



PROJECT NAME

CATALOG NO.

TYPE

DATE

NOTE

SLIM LINEAR LED HIGH BAY

EHB Series

Slim Linear LED High Bay

DESCRIPTION

The Alphalite EHB Series Slim Linear LED High Bay delivers high lumen output, long life, economic solution, and no restrike time. This energy-efficient LED luminaire offers one-to-one replacement of existing HID or fluorescent high bays. Precision-formed reflectors delivers adequate light in high mounting applications. Modular driver and LED arrays. Economic solution to optimize payback. Capable of being operated with occupancy sensor



APPLICATION

Various commercial industrial applications with high ceilings: warehouse, manufacturing facilities, retail, gymnasiums, grocery.



SPECIFICATION FEATURES

Construction

Rigid, low-profile steel housing. Precision-engineered and manufactured optics to optimize light delivery to the working plane. Convenient mounting options and sufficient knockouts for controls integration and multiple connection options. Housing features radiator slots for heat dissipation and low temperature LED operation. LED module and driver are replaceable. Housing and optics maintain damp location rating with all internal components.

Mounting

Comes standard equipped with V-hooks for mounting. Various mounting options available: surface, suspension, air craft cable, and chain.

Finish

Highly reflective finish. Baked white paint, applied after fabrication.

Electrical

Luminaire utilizes long life, high efficacy LEDs and a highly efficient, reliable LED driver. 120V-277V input voltage for increased versatility. 0-10V continuous dimming comes standard. Ideal when used in conjunction with controls and sensors. Comes equipped with quick disconnect for compliance with US code.

Optics

Die formed, 95% reflectivity optical reflectors optimizes performance and light delivery. Comes standard with high transmission frosted lens.

Certifications / Regulatory

All components used have UL approval. UL Class 2. Power supply: SCP, OTP, OVP protection, FCC Part 15 Class B, UL8750 Class 2.

Warranty

7-year limited warranty. See complete warranty terms for details.

Quick Ship Product

- EHB2-90/840
- EHB2-110/840
- EHB2-110/850
- EHB2-162/840
- EHB2-162/850
- EHB4-223/840
- EHB4-223/850
- EHB4-321/850

ORDERING INFORMATION

Sample Number: EHB2-162/850

EHB	4	L	8	40	(Blank)	(Blank)
Series	Form Factor	Lumen Package	CRI	CCT	Input Voltage	Dimming
EHB = LED Slim Linear High Bay	2 = 2' 4 = 4'	2' length: 110 = 110W 162 = 162W 4' length: 223 = 223W 321 = 321W	8 - 83+ CRI	40 - 4000K 50 - 5000K	(Blank) - 120V-277V 480 - 480V	(Blank) - 0-10V Continuous Dimming

Options

Accessories

WG = Wire Guard (see pg. 2 for details)
PMK = Single-point pendant mount kit
SMK = Surface mount kit
ACC = Aircraft cable suspension kit
CHS = S-chain set (4 1/4")
CRD-x = SJTOW black cord, 18/3, x=length
TLP = Nema locking plug

Controls

PIR = PIR Occupancy On/Off Sensor
OS - Integrated step dimming PIR occupancy sensor
DL - Integrated daylight harvesting
SMC - Smart Control System

