

# Industrial Low Bay (ESB)

## Industrial Low Bay Specification

Industrial low bay luminaire shall consist of a two piece heavy duty die cast aluminum housing designed for most industrial applications. Ballast mounted directly to the ballast housing for cooler operation. Available in 250 to 400 watt high pressure sodium lamp and 175 to 400 watt metal halide lamp. Available with (specify) 120, 208, 240, 277, 480 volt, or 4MT (120,208,240,277V) 60Hz ballast. Luminaire shall be completely pre-wired for ease of installation.

## Basic Product Description

Luminaire is finished in white powder polyester finish with 3/4" threaded hub on top of pendant adapter. The pendant slide on adapter assures plumb alignment for swivel pendant and pre-wired power hook mounting. Labor saving combination through wire and outlet box slide on adapter has key hole slots for direct to junction box installation. Porcelain socket, nickel plated screw shell with lamp grips and spring loaded center contact eliminates lamp loosening.

## Ballast Characteristics

Industrial Low Bay shall contain a long lasting, suitable for 55°C ambient temperature, U.L. recognized High Power Factor (HPF) auto-transformer type ballast with class II insulation. Will start lamps at -20°F (-30°C) for metal halide and -40°F (-40°C) for high pressure sodium. Mercury vapor lamps may be used in 175-400 watt metal halide fixtures. For availability of 220/240V, 50Hz ballast - consult factory.

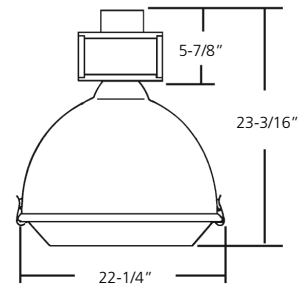
## Reflector Assembly

A heavy duty spun aluminum reflector is finished in high reflectance, high heat white polyester powder coating. An injection molded, U.V. stabilized acrylic drop lens provides low glare and a wide beam symmetrical light distribution (polycarbonate lens available - consult factory). The reflector is hinged and latched for ease of relamping.



Lamp not included

WEIGHT = 20-30 lbs



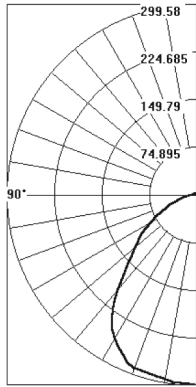
Accessories/Mounting Brackets, see Accessory Page

Ordering Example							
Unit	Wattage	Photometrics	Mounting	Lamp Style	Voltage	Ballast Style	Options
ESB	4	5	7	H	120	H	EDAL-22
Industrial Low Bay	3 - 175 4 - 250 6 - 400 200 - 200PS 320 - 320PS 350 - 350PS 400 - 400PS	5 - Wide Spread	7 - Pendent Mount 8 - Comb thru wire/outlet box mount	H - Metal Halide LS - High Pressure Sodium	120 208 240 277 480 4MT- (120, 208, 240, 277V)	H - High Power Factor	EDAL-22: 22" Drop Acrylic Lens EDPL-22: 22" Drop Polycarbonate Lens
				<b>Accessories</b>			
				<b>F</b>			
				SIF - Single Inline Fuse (120, 277V)			
				DIF - Double Inline Fuse (208, 240, 480V)			
				FB - Filter Breather			
				BSC - Ballast Safety Cable (6 ft.)			
				RSC - Reflector Safety Cable (2 ft.)			
				EM - Emergency Quartz Relay and Socket			
				EM60 - Emergency Quartz Delay Relay and Socket			
				QS - Quartz Socket only - auxiliary power req'd.			
				DP - Damp Location			
				3CPLG - 3' cord w/locking plug			
				MH 3/4 - 3/4" Male Hook			
				ML 3/4 - 3/4" Male Loop			
				MPH 3/4 - 3/4" Power Hook			
				QB - Encapsulated ballast for quiet operation			
				DL - Energy saver "Dualumen" system			
CSA Certification - consult factory.							



