PROJECT:
TYPE:
CATALOG #:

Full Body Linear High Bay
Sensor Ready Lumen & Kelvin Selectable

emLITE
Series FHB
REV #: FHB.03.26.02

User's Manual

FEATURES

- **Emergency lighting with adjustable Emergency Lighting Control (ELC), powered from a Signtex low-voltage central battery system.**
- Available with factory-installed UL Listed Emergency Lighting Control (ELC), for connection to a Signtex central battery, DC emergency power system.
- Premium powder-coat, die cast aluminum, white housing.
- Polycarbonate prismatic lens.
- Field selectable 4000k (neutral white) and 5000k (cool white) color temperatures*.
- Tri-lumen selectable delivers 12,000 to 60,000 nominal lumens (see lumen tables on page 3)**.
- Screw in sensor ready. Sensor and remote control sold separately.
- Remote control required to change factory sensor settings (see default settings on page 2).
- Long-life LEDs provide 135,000 hours of operation with at least 70% of initial lumen output (L70), and 41,000 hours with at least 90% of initial lumen output (L90)***.
- LED color maintenance < 0.003 chromaticity shift (Δu'v') over the initial 6,000 hours of operation.
- Color rendering index > 80%

ELECTRICAL

- Operating temperature (ambient):
  -40°C to 55°C (-40°F to 131°F) for FHB-18L & FHB-24L.
  -40°C to 50°C (-40°F to 122°F) for FHB-36L & FHB-60L.
- Universal 120-277V AC voltage (50-60Hz) is standard.
- 347-480V achieved with step-down transformer.
- 0-10VDC dimming drivers are standard.
- Emergency driver option available.
- Input transient surge protection = 6kV.
- PF > 0.9 ; THD < 20%.

CODES COMPLIANCE

- cULus listed for Damp locations.
- DLC premium listed.
- Complies with FCC part 15, class A.
- Complies with IEEE C.62.41-1991, Class A input transient surge protection (1.0kV).

WARRANTY

- 5 year total customer satisfaction warranty. For details see Signtex product catalog technical data section.

* Contact factory for other color temperatures and lumen packages.
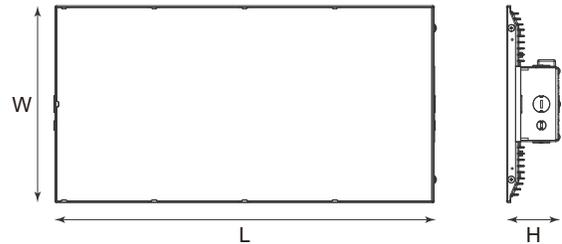*** L70 hours are IES TM-21-11 calculated hours.*

DIMENSIONS

Model #	L (in)	W (in)	H (in)	Weight (lbs)
FHB-18L-SLSK	13.00	9.50	2.20	3.7
FHB-24L-SLSK	14.20	10.25	2.40	4.5
FHB-36L-SLSK	19.70	10.25	2.60	6.5
FHB-60L-SLSK	30.70	11.00	2.60	9.25

STANDARD

cULus LISTED | DLC LISTED PREMIUM | FC | DAMP | 6kV Surge Protection

OPTIONS

ELC EMERGENCY LIGHTING CONTROL

FIXTURE ORDERING INFORMATION EXAMPLE: FHB24LSLSK-ELCXX

FHB	24L	SL SK		-	ELCXX

SERIES	SIZE	SELECTABLE[1]		INPUT VOLTAGE	OPTIONS
		NOMINAL LUMENS	COLOR TEMP		
FHB	18L	**SL** 18,000/15,000/12,000	SK 4000K/ 5000K	**(Blank)** 120-277V	**ELCXX**[2] Emergency Lighting Control
	24L	**SL** 24,000/18,000/15,000		**UNC*** 347-480V	*"XX"= Varies with fixture size and power.*
	36L	**SL** 36,000/30,000/24,000			*See Options table for complete part number*
	60L	**SL** 60,000/48,000/36,000			**EM10** 10W Emergency driver
					EM13 13W Emergency driver
					EM25 25W Emergency driver

[1] Nominal values, See Electrical data for specific values.
[2] See ELC Power details table, Page2,

EMERGENCY LIGHTING CONTROLS (ELC)
For use with Signtex Lighting DC Central Battery System

MODEL	ELC10P7		ELC40P7	
	EPR [1] WATTS (MIN.)	EM LUMENS [2]	EPR WATTS (MAX.) [3]	EM LUMENS
FHB-18L	10	1400	40	5,600
FHB-24L	10	1500	40	6,000
FHB-36L	10	1400	40	5,600
FHB-24L	10	1500	40	6,000

[1] Emergency power rating (Factory Adjustable).