Emergency Backup

EM700 - 700lm
EM1400 - 1400lm
EM2000 - 2000lm

SUMMARY

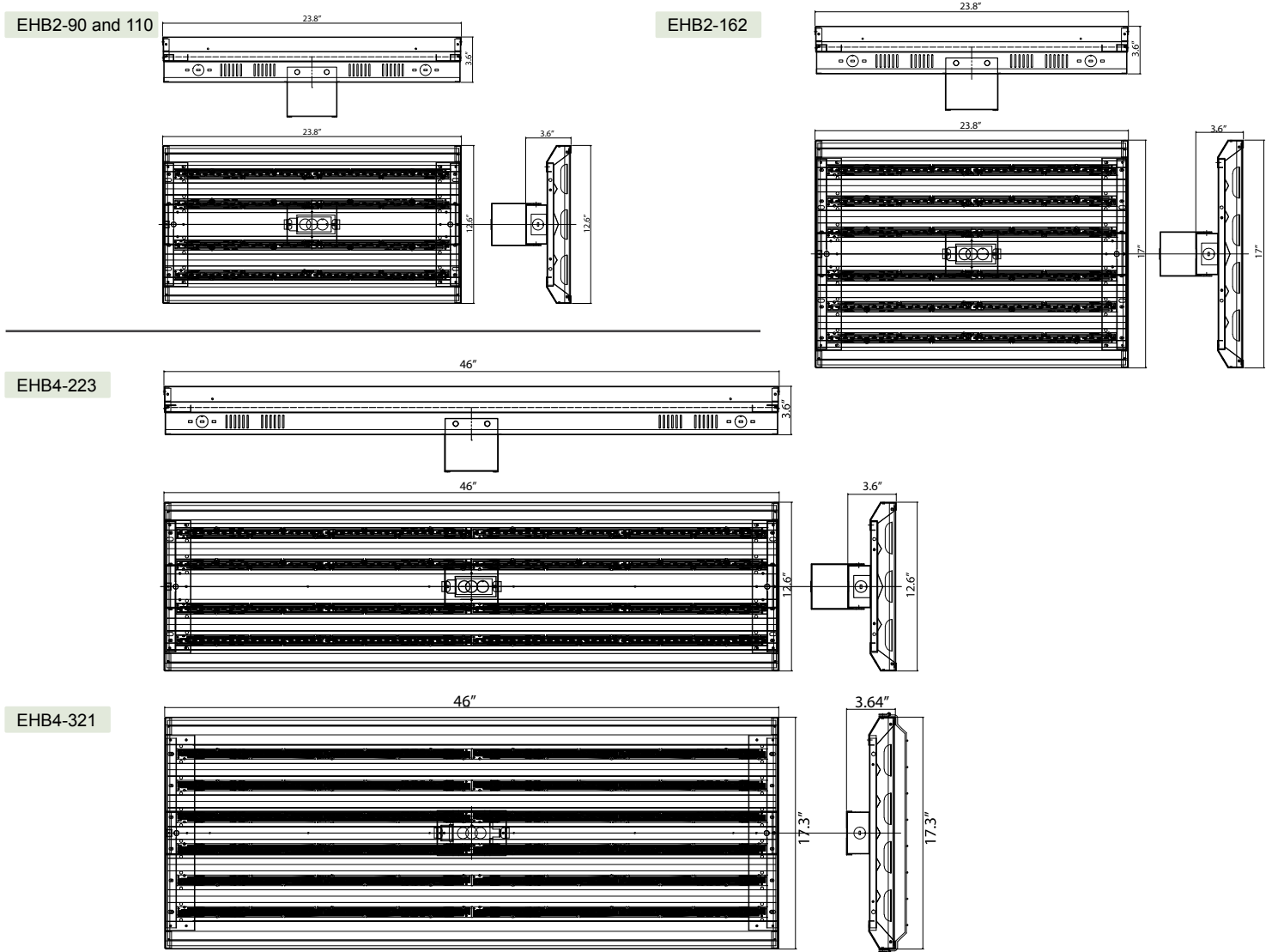
Input Voltage	120V-277V
Input Frequency	50/60 Hz
Power Factor	> 0.95
THD (Max.)	20%
Efficacy	> 130 LPW
Controls/ Dimming	Full Range 0-10V dimming standard
Dimming Range	10-100%
CRI	83+, R9 > 0
CCT	4000K and 5000K
Operating Temp.	-20- +55C
Rated Life	70,000 hours

