IP710-LFZ

PACKAGE CONTENTS:

Description	Quantity
LED Linear High Bay with Q-Base	1
Suspending hook (A)	4
Hanging chain (B)	2
Box	1



ACCESSORY COMPATIBILITY LIST:

Accessories / Models	Microwave motion sensor 3pin IL-09MW	Infrared motion sensor 3pin IL-09IR IL-09IR50
IL-WFS-ST-160	•	•
IL-WFS-ST-240	•	•

ACCESSORIES (sold separately):

Microwave motion sensor 3pin
IL-09MW



Remote control for motion sensor
IL-06RC

Infrared motion sensor 3pin
IL-09IR





Infrared motion sensor 3pin 50ft
IL-09IR50



ANNEX 1

Model	Watts	3,500 K	4,000 K	5,000 K
IL-WFS-ST-160	100W	16,862 lm	17,423 lm	17,394 lm
	130W	21,130 lm	21,975 lm	21,566 lm
	160W	25,110 lm	26,246 lm	25,574 lm
IL-WFS-ST-240	180W	29,682 lm	30,945 lm	30,539 lm
	210W	33,836 lm	35,331 lm	34,536 lm
	240W	37,877 lm	39,987 lm	38,423 lm

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MOTION SENSOR INFORMATION



IL-09MW
Microwa nsor 3pin

+



IL-06RC
R ol



IL-09IR
Infrared sor 3pin

+



IL-06RC
R ol



IL-09IR50
Infrare or 3pin

+

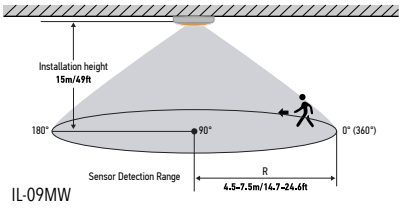


IL-06RC
R ol

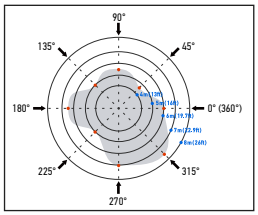
Specifications	Models: IL-09MW	Models: IL-09IR	Models: IL-09IR50	Default setting
Detection area	25 %/50 %/75 %/100 %			100 %
Hold time	**Remote control:** 5 s/30 s/1 min/3 min/5 min/10 min/20 min/30 min **Built-in switch:** 5 s/1 min/5 min/10 min			10 min
Daylight threshold	2 lux (0.2 fc)/10 lux (0.9 fc)/30 lux (2.8 fc)/50 lux (4.7 fc)/80 lux (7.4 fc)/120 lux (11.2 fc)/200 lux (18.6 fc)/250 lux (23.2 fc)/ 300 lux (27.9 fc)/350 lux (32.5 fc)/400 lux (37.2 fc)/disable			Disable
Standby period	0 s/10 s/30 s/1 min/5 min/10 min/30 min/60 min/+ ∞			0 s
Standby dimming level	**Remote control:** 10 %/20 %/30 %/50 % **Built-in switch:** 0 %/10 %/30 %/50 %			10 %

Specifications	Models: IL-09MW	Models: IL-09IR	Models: IL-09IR50
Operating voltage	10 - 15 V		
Operating current	< 30 mA	< 15 mA	< 30 mA
Mounting height	max 49.2 ft (15 m)	max 39.4 ft (12 m)	max 49.2 ft (15 m)
Detection radius	14.7 ft - 24.6 ft (4.5 m - 7.5 m)	14.7 ft - 22.9 ft (4.5 m - 7 m)	14.7 ft - 22.9 ft (4.5 m - 7 m)
Operating frequency	5.8 GHz ± 75 MHz	-	-
Transmitting power	< 0.3 mW	-	-

MICROWAVE MOTION SENSOR:

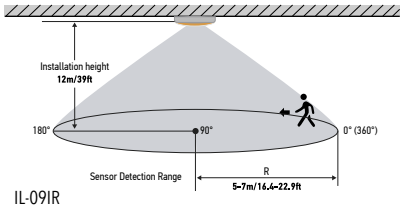


IL-09MW

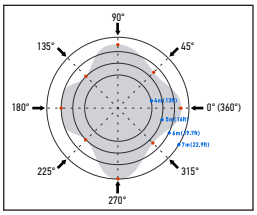


Sensitivity	0°/360°	45°	90°	135°	180°	225°	270°	315°
100%15m	6	4.5	5.5	5	6.5	5	7	7.5