[2] Nominal output at 4000K and Efficacy in Mid-Lumen Range.

[3] Maximum Emergency Power Rating (EPR).

NOTE:
Emergency lumens are calculated based on efficacy in the MID-LUMEN range (4000K) from the Electrical Data Table. The value is adjustable through the EPR range shown above. For maximum efficiency, EPR should be set at the minimum level for compliance with NFPA Life Safety Code, based on photometric data for the fixture when installed.

To calculate lumen output within the EPR range given:

Lumens = EPR (watts) x Luminaire Efficacy (Lm/watt)

ACCESSORIES (ORDER SEPARATELY)

Sensor:

HD07VR-PH-1-90 = Passive infrared sensor with 90° elbow adapter- maximum mounting height = 39FT, factory settings: detection area =100%, hold time = 5 sec, stand-by period = 0 sec, stand-by dimming level = 10%, daylight threshold = disabled

HD07VR-MH-B-1-90 = Microwave step-dimming sensor with 90° elbow adapter - maximum mounting height = 49FT, factory settings: detection area =100%, hold time = 5 sec, stand-by period = 0 sec, stand-by dimming level = 10%, daylight threshold = disabled

HD05R = Remote control for HD07VR-PH-1-90 & HD07VR-MH-B-1-90 (required to change factory settings)

Wire Guard:

FHB-WG-18L	=	WIRE GUARD FOR FHB-WG-18L
FHB-WG-24L	=	WIRE GUARD FOR FHB-WG-24L
FHB-WG-36L	=	WIRE GUARD FOR FHB-WG-36L
FHB-WG-60L	=	WIRE GUARD FOR FHB-WG-60L

Remote Mount EM Drivers:

BLEM-CP-10C = EMERGENCY DRIVER - EM10
BLEM-CP-13C = EMERGENCY DRIVER - EM13

Mounting Option:

FHB-SMK	=	SURFACE MOUNT KIT FOR FHB- ALL MODELS*
FHB-PMK	=	PENDANT MOUNT KIT FOR FHB- ALL MODELS*
CMK-3	=	CABLE MOUNT KIT 3 METER- ALL MODELS
CMK-5	=	CABLE MOUNT KIT 5 METER- ALL MODELS

* SMK and PMK not compatible with UNC and EM drivers.

COMPATIBLE DIMMERS AND CONTROLS

Manufacturer	Model Number	Dimmer Range	Load Switching Capacity
Best Lighting	DWS-010V-T	10%-100%	600W
Best Lighting	DWS-010V-D	10%-100%	600W
Leviton	IP710-LFZ	10%-100%	1200W
Lutron	DVSTV	10%-100%	450W

emLITE
Series FHB

LUMEN TABLES

Series	Measurements	Low Lumens		Mid Lumens		High Lumens	
		4000k	5000k	4000k	5000k	4000k	5000k
FHB-18L-SLSK	Lumens	12,454	12,245	15,387	14,987	18,260	17,662
	Watt	81.57	82.68	103.79	105.72	127.33	130.36
	Efficacy	153	148	148	142	143	135

Series	Measurements	Low Lumens		Mid Lumens		High Lumens	
		4000k	5000k	4000k	5000k	4000k	5000k
FHB-24L-SLSK	Lumens	15,480	15,446	18,164	17,944	23,772	23,381
	Watt	97.50	98.69	116.37	117.96	158.16	161.41
	Efficacy	159	157	156	152	150	145

Series	Measurements	Low Lumens		Mid Lumens		High Lumens	
		4000k	5000k	4000k	5000k	4000k	5000k
FHB-36L-SLSK	Lumens	24,204	24,004	29,825	29,339	35,415	34,727
	Watt	151.23	154.24	192.09	196.72	235.36	242.20
	Efficacy	160	156	155	149	150	143

Series	Measurements	Low Lumens		Mid Lumens		High Lumens	
		4000k	5000k	4000k	5000k	4000k	5000k
FHB-60L-SLSK	Lumens	36,167	36,380	47,698	47,582	59,177	58,715
	Watt	224.7	228.0	305.1	309.5	389.6	397.7
	Efficacy	161	160	156	154	152	148

ELECTRICAL DATA

Series	CCT	Input Amps (A)								
		Low Lumens			Mid Lumens			High Lumens		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
FHB-18L-SLSK	4000k	0.68	0.34	0.29	0.86	0.43	0.37	1.06	0.53	0.46
	5000k	0.69	0.34	0.30	0.88	0.44	0.38	1.09	0.54	0.47

