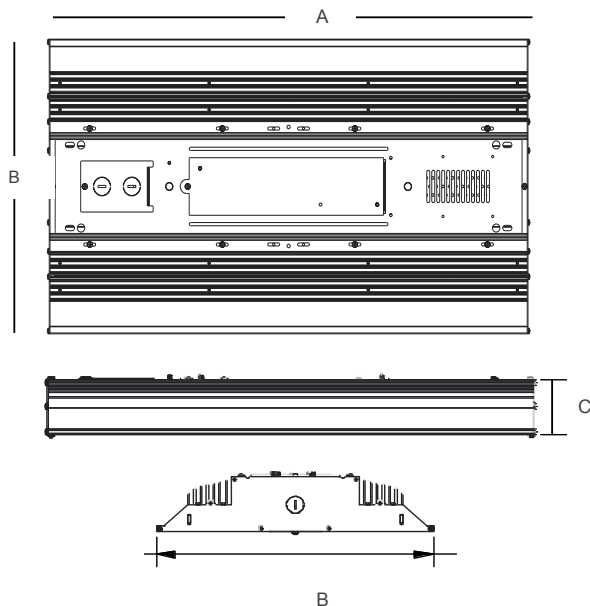# LED HIGH BAY LINEAR
HL SERIES

PRODUCT DESCRIPTION:

The LED Linear Highbay Series offers leading-edge efficacy and scalability for high ceiling applications such as warehouses, distribution centers, manufacturing facilities and big box retailers. Measuring just 14" x 24," the LED luminaires deliver the high lumen output associated with traditional fluorescent and HID highbays in a form factor one-quarter the size.

The Linear Highbay Series can be configured with wide beam distributions, and emergency controls, for optimal lumen output and energy savings. Choose from cable, pendant and surface mounting options to create a custom solution that meets any lighting requirement.

FEATURES:

- Wide lens distribution
- Operating temperature -34°C to 50°C (-30°F to 122°F)
- Suitable for Damp locations
- L70 lifetimes projected to be 100,000 hours
- 347-480V option available
- Translucent lens offered for diffuse light
- Wire guard available for additional protection
- 0-10V Dimming standard
- 100W equivalent to 250W fluorescent high bay and 150W & 200W equivalent to 400W HID fixture
- 7 year limited warranty (10 year limited warranty available, contact Maxlite for more info.)

Dimensions			
Product	A	B	C
100W	24.06"	13.69"	2.73"
150W	24.06"	13.69"	4.23"
200W	24.06"	13.69"	4.23"

MODEL SELECTION					Typical order example: HL-150UW-50EM		
HL			**W**				
FAMILY	**WATTAGE**	**VOLTAGE**	**BEAM SPREAD**	**CCT**	**OPTIONS**		
HL= High Bay Linear	**100=** 100W	**U=** 120-277V	**W=** Wide	[3]**40=** 4000K	**Omit=** None	**OMIT=** None	**OMIT=** None
	150= 150W	**H=** 347-480V[1]		[3]**50=** 5000K	**TS=** Translucent Lens	**MSO=** On/Off Sensor	[2]**EM=** Battery Backup Unit
	200= 200W					**MSV=** Bi-Level Sensor	
						MSC= Bi-Level Sensor with Remote Capability	

NOTES:

1. 347-480V 4000K product is not DLC qualified
2. Emergency battery back up only available in Dual voltage (120V or 277V)
3. 4000K DLC Standard, 5000K DLC Premium

SPECIFICATIONS:

| ITEM	SPECIFICATION	HL-100UW-40	HL-100UW-50	HL-150UW-40	HL-150UW-50	HL-200UW-40	HL-200UW-50
		DETAILS					
GENERAL PERFORMANCE	Power Consumption (W)	103.4	103.9	148.4	149.9	194.6	195.6
	Lumens Delivered (lm)	12,000	13,400	17,500	19,500	23,000	25,000
	Efficacy (lm/W)	118	129	117	130	117	127
	CRI	≥70					
	Color Temperature (K)	4000K, 5000K					
	L70 Lifetime (hours)	100,000					
	Color Consistency	Proprietary binning for uniform color					
	Emergency Operation	Minimum 1750 lumens for 90 mins		Minimum 2800 lumens for 90 mins			
ELECTRICAL	Power Factor	0.99					
	Input Voltage	120-277V (347-480V optional), (EM-BBU only available in Dual voltage 120V or 277V)					
PHYSICAL	Mounting	V hook standard for chain/cable mount. (chain/cable not included. See Mounting Accessories Chart for other options)					
	Operating Temperature	-34°C to 50°C (-30°F to 122°F)/ For EM units 0°C - 40°C (32°F - 104°F)					
	Humidity	10-85% RH, non-condensing					
QUALIFICATION	Qualification	cULus, DLC 4.1 Standard, DLC 4.1 Premium, FCC, Lighting Facts					
	Material Usage	RoHS compliant; no mercury					
	Environment	Indoor / Damp					
	Warranty	7 year limited warranty (10 year limited warranty available, contact Maxlite for more info.)					