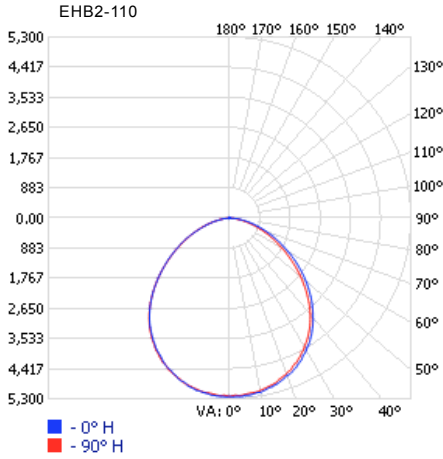
ENERGY PERFORMANCE DATA

Form Factor	Part No.	Rated Wattage (W)	Tested Wattage (W)	Delivered Lumens (lm)	Efficacy (lm/W)
2' Frosted Lens	EHB2- 90/840	90	90	11700	130
	EHB2- 90/850			11790	131
	EHB2-110/840	110	105	14300	130
	EHB2-110/850			14410	131
	EHB2-162/840	162	159	21060	130
EHB2-162/850	21222			131	
4' Frosted Lens	EHB4-223/840	223	210	28990	130
	EHB4-223/850			29213	131
	EHB4-321/840	321	313	41730	130
	EHB4-321/850			42051	131

PHYSICAL PARAMETERS

DIMENSION





Candlepower

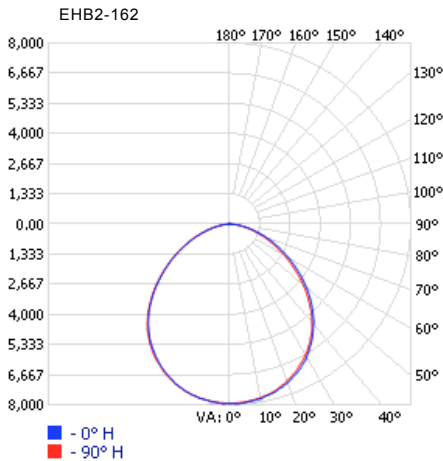
ANGLE IN DEG	0	45	90
0	5228	5228	5228
5	5210	5220	5184
10	5187	5153	5129
15	5070	5046	5022
20	4908	4897	4849
25	4726	4698	4656
30	4477	4428	4367
35	4170	4126	4048
40	3793	3758	3665
45	3378	3319	3212
50	2927	2847	2729
55	2454	2362	2241
60	1983	1886	1775
65	1536	1443	1346
70	1129	1037	960
75	756	687	627
80	442	394	350
85	185	156	128
90	18	15	8

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80			70			50			30			10			0		
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
1	1.09	1.05	1.01	0.97	1.07	1.03	0.99	0.86	0.98	0.95	0.93	0.94	0.92	0.9	0.91	0.89	0.87	0.85
2	1	0.92	0.86	0.8	0.97	0.9	0.84	0.73	0.87	0.82	0.78	0.83	0.79	0.76	0.8	0.77	0.74	0.72
3	0.92	0.82	0.74	0.68	0.89	0.8	0.73	0.63	0.77	0.71	0.66	0.74	0.69	0.65	0.72	0.67	0.63	0.61
4	0.84	0.73	0.64	0.58	0.82	0.71	0.63	0.55	0.69	0.62	0.56	0.66	0.6	0.56	0.64	0.59	0.55	0.53
5	0.78	0.65	0.56	0.5	0.75	0.64	0.56	0.48	0.62	0.55	0.49	0.6	0.54	0.49	0.58	0.52	0.48	0.46
6	0.72	0.59	0.5	0.44	0.7	0.58	0.5	0.42	0.56	0.49	0.43	0.54	0.48	0.43	0.53	0.47	0.42	0.4
7	0.67	0.53	0.45	0.39	0.65	0.53	0.44	0.38	0.51	0.44	0.38	0.5	0.43	0.38	0.48	0.42	0.38	0.36
8	0.62	0.49	0.4	0.35	0.6	0.48	0.4	0.34	0.47	0.4	0.34	0.45	0.39	0.34	0.44	0.38	0.34	0.32
9	0.58	0.45	0.37	0.31	0.57	0.44	0.37	0.31	0.43	0.36	0.31	0.42	0.36	0.31	0.41	0.35	0.31	0.29
10	0.54	0.41	0.34	0.28	0.53	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.33	0.28	0.38	0.32	0.28	0.26

Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	4,060.60	30.10%
0-40	6,607.20	49%
0-60	11,177.30	82.90%
60-90	2,254.20	16.70%
70-100	872.1	6.50%
90-120	16.6	0.10%
0-90	13,431.50	99.70%
90-180	45.4	0.30%
0-180	13,476.90	100%



Candlepower

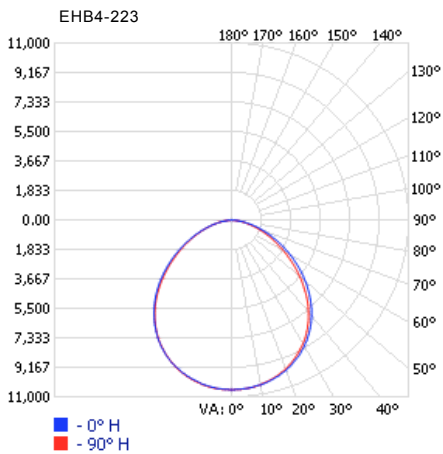
ANGLE IN DEG	0	45	90
0	7942	7942	7942
5	7925	7912	7902
10	7841	7828	7808
15	7694	7667	7649
20	7472	7418	7391
25	7178	7117	7071
30	6794	6737	6685
35	6310	6285	6218
40	5771	5730	5656
45	5140	5091	4981
50	4459	4371	4264
55	3734	3638	3524
60	3019	2915	2807
65	2338	2235	2144
70	1710	1606	1540
75	1150	1065	1010
80	669	611	566
85	280	242	210
90	38	26	17

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80			70			50			30			10			0		
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
1	1.09	1.05	1.01	0.97	1.07	1.03	0.99	0.86	0.98	0.95	0.93	0.94	0.92	0.9	0.91	0.89	0.87	0.85
2	1	0.92	0.86	0.8	0.97	0.9	0.84	0.73	0.87	0.82	0.77	0.83	0.79	0.76	0.8	0.77	0.74	0.72
3	0.91	0.81	0.74	0.67	0.89	0.8	0.73	0.63	0.77	0.71	0.65	0.74	0.69	0.64	0.71	0.67	0.63	0.61
4	0.84	0.72	0.64	0.57	0.82	0.71	0.63	0.54	0.69	0.62	0.56	0.66	0.6	0.55	0.64	0.59	0.55	0.53
5	0.77	0.65	0.56	0.5	0.75	0.64	0.56	0.48	0.62	0.54	0.49	0.6	0.53	0.48	0.58	0.52	0.48	0.46
6	0.72	0.59	0.5	0.44	0.7	0.58	0.49	0.42	0.56	0.48	0.43	0.54	0.48	0.43	0.52	0.47	0.42	0.4
7	0.66	0.53	0.45	0.39	0.65	0.52	0.44	0.37	0.51	0.43	0.38	0.49	0.43	0.38	0.48	0.42	0.38	0.36
8	0.62	0.49	0.4	0.35	0.6	0.48	0.4	0.34	0.47	0.39	0.34	0.45	0.39	0.34	0.44	0.38	0.34	0.32
9	0.58	0.45	0.37	0.31	0.56	0.44	0.36	0.3	0.43	0.36	0.31	0.42	0.35	0.31	0.41	0.35	0.31	0.29
10	0.54	0.41	0.33	0.28	0.53	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.28	0.26

Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	6,174.40	29.80%
0-40	10,065.30	48.60%
0-60	17,120.90	82.70%
60-90	3,540.50	17.10%
70-100	1,378.50	6.70%
90-120	18.6	0.10%
0-90	20,661.30	99.70%
90-180	52.9	0.30%
0-180	20,714.20	100%