INFRARED MOTION SENSOR:



IL-09IR

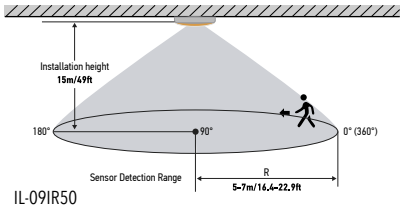


Sensitivity	0°/360°	45°	90°	135°	180°	225°	270°	315°
100%12m	6.5	5.5	6.5	5	6	5	7	5.5

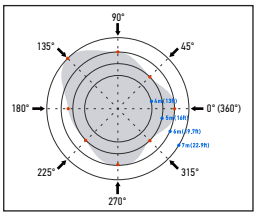
SENSOR USAGE RECOMMENDATIONS:

INDOOR RECOMMENDED LOCATIONS
Places where the temperature of the environment is well controlled.
Places where detecting the movement of people is a high priority.

INDOOR NOT RECOMMENDED LOCATIONS
Places where environment temp close to human body.
Places where PIR sensor lens can get covered.
Places higher than 39ft (unless you use 50ft PIR).



IL-09IR50



Sensitivity	0°/360°	45°	90°	135°	180°	225°	270°	315°
100%12m	6.5	5.5	6.5	5	6	5	7	5.5

REMOTE CONTROL

sold separately



Button	Remarks	Button	Remarks	Button	Remarks
ON/OFF ON/OFF	Turn the sensor ON/OFF.	Auto Auto	Enter "sensor mode" and perform previous settings.	Reset Reset	Enter "sensor mode" and perform the default settings.
Scenes Scenes	Shows current settings saved in remote.	Start Start	Press this to begin scene setup.	Memory Memory	Saves the scene settings.
Appy Apply	Applies current scene settings to the fixture.	M H Mounting height	Adjust detection area/sensitivity levels according to real installation situations, higher or lower.	Send Send	Memorize and send out the previous setting of individual parameters.
Detection range	Also known as "sensitivity", 100 % means the highest sensitivity and longest distance. Use this button and the + - buttons to adjust.	Daylight sensor	The preset lux level at which motion will be detected. Use this button and the + - buttons to adjust.	Stand-by dimming	After hold time, the light will dim from 100 % to optional standby dimming levels. Use this button and the + - buttons to adjust.
Hold time	The period that light will stay illuminated 100 % after no motion is detected. Use this button and the + - buttons to adjust.	Up	The main functional buttons to adjust the factors to desired level. Press + - button to dim light directly auto in non-detection mode.	Stand-by period	The period after holdtime, during which the light keeps standby dimming level. Use this button and the + - buttons to adjust.
CCT CCT selectable	Not applicable to this product.	Down		POWER Power	Adjust brightness in both ON/OFF mode & sensor mode, minimum 10%, max 100%, each time this button is pressed it changes by 5%.
Reserved button	Not applicable to this product.	Daylight harvesting	Daylight harvesting function enabled or disabled.	Test Test button	Press this button to test the sensor; it will temporarily change the hold time to 2s. This setting cannot be saved.

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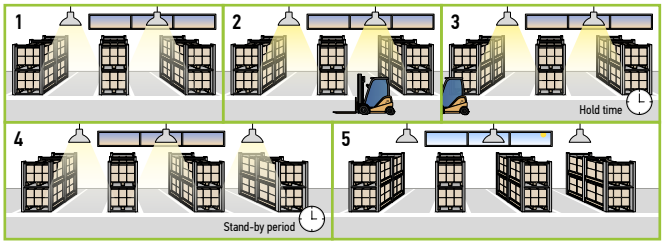
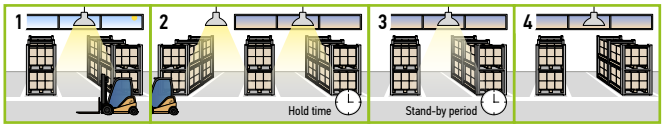
WITH DUSK/DAWN FUNCTION:

1. With insufficient ambient brightness, sensor turns on light and keeps it at standby dimming level even if there is no motion or presence.
2. When sensor detects motion or presence it will bring the light level up to 100 %.
3. After motion is no longer detected, fixture remains at 100 % for hold time.
4. After the preset hold time period, it will dim to the standby dimming level and maintain it indefinitely.
5. With sufficient ambient brightness, sensor will turn OFF light automatically.