*4000K DLC 4.1 Standard, 5000K DLC 4.1 Premium

ORDERING*:

MODEL	MODEL NUMBER	WATTAGE	DISTRIBUTION
1409007	HL-100UW-40	100	Wide
101446	HL-100UW-50		
1409009	HL-150UW-40	150	
101448	HL-150UW-50		
1409011	HL-200UW-40	200	
101450	HL-200UW-50		

*Please contact your MaxLite representative to order products that don't have order codes listed here.

ACCESSORIES			
ACCESSORY IMAGE	**MODEL NUMBER**	**ORDER CODE**	**DESCRIPTION**
	HL-WGW-A	101428	14" x 24" High Bay Wire Guard White Finish
	HL-TS-A	101242	High Bay Linear Translucent Lens (2 Required Per Fixture)
	MLCHKLSU15	74138	15' Cable Kit
	MLCHKSQ	71119	20' Cable Kit
	HL-SMK*	107603	Surface Mount Kit
	HL-MPK*	107604	Monopoint Mount Kit 1.115" Non-Threaded Hole Fits ¾" Pipe
	RMTITXSRP280	103492	Remote Control for MSC Commissioning

HIGH BAY W/ SURFACE MOUNT KIT:

4.27"
2.18"
4.90"
4.27 in

HIGH BAY W/ MONO-POINT:

4.44"
7.15"
4.27"
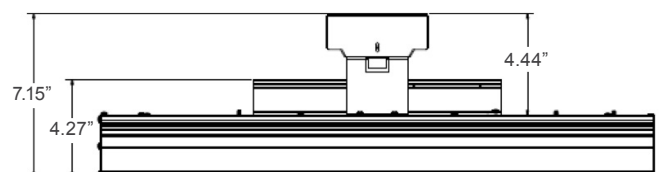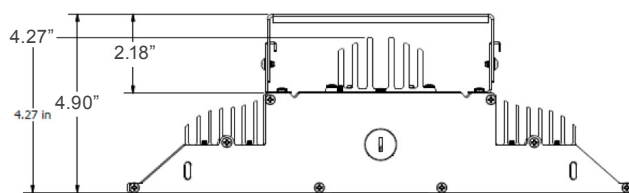
ADDITIONAL PERFORMANCE DATA*

ELECTRICAL LOAD:

MODEL	SYSTEM WATTAGE				CURRENT WATTAGE (A)			
	120V	277V	347V	480V	120V	277V	347V	480V
HL-100	104	103	102	102	0.95	0.4	0.35	0.25
HL-150	150	147	147	147	1.4	0.6	0.5	0.35
HL-200	197	188	190	190	1.7	0.8	0.6	0.46

LUMEN MAINTENANCE VS. AMBIENT TEMPERATURE @ 100 KHOURS								
-20°C	0°C	10°C	25°C	30°C	35°C	40°C	45°C	50°C
77.15%	77.15%	77.15%	76.19%	76.49%	76.78%	77.06%	77.34%	77.60%

Lumen Output Multiplier vs. Ambient Temperature (HL-200)

