

# Prism Bay 16 (ESB)

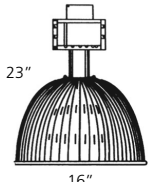


Lamp not included

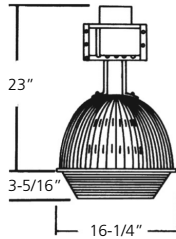


Shown with optional full wire guard

WEIGHT = 15-28 lbs



Form AO & FL



Form AC

For 175W & 250W metal Halide lamps - form AC only

Accessories/Mounting Brackets, see Accessory Page

### Prism Bay 16 Specification

Prism Bay 16 versatile high bay luminaire shall consist of a 16" acrylic reflector/refractor, two piece heavy duty die cast aluminum ballast housing, designed for most industrial and commercial applications. Ballast mounted directly to the ballast housing for cooler operation. Available in 150 to 400 watt high pressure sodium lamp or 175-400 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.

### 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 adaptor has keyhole slots for direct to junction box installation. Porcelain socket will contain a lamp grip, nickel plated spring loaded center contact, eliminating lamp loosening.

### Ballast Characteristics

The Prism Bay shall contain a long lasting, suitable for 40°C ambient temperature, U.L. recognized High Power Factor, auto-transformer type ballast. Will start metal halide lamps at -20°F (-30°C) and -40°F (-40°C) for HPS. Mercury vapor lamps may be used in 175-400 watt metal halide fixtures. For availability of 220/240V 50Hz ballasts - consult factory.

### Reflector/Refractor Assembly

The acrylic seamless reflector/refractor provides a IES type V wide beam distribution. For polycarbonate reflector/refractor, consult factory. The refractor can be supplied open or enclosed. A flat acrylic clear lens is also available.

Reflexor® by LEXALITE®

### Ordering Example

Unit	Wattage	Photometrics	Mounting	Lamp Style	Voltage	Ballast Style	Options
ESB	6	5	7	H	208	H	AO16
Prism Bay	2 - 150 3 - 175** 4 - 250** 6 - 400 200 - 200PS 320 - 320PS** 350 - 350PS** 400 - 400PS	5 - Wide Beam	7 - Pendant Mount 8 - Combination thru wire outlet box	H - Metal Halide LS - High Pressure Sodium	120 208 240 277 480 4MT- (120, 208, 240, 277V) RBH - Remote Ballast*	H - High Power Factor	AO - Open AC - Drop Lens (250W max) FL - Flat Lens (250W max)

### Accessories

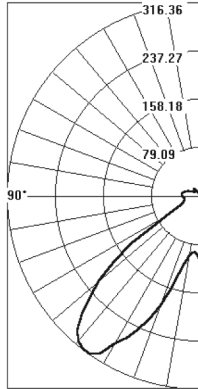
- SIF - Single Inline Fuse (120,277)
- DIF - Double Inline Fuse (208,240,480)
- BSC - Ballast Safety Cable (6 foot)
- RSC - Reflector Safety Cable (2 foot)
- DP - Damp Location
- 3CPLG - 3' cord w/locking plug
- FWG 16 - 16" Wire Guard
- WG - Wire Guard (AO only)
- MH 3/4 - 3/4" Male Hook
- ML 3/4 - 3/4" Male Loop
- MPH 3/4 - 3/4" Power Hook
- EM - Emergency Quartz Relay and Socket
- EM60 - Emergency Quartz Delay Relay and Socket
- QS - Quartz Socket only-auxiliary power required
- FL - Flat Acrylic Clear lens
- QB - Encapsulated ballast for quiet operation
- DL - Energy saver "Dualumen" system

\*Consult Factory  
\*\*Must use protected lamp and special socket and open bottom

CSA Certification - consult factory.

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## Photometrics



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	161.1	16.1	18.3
0-40	356.0	35.6	40.4
0-60	680.8	68.1	77.3
0-90	773.8	77.4	87.8
90-120	76.7	7.7	8.7
90-130	86.3	8.6	9.8
90-150	103.5	10.4	11.7
90-180	107.5	10.7	12.2
0-180	881.3	88.1	100.0

### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

	80				70				50				30				10				0			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
0	102	102	102	102	99	99	99	99	92	92	92	86	86	86	80	80	80	77						
1	94	90	87	84	91	87	84	81	81	79	77	76	74	73	71	70	69	66						
2	87	80	75	71	84	78	73	69	73	69	66	69	65	63	65	62	60	57						
3	80	71	65	60	77	69	63	59	65	60	56	61	57	54	58	55	52	50						
4	74	64	57	52	71	62	56	51	59	53	49	55	51	47	52	49	45	43						
5	67	57	50	44	65	55	49	44	52	47	42	50	45	41	47	43	39	37						
6	62	51	43	38	59	49	42	37	47	40	36	44	39	35	42	37	34	32						
7	56	45	37	32	54	43	36	31	41	35	30	39	33	29	37	32	28	27						
8	51	39	32	18	49	38	31	27	36	30	26	34	29	25	33	28	24	22						
9	47	35	28	23	45	34	27	22	32	26	22	30	25	21	29	24	20	18						
10	43	31	24	19	41	30	23	19	28	22	18	27	21	17	25	20	17	15						

Catalog Number: ESB-657LS-XXXH-AO-16  
Lamp: Clear High Pressure Sodium

Reflector: Formed open bottom 16" dia.  
acrylic reflector/refractor.