Series	CCT	Input Amps (A)								
		Low Lumens			Mid Lumens			High Lumens		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
FHB-24L-SLSK	4000k	0.81	0.41	0.35	0.97	0.48	0.42	1.32	0.66	0.57
	5000k	0.82	0.41	0.36	0.98	0.49	0.43	1.35	0.67	0.58

Series	CCT	Input Amps (A)								
		Low Lumens			Mid Lumens			High Lumens		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
FHB-36L-SLSK	4000k	1.26	0.63	0.55	1.60	0.80	0.69	1.96	0.98	0.85
	5000k	1.29	0.64	0.56	1.64	0.82	0.71	2.02	1.01	0.87

Series	CCT	Input Amps (A)								
		Low Lumens			Mid Lumens			High Lumens		
		120V	240V	277V	120V	240V	277V	120V	240V	277V
FHB-60L-SLSK	4000k	1.87	0.94	0.81	2.54	1.27	1.10	3.25	1.62	1.41
	5000k	1.90	0.95	0.82	2.58	1.29	1.12	3.31	1.66	1.44

Full Body Linear High Bay

PHOTOMETRIC DATA

FHB-18L-SLSK
Luminaire Data

Description	Full Body High Bay Lumen/Kelvin Selectable
Total Lumens	17,662
Input Wattage	130
Efficacy (lm/W)	135
Spacing Criterion (0-180°)	1.26
Spacing Criterion (90-270°)	1.24

Photometrics calculated at 5000k-high lumens setting

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20°	3,042	17.2%
0-30°	6,475	36.7%
0-40°	10,520	59.6%
20-50°	10,813	61.2%
40-70°	6,271	35.5%
0-60°	15,726	89.0%
0-80°	17,425	98.7%
0-90°	17,638	99.9%
90-180°	24	0.1%
0-180°	17,662	100.0%
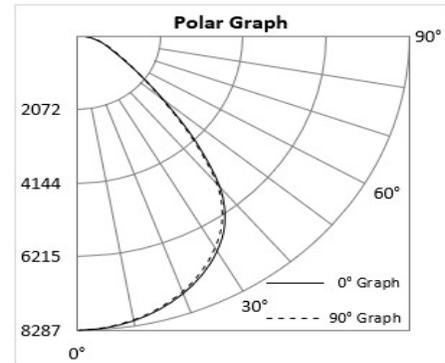
FHB-24L-SLSK
Luminaire Data

Description	Full Body High Bay Lumen/Kelvin Selectable
Total Lumens	23,381
Input Wattage	161
Efficacy (lm/W)	145
Spacing Criterion (0-180°)	1.26
Spacing Criterion (90-270°)	1.28

Photometrics calculated at 5000k-high lumens setting

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20°	4,016	17.2%
0-30°	8,550	36.6%
0-40°	13,901	59.5%
20-50°	14,322	61.3%
40-70°	8,341	35.7%
0-60°	20,833	89.1%
0-80°	23,074	98.7%
0-90°	23,350	99.9%
90-180°	31	0.1%
0-180°	23,381	100.0%
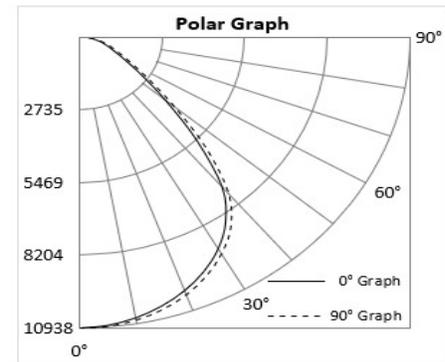
FHB-36L-SLSK
Luminaire Data

Description	Full Body High Bay Lumen/Kelvin Selectable
Total Lumens	34,727
Input Wattage	242
Efficacy (lm/W)	143
Spacing Criterion (0-180°)	1.26
Spacing Criterion (90-270°)	1.28

Photometrics calculated at 5000k-high lumens setting

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20°	5,902	17.0%
0-30°	12,592	36.3%
0-40°	20,536	59.1%
20-50°	21,267	61.2%
40-70°	12,472	35.9%
0-60°	30,906	89.0%
0-80°	34,256	98.6%
0-90°	34,682	99.9%
90-180°	45	0.1%
0-180°	34,727	100.0%
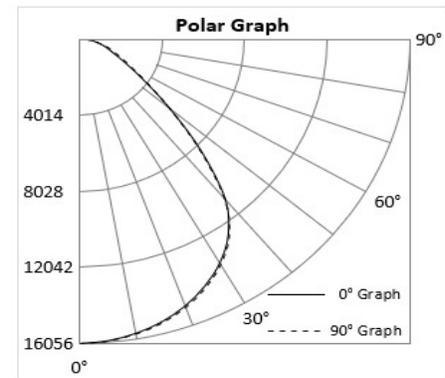
FHB-60L-SLSK
Luminaire Data