Candlepower

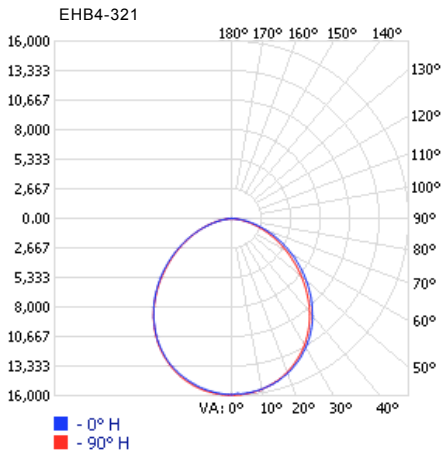
ANGLE IN DEG	0	45	90
0	10550	10550	10550
5	10513	10528	10520
10	10412	10399	10398
15	10202	10175	10152
20	9933	9874	9838
25	9511	9466	9402
30	9042	8976	8874
35	8436	8364	8217
40	7745	7617	7444
45	6910	6755	6547
50	6009	5815	5569
55	5063	4836	4585
60	4110	3870	3637
65	3185	2964	2764
70	2320	2134	1989
75	1552	1419	1315
80	892	812	746
85	365	326	298
90	30	37	40

Coefficients of Utilization - Zonal Cavity Method

RCC	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80			70			50			30			10			0		
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
1	1.09	1.05	1.01	0.97	1.07	1.03	0.99	0.86	0.98	0.95	0.93	0.94	0.92	0.9	0.91	0.89	0.87	0.85
2	1	0.92	0.86	0.8	0.97	0.9	0.84	0.73	0.87	0.82	0.77	0.83	0.79	0.75	0.8	0.77	0.74	0.72
3	0.91	0.81	0.73	0.67	0.89	0.8	0.72	0.63	0.77	0.71	0.65	0.74	0.69	0.64	0.71	0.67	0.63	0.61
4	0.84	0.72	0.64	0.57	0.82	0.71	0.63	0.54	0.68	0.62	0.56	0.66	0.6	0.55	0.64	0.59	0.55	0.52
5	0.77	0.65	0.56	0.5	0.75	0.64	0.56	0.47	0.62	0.54	0.49	0.6	0.53	0.48	0.58	0.52	0.48	0.46
6	0.71	0.59	0.5	0.44	0.7	0.58	0.49	0.42	0.56	0.48	0.43	0.54	0.48	0.43	0.52	0.47	0.42	0.4
7	0.66	0.53	0.45	0.39	0.65	0.52	0.44	0.37	0.51	0.43	0.38	0.49	0.43	0.38	0.48	0.42	0.38	0.36
8	0.62	0.49	0.4	0.34	0.6	0.48	0.4	0.34	0.47	0.39	0.34	0.45	0.39	0.34	0.44	0.38	0.34	0.32
9	0.58	0.45	0.37	0.31	0.56	0.44	0.36	0.3	0.43	0.36	0.31	0.42	0.35	0.31	0.41	0.35	0.31	0.29
10	0.54	0.41	0.33	0.28	0.53	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.28	0.26

Zonal Lumen Summary

ZONE	LUMENS	% LUMINAIRE
0-30	8,213.30	29.80%
0-40	13,392.30	48.50%
0-60	22,796.80	82.60%
60-90	4,724.40	17.10%
70-100	1,847.00	6.70%
90-120	27.5	0.10%
0-90	27,521.20	99.70%
90-180	71	0.30%
0-180	27,592.20	100%



Candlepower			
ANGLE IN DEG	0	45	90
0	15896	15896	15896
5	15810	15837	15873
10	15636	15634	15651
15	15311	15298	15268
20	14839	14794	14732
25	14204	14134	14026
30	13424	13326	13179
35	12476	12369	12147
40	11376	11238	10979
45	10177	9958	9658
50	8863	8609	8301
55	7514	7236	6920
60	6182	5897	5592
65	4871	4592	4324
70	3606	3358	3147
75	2431	2234	2062
80	1390	1240	1110
85	568	467	364
90	58	33	17