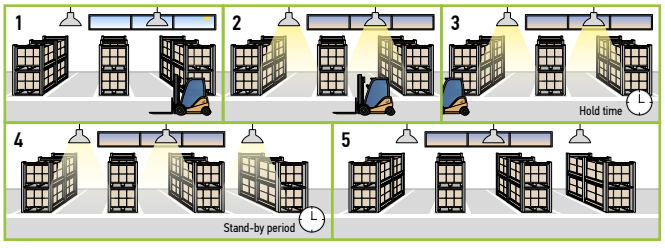
WITH DAYLIGHT DISABLED:

1. Sensor turns ON light when motion is detected.
2. Light will stay on after detecting motion for the desired hold time.
3. Sensor dims light to standby dimming level after hold time if there is still no motion.
4. Sensor turns OFF light after standby period.



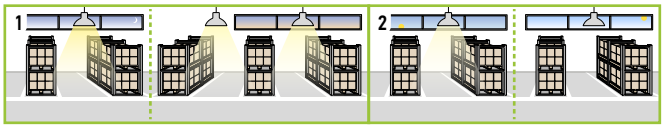
WITH DAYLIGHT THRESHOLD:

1. With sufficient daylight, the light remains OFF even after motion is detected.
2. With insufficient daylight, the sensor turns light ON when motion is detected.
3. After there's no motion detected, the sensor keeps light ON 100 % for holdtime.
4. After holdtime, sensor dims light to standby dimming level for standby period. If the standby period has been set as 0s, sensor turns light OFF automatically after holdtime.
5. The sensor turns OFF light automatically after the standby period when there's no motion detected.



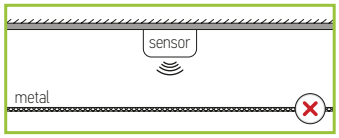
DAYLIGHT HARVESTING:

1. When the ambient brightness is lower than the preset lux level, the sensor will automatically turn on the light and adjust the dimming according to changes in ambient brightness. As it gets darker outside, the fixtures will brighten, and as it gets brighter outside, the fixtures will dim.
2. When the ambient brightness exceeds the preset lux level, the light will turn OFF.

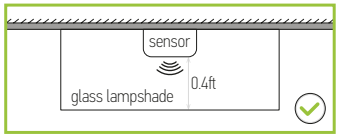


MICROWAVE MOTION SENSOR:

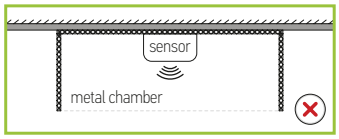
To avoid blocking the microwave emission, the microwave sensor can not be covered with metal materials, be sprayed with a coating of metal components, or have attached metal material or stickers etc.



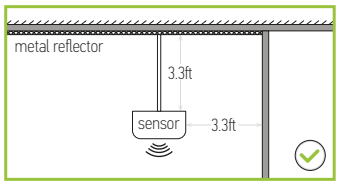
The distance between the antenna and the glass (dielectric material) should be no less than 0.4 ft when the sensor is within the glass lampshade. Otherwise, the microwave motion sensor will not penetrate the glass easily.



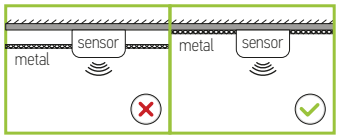
Avoid placing the sensor inside a metal chamber, this may cause a mis-trigger.



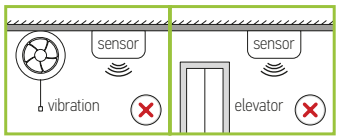
The sensor should not be placed in a small confined space. To avoid increasing the sensor detection range or abnormal operation, the sensor should be kept away from large areas of metal and glass reflectors (separation distance at least 3.3 ft). Reduce the detection area setting.



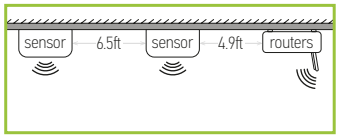
To avoid affecting the microwave signal transmission, the microwave antenna should be higher than the surrounding metal surface.



Any vibration or movement may trigger the sensor. Ensure the sensor is far from any constant movement.

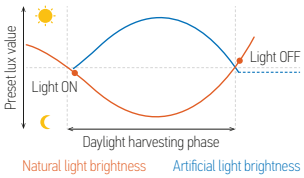


At least 2 m/6.5 ft distance between microwave sensors; 1.5 m/4.9 ft between the sensor and other wireless devices such as routers to avoid possible radio interference.