Description	Full Body High Bay Lumen/Kelvin Selectable
Total Lumens	58,715
Input Wattage	398
Efficacy (lm/W)	148
Spacing Criterion (0-180°)	1.28
Spacing Criterion (90-270°)	1.26

Photometrics calculated at 5000k-high lumens setting

Zonal Lumen Summary

Zone	Lumens	%Fixt
0-20°	9,998	17.0%
0-30°	21,317	36.3%
0-40°	34,727	59.1%
20-50°	35,995	61.3%
40-70°	21,199	36.1%
0-60°	52,364	89.2%
0-80°	58,000	98.8%
0-90°	58,644	99.9%
90-180°	71	0.1%
0-180°	58,715	100.0%

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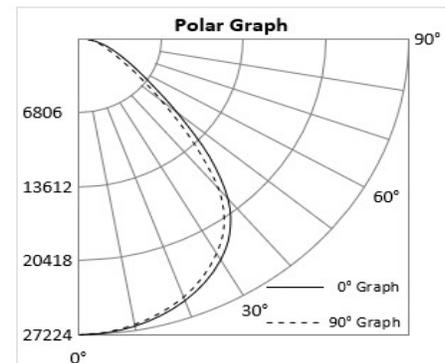
COMPATIBLE EMERGENCY DRIVERS-INSTALLED

Emergency Driver Part Number	EM10		EM13		EM25	
Model	Watts	EM Lumens	Watts	EM Lumens	Watts	EM Lumens
FHB-18L-SLSK	10	1400	13	1820	25	3500
FHB-24L-SLSK	10	1500	13	1950	25	3750
FHB-36L-SLSK	10	1400	13	1820	25	3500
FHB-60L-SLSK	10	1500	13	1950	25	3750

PLUGS AND CORDS

Part number suffix	Description	For use with
6C3	6' cord - 3 conductor (black/white/green)	Standard & UNC
6C4	6' cord - 4 conductor (black/white/green/red)	EM driver
6C5	6' cord - 5 conductor (black/white/green/purple/pink)	Dimming (standard & UNC)
6C6	6' cord - 6 conductor (black/white/green/red/purple/pink)	Dimming & EM driver
10C3	10' cord - 3 conductor (black/white/green)	Standard & UNC
10C4	10' cord - 4 conductor (black/white/green/red)	EM driver
10C5	10' cord - 5 conductor (black/white/green/purple/pink)	Dimming (standard & UNC)
10C6	10' cord - 6 conductor (black/white/green/red/purple/pink)	Dimming & EM driver
15C3	15' cord - 3 conductor (black/white/green)	Standard & UNC
15C4	15' cord - 4 conductor (black/white/green/red)	EM driver
15C5	15' cord - 5 conductor (black/white/green/purple/pink)	Dimming (standard & UNC)
15C6	15' cord - 6 conductor (black/white/green/red/purple/pink)	Dimming & EM driver
6W3	6' whip - 3 conductor (black/white/green)	Standard & UNC
6W4	6' whip - 4 conductor (black/white/green/red)	EM driver
6W5	6' whip - 5 conductor (black/white/green/purple/pink)	Dimming (standard & UNC)
6W6	6' whip - 6 conductor (black/white/green/red/purple/pink)	Dimming & EM driver
6P515	6' cord - 3 conductor (black/white/green) - NEMA 5-15 plug (120V/15A)	Standard luminaire
6P615	6' cord - 3 conductor (black/white/green) - NEMA 6-15 plug (240V/15A)	Standard luminaire
6P715	6' cord - 3 conductor (black/white/green) - NEMA 7-15 plug (277V/15A)	Standard luminaire
6P520	6' cord - 3 conductor (black/white/green) - NEMA 5-20 plug (120V/20A)	Standard luminaire
6P620	6' cord - 3 conductor (black/white/green) - NEMA 6-20 plug (277V/20A)	Standard luminaire
6P515L	6' cord - 3 conductor (black/white/green) - NEMA L5-15 plug (120V/15A locking)	Standard luminaire
6P615L	6' cord - 3 conductor (black/white/green) - NEMA L6-15 plug (240V/15A locking)	Standard luminaire
6P715L	6' cord - 3 conductor (black/white/green) - NEMA L7-15 plug (277V/15A locking)	Standard luminaire
6P520L	6' cord - 3 conductor (black/white/green) - NEMA L5-20 plug (120V/20A locking)	Standard luminaire
6P620L	6' cord - 3 conductor (black/white/green) - NEMA L6-20 plug (240V/20A locking)	Standard luminaire
6P720L	6' cord - 3 conductor (black/white/green) - NEMA L7-20 plug (277V/20A locking)	Standard luminaire
6P2420L	6' cord - 3 conductor (black/white/green) - NEMA L24-20 plug (347V/20A locking)	UNC luminaire
6P820L	6' cord - 3 conductor (black/white/green) - NEMA L8-20 plug (480V/20A locking)	UNC luminaire