Lumen Maintenance 25°C vs. Hours (HL-200)
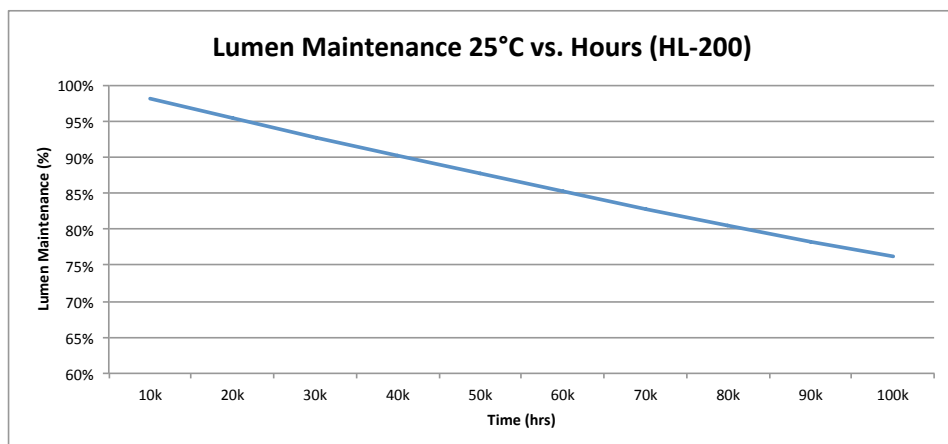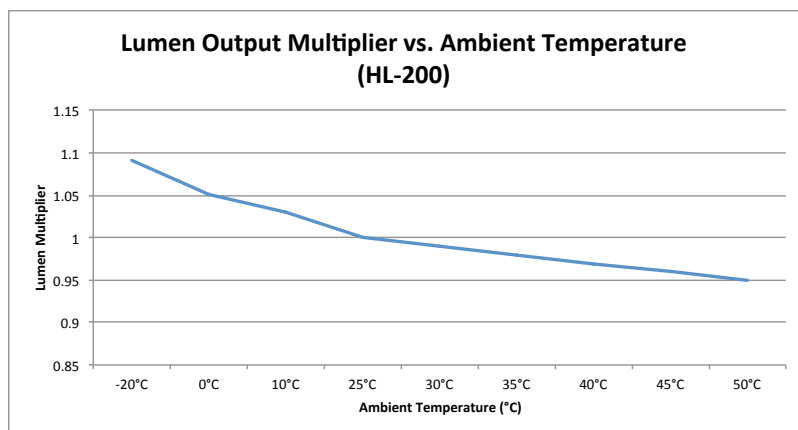
*Performance data evaluated at 5000K. Contact Maxlite for 4000K information

MSV - BI-LEVEL MOTION SENSOR:

SPECIFICATION:

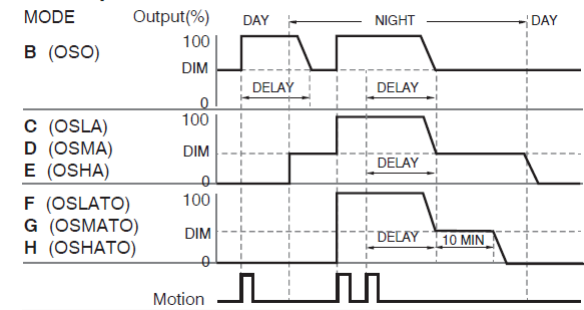| SPECIFICATIONS	MSITXLOD500SPASSY
POWER SUPPLY	100/120/240/277VAC, 50/60Hz
MAX LOAD	800W (VA)
LOW DIM LEVEL	0/5/10/20/25/33/50% SELECTABLE
LOW DIM CONTROL	0-10V
INFRARED SENSOR	Omni-directional quad element pyroelectric
LOAD SWITCHING	ZERO-CROSS AUTOMATIC FREQUENCY SWITCHING
HIC PROTECTION	MAX. 80A FOR 16.7 msec.
DETECTABLE SPEED	0.5-10FT/SEC
MOUNTING HEIGHT	SUBJECT TO TO LENSE TYPE APPLIED
DETECTION RANGE	SUBJECT TO TO LENSE TYPE APPLIED AND HEIGHT
AMBIENT LIGHT LEVEL	L:20~50 lux, M:80~130 lux, H:500~600 lux
DELAY TIME SETTING	1'/3'/5'/10'/15'/20'/30' selectable
TIME-OFF DELAY	10 MIN, TO MODES ONLY
OP HUMIDITY	MAX 95% RH
OP TEMPERATURE	-40°F~158°F
DIMENSIONS	2.36"x H1.45"