DAYLIGHT HARVESTING SETTING:

1. Adjust "daylight" value higher than 50lux.
2. Preset "standby period" 0S.
3. Press "daylight harvesting" button on remote control to activate.



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INSTALLATION GUIDE

IMPORTANT SAFETY INFORMATION:

Please read all the instructions below before installation!

- Make sure that the supply voltage corresponds to the rated product voltage.
- The product must be installed by a qualified electrician in accordance with the National Electrical Code and corresponding local codes.
- If the product is damaged, do not use it.

⚠ WARNING

Risk of personal injury – read and follow all warnings and installation instructions. Keep or give to the owner for future reference.

Risk of cuts: Wear gloves to prevent cuts or abrasions when removing from carton, handling, installing, and maintaining this product.

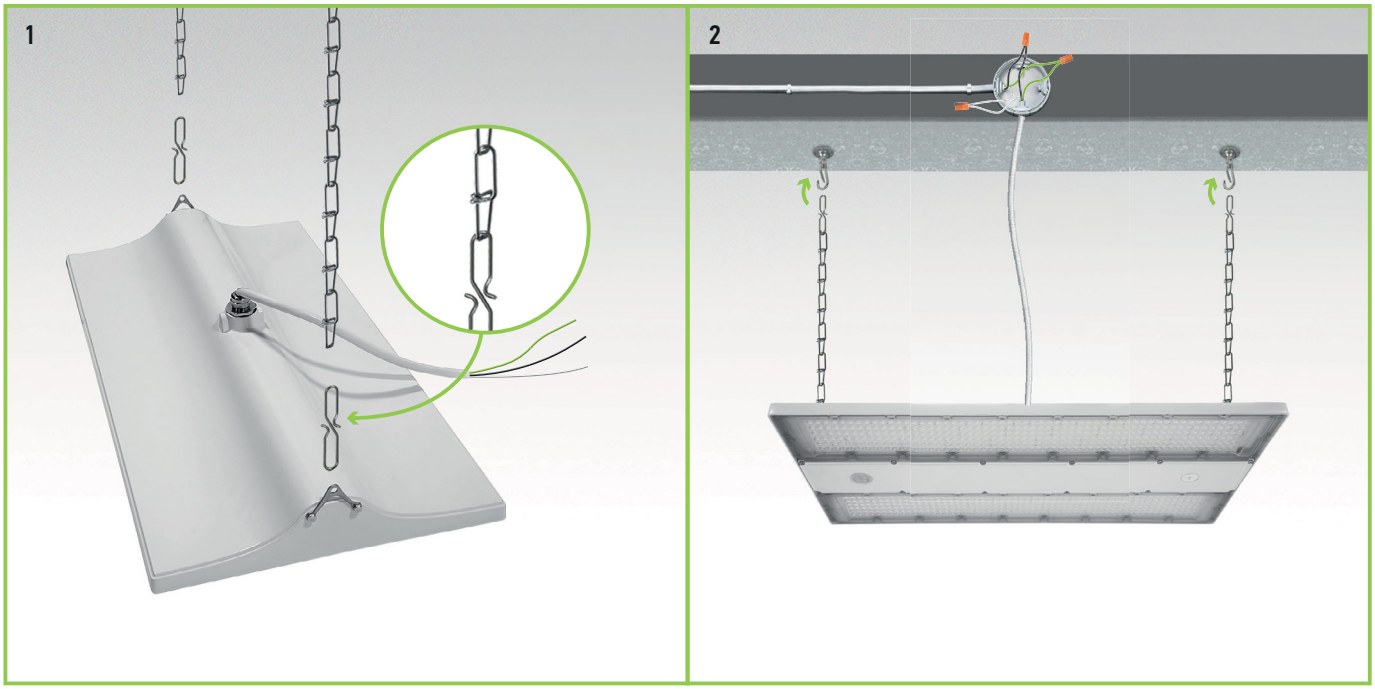
Risk of electric shock: This product must be installed in accordance with the applicable installation code by a person familiar with the construction and operation of the product and the hazards involved.

Risk of Fire: Minimum 194°F supply conductors. Consult a qualified electrician to ensure correct branch circuit conductor.

Integrity LED assumes no responsibility for claims arising out of improper or careless Installation or handling of this product.

INSTALLATION STEPS:

1. Insert suspending hooks in to both ends of the fixture. Secure chain to ceiling, beam or other mounting surface.
2. Connect the wires: Black to Black, White to White, Green to Green. If you are not using the dimming wires cap them off but not together.



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