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Full Body Linear High Bay

PLUGS AND CORDS

Part number suffix	Description	For use with
10P515	10' cord - 3 conductor (black/white/green) - NEMA 5-15 plug (120V/15A)	Standard luminaire
10P615	10' cord - 3 conductor (black/white/green) - NEMA 6-15 plug (240V/15A)	Standard luminaire
10P715	10' cord - 3 conductor (black/white/green) - NEMA 7-15 plug (277V/15A)	Standard luminaire
10P520	10' cord - 3 conductor (black/white/green) - NEMA 5-20 plug (120V/20A)	Standard luminaire
10P620	10' cord - 3 conductor (black/white/green) - NEMA 6-20 plug (277V/20A)	Standard luminaire
10P515L	10' cord - 3 conductor (black/white/green) - NEMA L5-15 plug (120V/15A locking)	Standard luminaire
10P615L	10' cord - 3 conductor (black/white/green) - NEMA L6-15 plug (240V/15A locking)	Standard luminaire
10P715L	10' cord - 3 conductor (black/white/green) - NEMA L7-15 plug (277V/15A locking)	Standard luminaire
10P520L	10' cord - 3 conductor (black/white/green) - NEMA L5-20 plug (120V/20A locking)	Standard luminaire
10P620L	10' cord - 3 conductor (black/white/green) - NEMA L6-20 plug (240V/20A locking)	Standard luminaire
10P720L	10' cord - 3 conductor (black/white/green) - NEMA L7-20 plug (277V/20A locking)	Standard luminaire
10P2420L	10' cord - 3 conductor (black/white/green) - NEMA L24-20 plug (347V/20A locking)	UNC luminaire
10P820L	10' cord - 3 conductor (black/white/green) - NEMA L8-20 plug (480V/20A locking)	UNC luminaire
15P515	15' cord - 3 conductor (black/white/green) - NEMA 5-15 plug (120V/15A)	Standard luminaire
15P615	15' cord - 3 conductor (black/white/green) - NEMA 6-15 plug (240V/15A)	Standard luminaire
15P715	15' cord - 3 conductor (black/white/green) - NEMA 7-15 plug (277V/15A)	Standard luminaire
15P520	15' cord - 3 conductor (black/white/green) - NEMA 5-20 plug (120V/20A)	Standard luminaire
15P620	15' cord - 3 conductor (black/white/green) - NEMA 6-20 plug (277V/20A)	Standard luminaire
15P515L	15' cord - 3 conductor (black/white/green) - NEMA L5-15 plug (120V/15A locking)	Standard luminaire
15P615L	15' cord - 3 conductor (black/white/green) - NEMA L6-15 plug (240V/15A locking)	Standard luminaire
15P715L	15' cord - 3 conductor (black/white/green) - NEMA L7-15 plug (277V/15A locking)	Standard luminaire
15P520L	15' cord - 3 conductor (black/white/green) - NEMA L5-20 plug (120V/20A locking)	Standard luminaire
15P620L	15' cord - 3 conductor (black/white/green) - NEMA L6-20 plug (240V/20A locking)	Standard luminaire
15P720L	15' cord - 3 conductor (black/white/green) - NEMA L7-20 plug (277V/20A locking)	Standard luminaire
15P2420L	15' cord - 3 conductor (black/white/green) - NEMA L24-20 plug (347V/20A locking)	UNC luminaire
15P820L	15' cord - 3 conductor (black/white/green) - NEMA L8-20 plug (480V/20A locking)	UNC luminaire

DISTRIBUTOR

Contact Signtex for layout assistance.
Code compliant emergency lighting layouts provided!
Specifications and dimensions subject to change without notice.