WIRING DIAGRAM:
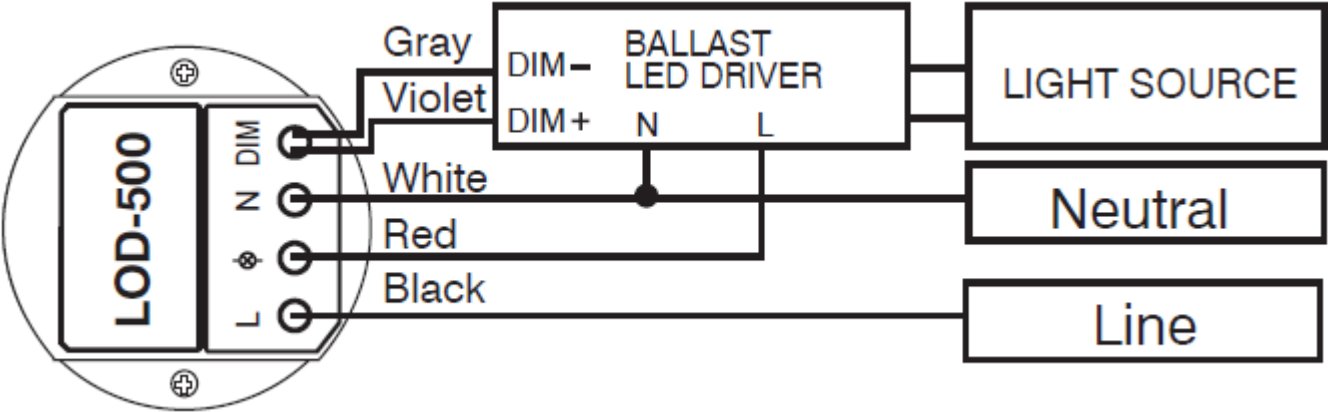
SENSOR CONTROL MODES:

The Bi-Level Motion Sensor features 8 different control modes selectable via rotary DIP switch. Please refer to the following description and select the desired control mode.

NOTE: Ensure to set the DIP switch at "click" position while setting the control mode.

Mode	Sensor Control Description
A	1. Turn on the light for 5 seconds at every motion detected. 2. Dim the light for 10 seconds and then turn off.
B	1. Ambient light sensor is disabled with this mode. 2. Dim the light to low level as DIM set all time under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy.
C	1. Light off while ambient light is higher than 50 lux. 2. While ambient light is lower than 20 lux, dim the light to low level as DIM set under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy.
D	1. Light off while ambient light is higher than 130 lux. 2. While ambient light is lower than 80 lux, dim the light to low level as DIM set under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy.
E	1. Light off while ambient light is higher than 600 lux. 2. While ambient light is lower than 500 lux, dim the light to low level as DIM set under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy.
F	1. Light off while ambient light is higher than 50 lux. 2. While ambient light is lower than 20 lux, light stays off under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy. When delay time elapse, dim the light to low level as DIM set for 10 minutes as Time Off delay. 4. Turn the light to full-ON per delay TIME set if sensor detects occupancy during Time Off. Turn the light off if no occupancy detected during Time Off delay.
G	1. Light off while ambient light is higher than 130 lux. 2. While ambient light is lower than 80 lux, light stays off under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy. When delay time elapse, dim the light to low level as DIM set for 10 minutes as Time Off delay. 4. Turn the light to full-ON per delay TIME set if sensor detects occupancy during Time Off. Turn the light off if no occupancy detected during Time Off delay.
H	1. Light off while ambient light is higher than 600 lux. 2. While ambient light is lower than 500 lux, light stays off under vacancy. 3. Turn the light to full-ON per delay TIME set under occupancy. When delay time elapse, dim the light to low level as DIM set for 10 minutes as Time Off delay. 4. Turn the light to full-ON per delay TIME set if sensor detects occupancy during Time Off. Turn the light off if no occupancy detected during Time Off delay.