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## Photometrics



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	239.0	23.9	32.5
0-40	384.1	38.4	52.2
0-60	601.0	60.1	81.7
0-90	715.7	71.6	97.3
90-120	16.6	1.7	2.3
90-130	19.7	2.0	2.7
90-150	20.2	2.0	2.7
90-180	20.2	2.0	2.7
0-180	735.9	73.6	100.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																		
	80			70			50			30			0					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0			
0	87	87	87	87	85	85	85	81	81	81	77	77	77	73	73	73	72	
1	80	77	74	71	78	75	72	70	72	69	67	68	67	65	65	64	63	61
2	73	68	63	59	71	66	62	58	63	60	57	61	58	55	58	56	54	52
3	68	60	55	50	66	59	54	50	57	52	49	54	51	47	52	49	46	45
4	62	54	48	43	60	53	47	43	51	46	42	49	45	41	47	44	41	39
5	57	49	42	38	56	48	42	37	46	41	37	44	40	36	43	39	36	34
6	53	44	38	33	52	43	37	33	42	37	33	40	36	32	39	35	32	30
7	50	40	34	30	48	39	34	30	38	33	29	37	32	29	36	32	29	27
8	46	37	31	27	45	36	31	27	35	30	26	34	29	26	33	29	26	24
9	43	34	28	24	42	33	28	24	32	27	24	32	27	24	31	26	23	22
10	41	31	26	22	40	31	26	22	30	25	22	29	25	22	29	24	21	20

Catalog Number: ESB-657LS-XXXXH-EDPL-22  
Lamp: Clear High Pressure Sodium

Reflector: Formed white painted dome shaped (metal reflector) with truncated conical socket collar, plastic prismatic drop lens enclosure

Lumens: Per 1,000 lamp lumens

Efficiency: 73.6%

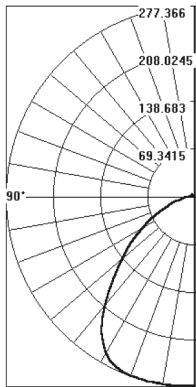
CIE Type: Direct

Luminaire Spacing Criteria: 1.3

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0	299.6	
5	296.6	28.3
15	290.6	82.6
25	277.6	128.1
35	234.4	145.2
45	155.4	121.1
55	107.1	95.8
65	63.0	63.2
75	33.6	35.7
85	14.0	15.8
90	9.1	
95	6.4	7.1
105	4.3	4.7
115	5.0	4.8
125	3.7	3.1
135	1.1	0.5
145	0.0	0.0
155	0.0	0.0
165	0.0	0.0
175	0.0	0.0
180	0.0	0.0



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	230.8	23.1	30.6
0-40	379.8	38.0	50.3
0-60	614.5	61.5	81.4
0-90	733.6	73.4	97.2
90-120	17.4	1.7	2.3
90-130	21.1	2.1	2.8
90-150	21.4	2.1	2.8
90-180	21.4	2.1	2.8
0-180	755.0	75.5	100.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																		
	80			70			50			30			0					
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	0			
0	89	89	89	89	87	87	87	87	83	83	83	79	79	79	75	75	75	73
1	82	79	76	73	80	77	74	72	73	71	69	70	68	66	67	65	64	62
2	75	69	65	60	73	68	63	60	65	61	58	62	59	56	59	57	55	53
3	69	61	56	51	67	60	55	50	58	53	49	55	51	48	53	50	47	45
4	63	55	49	44	62	54	48	43	52	47	43	50	45	42	48	44	41	39
5	59	49	43	38	57	48	42	38	47	41	37	45	40	37	43	39	36	34
6	54	45	38	34	53	44	38	33	42	37	33	41	36	32	39	35	32	30
7	50	41	34	30	49	40	34	30	39	33	29	37	32	29	36	32	29	27
8	47	37	31	27	46	36	31	27	35	30	26	34	29	26	33	29	26	24
9	44	34	28	24	43	34	28	24	33	27	24	32	27	23	31	26	23	22
10	41	32	26	22	40	31	25	22	30	25	22	29	25	21	29	24	21	20

Catalog Number: ESB-657H-XXXXH-EDPL-22  
Lamp: Clear High Metal Halide

Reflector: Formed white painted dome shaped (metal reflector) with truncated conical socket collar, plastic prismatic drop lens enclosure

Lumens: Per 1,000 lamp lumens

Efficiency: 75.5%

CIE Type: Direct

Luminaire Spacing Criteria: 1.3

Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0	275.0	
5	275.4	26.3
15	277.0	78.5
25	273.5	126.1
35	239.6	149.0
45	171.0	132.4
55	114.7	102.3
65	65.1	65.8
75	34.6	37.0
85	14.6	16.3
90	9.4	
95	6.6	7.3
105	4.3	4.6
115	5.6	5.5
125	4.4	3.7
135	0.8	0.4
145	0.0	0.0
155	0.0	0.0
165	0.0	0.0
175	0.0	0.0
180	0.0	0.0