Lumens: Per 1,000 lamp lumens

Efficiency: 88.1%

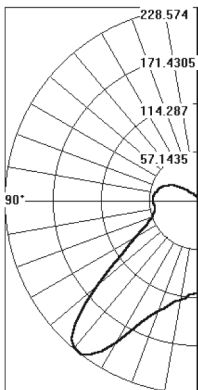
CIE Type: Semi-Direct

Luminaire Spacing Criteria: 2.0

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	103.3	
5	92.4	9.1
15	131.1	40.0
25	244	112.0
35	316.4	195.2
45	274.0	208.3
55	137.1	116.3
65	34.5	36.4
75	25.6	27.5
85	26.7	29.0
90	28.1	
95	29.0	31.4
105	25.8	27.2
115	18.0	18.0
125	10.1	9.6
135	12.8	10.1
145	11.3	7.1
155	5.1	2.3
165	4.6	1.3
175	4.6	0.4
180	4.1	



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	123.0	12.3	13.6
0-40	261.3	26.1	29.0
0-60	518.5	51.8	57.5
0-90	699.8	70.0	77.6
90-120	150.5	15.0	16.7
90-130	177.3	17.7	19.7
90-150	197.6	19.8	21.9
90-180	202.0	19.8	22.4
0-180	901.7	90.2	100.0

### COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD

	80				70				50				30				10				0			
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	
0	103	103	103	103	98	98	98	98	89	89	89	81	81	81	73	73	73	70						
1	92	87	83	79	88	83	80	76	76	73	70	69	67	64	63	61	59	56						
2	84	76	70	65	80	73	67	62	66	62	58	60	57	54	55	52	49	46						
3	76	67	59	54	72	64	57	52	58	53	48	53	49	45	48	45	42	39						
4	70	59	51	45	66	57	50	44	52	46	41	48	43	39	43	39	36	33						
5	64	53	44	39	61	50	43	37	46	40	35	42	37	33	39	34	31	28						
6	58	47	38	33	55	45	37	32	41	35	30	38	32	28	34	30	26	24						
7	53	41	33	28	51	39	32	27	36	30	25	33	28	24	30	26	22	20						
8	49	37	28	24	46	35	28	23	32	26	22	30	24	20	27	22	19	17						
9	45	33	25	20	43	31	24	19	29	23	18	26	21	17	24	19	16	14						
10	41	29	22	17	39	28	21	16	26	20	15	23	18	14	21	17	13	12						

Catalog Number: ESB-657H-XXXH-AC-16  
Lamp: Phosphor Coated Metal Halide

Reflector: Formed open bottom 16" dia.  
acrylic reflector/refractor.

Lumens: Per 1,000 lamp lumens

Efficiency: 90.2%

CIE Type: Semi-Direct

Luminaire Spacing Criteria: 1.9

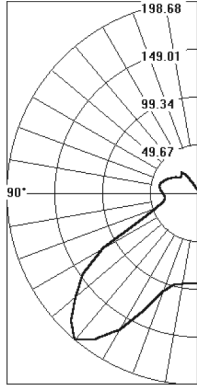
Candela & Lumen values are based on 1,000 lamp lumens. For other lamp lumen ratings, multiply candela and lumen values by the number: Lumens divided by 1,000.

Per 1,000 Lamp Lumens

DEG	CANDELA	LUMENS
0	110.0	
5	112.0	10.9
15	127.5	36.5
25	159.2	75.5
35	223.1	138.4
45	205.2	156.0
55	111.0	101.2
65	67.4	67.6
75	53.2	56.7
85	52.2	57.0
90	58.1	
95	53.0	57.5
105	49.7	52.0
115	41.5	41.0
125	29.7	26.0
135	18.0	14.0
145	9.4	6.4
155	6.3	3.0
165	3.8	1.1
175	3.3	0.3
180	3.3	