Mode Operation Chart

SENSOR SETTINGS:

MODE (TEST)

TIME (10 minutes)   (Factory set)   DIM (OFF)
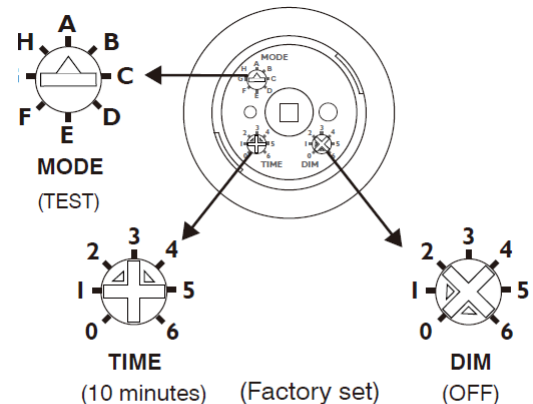
POS.	0	1	2	3	4	5	6
TIME	1'	3'	5'	10'	15'	20'	30'
DIM	OFF	5%	10%	20%	25%	33%	50%

MSO - ON/OFF MOTION SENSOR:

SPECIFICATION:

SPECIFICATIONS	MSITXLOS509SFCCNTRL
POWER SUPPLY	120/277VAC, 50/60Hz
MAX LOAD @ -40°F~131°F	800/1200W(VA)@ 120/277V
MAX LOAD @ 131°F~158°F	500/750W(VA)@120/277V
INFRARED SENSOR	Omni-directional quad element pyroelectric
LOAD SWITCHING	ZERO-CROSS HYBRID SWITCHING
HIC PROTECTION	MAX. 80A FOR 16.7 msec.
DETECTABLE SPEED	1-10FT/SEC
MOUNTING HEIGHT	SUBJECT TO TO LENSE TYPE APPLIED
DETECTION RANGE	SUBJECT TO TO LENSE TYPE APPLIED AND HEIGHT
AMBIENT LIGHT LEVEL	7 LEVELS ACCU-SET DIGITAL POTENTIOMETER
DELAY TIME SETTING	10"/1'/3'/5'/10'/20'/30' selectable
OP HUMIDITY	MAX 95% RH
OP TEMPERATURE	-40°F~158°F
DIMENSIONS	2.36"x H1.45"

WIRING DIAGRAM:

A. Single sensor control
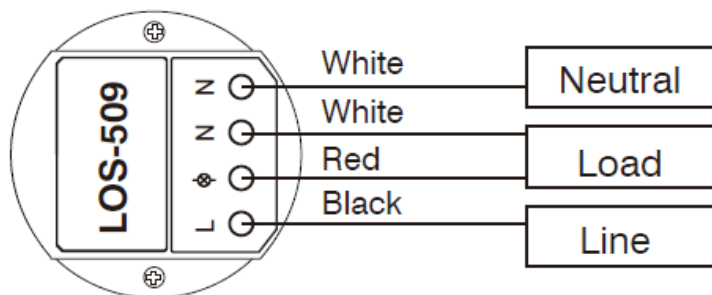
B. Multiple sensors control
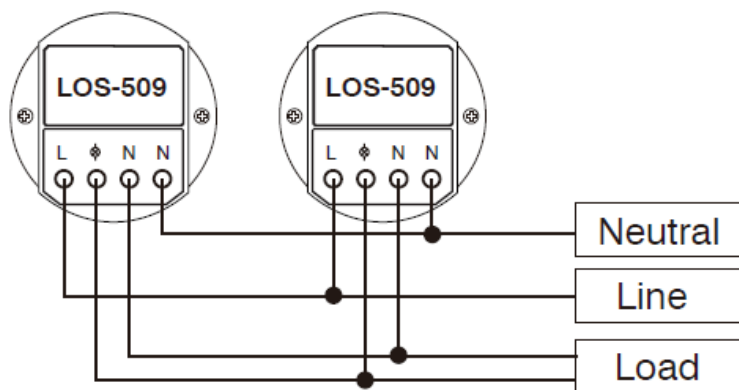
SENSOR SETTINGS:

Delay Time
The LOS-509 series offers 7 different delay time selection via Accu-Set potentiometers. The light will remain ON if sensor detects occupant's movement before the set delay time expires.

Ambient Light
The LOS-509Sxx offers 7 different ambient light level selection via Accu-Set potentiometers. The sensor will not switch ON the light if the LUX value of ambient light is higher than set level.

SW. POS.	1	2	3	4	5	6	7
TIME	T	1'	3'	5'	10'	20'	30'
LUX*	12	25	50	90	130	220	24H

Factory Set

LOS-509Sxx

TIME
(10 minutes)

(Factory set)

LUX
(ALS disabled)