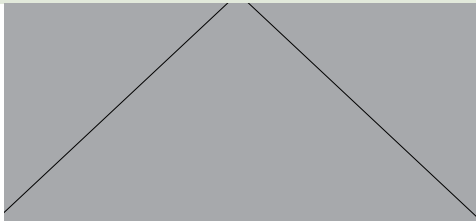
Coefficients of Utilization - Zonal Cavity Method																		
RCC %:	EFFECTIVE FLOOR CAVITY REFLECTANCE: 20%																	
	80	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20
RW %:	70	50	30	0	70	50	30	0	50	30	20	50	30	20	50	30	20	0
RCR: 0	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	1
1	1.09	1.05	1.01	0.97	1.07	1.03	0.99	0.86	0.98	0.95	0.92	0.94	0.92	0.9	0.91	0.89	0.87	0.85
2	1	0.92	0.85	0.8	0.97	0.9	0.84	0.73	0.87	0.81	0.77	0.83	0.79	0.75	0.8	0.77	0.74	0.72
3	0.91	0.81	0.73	0.67	0.89	0.8	0.72	0.62	0.77	0.7	0.65	0.74	0.69	0.64	0.71	0.67	0.63	0.61
4	0.84	0.72	0.64	0.57	0.82	0.71	0.63	0.54	0.68	0.61	0.56	0.66	0.6	0.55	0.64	0.59	0.54	0.52
5	0.77	0.65	0.56	0.5	0.75	0.64	0.55	0.47	0.61	0.54	0.49	0.59	0.53	0.48	0.58	0.52	0.48	0.46
6	0.71	0.58	0.5	0.43	0.7	0.57	0.49	0.42	0.56	0.48	0.43	0.54	0.47	0.42	0.52	0.47	0.42	0.4
7	0.66	0.53	0.44	0.38	0.65	0.52	0.44	0.37	0.51	0.43	0.38	0.49	0.43	0.38	0.48	0.42	0.37	0.35
8	0.62	0.48	0.4	0.34	0.6	0.48	0.4	0.34	0.46	0.39	0.34	0.45	0.39	0.34	0.44	0.38	0.34	0.32
9	0.58	0.45	0.36	0.31	0.56	0.44	0.36	0.3	0.43	0.36	0.31	0.42	0.35	0.31	0.41	0.35	0.3	0.29
10	0.54	0.41	0.33	0.28	0.53	0.41	0.33	0.28	0.4	0.33	0.28	0.39	0.32	0.28	0.38	0.32	0.28	0.26

Zonal Lumen Summary		
ZONE	LUMENS	% LUMINAIRE
0-30	12,277.70	29.80%
0-40	19,916.40	48.40%
0-60	33,837.50	82.20%
60-90	7,246.40	17.60%
70-100	2,818.80	6.80%
90-120	37.4	0.10%
0-90	41,083.80	99.80%
90-180	99.6	0.20%
0-180	41,183.40	100%

OPTION

ACCESSORY

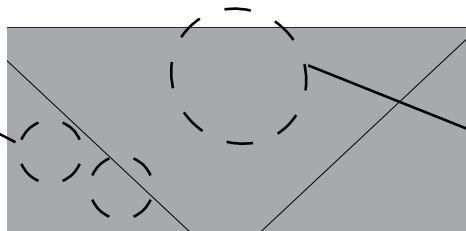
Wire Guard



Part # for ordering separately:
 EHB-WG-2L4M (Wire guard for EHB2-110)
 EHB-WG-2L6M (Wire guard for EHB2-162)
 EHB-WG-4L4M (Wire guard for EHB4-223)
 EHB-WG-4L6M (Wire guard for EHB4-321)

Mounting

V-Clips, air-craft cable, and chain.



Pendant Hanger



WIRELESS SMART CONTROL SYSTEM (ASMC)

The Alphalite Wireless Smart Control System is an ideal choice to provide convenient control of lighting. The LED controller uses wireless technology to communicate with other self-powered products in the system and provides an amazingly simple solution for dimming control of LED lighting

APPLICATION

Versatile solution for general purpose applications. Ideal for multi level building, offices, school, warehouse, manufacturing facilities, and spaces that demand energy demand reduction and high quality light.

BENEFITS

- Reliable, longer indoor range wireless communication
- Easy Design-in
- License-free
- Self-powered
- Lower energy costs
- Lower installation costs
- Strength of interoperability
- Convenient access to replaceable, standard components reduces life cycle costs