# Prism Bay 16 (ESB)



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	100.7	10.1	12.2
0-40	216.8	21.7	26.3
0-60	490.1	49.0	59.4
0-90	640.0	64.0	77.6
90-120	120.7	12.1	14.6
90-130	146.4	14.6	17.8
90-150	180.4	18.0	21.9
90-180	184.7	18.5	22.4
0-180	824.6	82.5	100.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																		
	80			70			50			30			10			0		
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	94	94	94	94	89	89	89	89	81	81	81	74	74	74	67	67	67	64
2	84	80	76	73	80	76	73	70	69	67	64	63	61	59	57	55	54	51
3	76	69	63	58	72	66	61	56	60	56	52	54	51	48	49	47	44	41
3	69	60	53	47	65	57	51	46	52	47	43	47	43	39	43	40	37	34
4	63	52	45	39	59	50	43	38	46	40	35	42	37	33	38	34	31	28
5	57	46	39	33	54	44	37	32	40	34	30	37	32	28	33	29	26	24
6	52	41	33	28	49	39	32	27	36	30	25	33	28	24	30	26	22	20
7	48	37	29	24	45	35	28	23	32	26	22	29	24	20	27	22	19	17
8	44	33	26	21	42	32	25	20	29	23	19	26	21	18	24	20	17	15
9	41	30	23	18	39	29	22	18	26	21	17	24	19	16	22	18	15	13
10	38	27	20	16	36	26	20	16	24	18	15	22	17	14	20	16	13	11

Catalog Number: ESB-657LS-XXXH-AC-16  
Lamp: Clear High Pressure Sodium

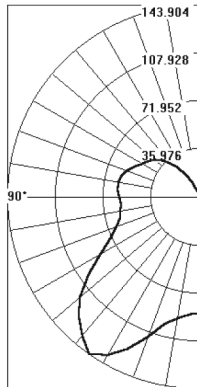
Reflector: Formed acrylic reflector/refractor with lower refractor dish pic.  
16" dia.

Lumens: Per 1,000 lamp lumens  
Efficiency: 82.5%  
CIE Type: Semi-Direct  
Luminaire Spacing Criteria: 2.1

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	92.8	
5	94.1	9.1
15	97.7	28.1
25	135.3	63.5
35	184.6	116.1
45	186.1	144.0
55	145.8	129.4
65	65.1	69.2
75	39.2	42.1
85	35.2	38.5
90	36.6	
95	39.7	43.1
105	40.6	42.6
115	35.4	35.0
125	29.0	25.7
135	25.3	20.1
145	22.6	14.0
155	5.4	3.0
165	4.1	1.1
175	2.8	0.3
180	2.2	



ZONAL LUMEN SUMMARY			
ZONE	LUMENS	%LAMP	%FIXT
0-30	95.6	9.6	11.2
0-40	184.6	18.5	21.6
0-60	372.5	37.3	43.5
0-90	575.6	57.6	67.3
90-120	184.2	18.4	21.5
90-130	225.0	22.6	26.4
90-150	272.6	27.3	31.9
90-180	280.1	28.0	32.7
0-180	855.6	85.6	100.0

COEFFICIENTS OF UTILIZATION - ZONAL CAVITY METHOD																		
	80			70			50			30			10			0		
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	95	95	95	95	90	90	90	90	80	80	80	70	70	70	62	62	62	58
1	84	79	75	71	79	74	70	67	66	62	60	57	55	53	50	48	46	43
2	76	68	61	56	71	64	58	53	56	51	47	49	45	42	43	40	37	34
3	68	59	51	45	64	55	48	43	49	43	39	42	38	34	37	33	30	27
4	62	51	43	37	58	48	41	36	43	37	32	37	33	29	32	29	25	23
5	57	45	37	32	53	43	35	30	38	32	27	33	28	24	29	25	22	19
6	52	40	33	27	49	38	31	26	34	28	23	30	25	21	26	22	19	16
7	48	36	29	23	45	34	27	22	30	24	20	27	22	18	23	19	16	14
8	44	33	25	20	42	31	24	19	28	22	18	24	19	16	21	17	14	12
9	41	30	23	18	39	28	22	17	25	20	16	22	17	14	19	16	13	11
10	38	27	20	16	36	26	19	15	23	18	14	20	16	13	18	14	11	10

Catalog Number: ESB-657H-XXXH-AO-16  
Lamp: Phosphor Coated Metal Halide

Reflector: Formed acrylic reflector/refractor with lower refractor dish pic.  
16" dia.

Lumens: Per 1,000 lamp lumens  
Efficiency: 85.6%  
CIE Type: Semi-Direct  
Luminaire Spacing Criteria: 1.9

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	87.1	
5	89.0	8.6
15	98.8	28.6
25	125.8	58.3
35	144.0	89.1
45	127.0	98.3
55	100.4	89.6
65	73.5	73.1
75	60.0	65.1
85	58.7	65.0
90	59.7	
95	61.3	66.8
105	60.5	64.0
115	53.8	53.5
125	46.3	41.8
135	38.8	30.0
145	26.6	16.8
155	12.4	6.0
165	4.4	1.3
175	2.3	0.3
180	2.0	