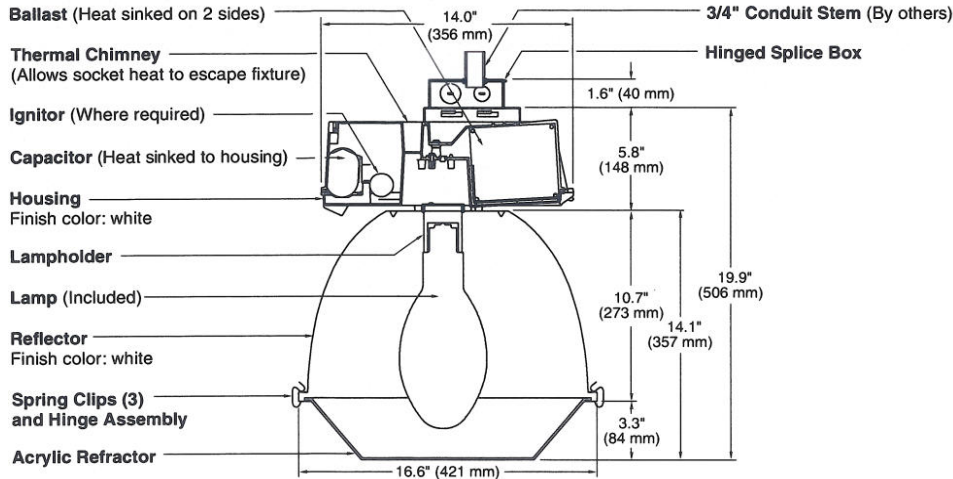


HINGED SPLICE BOX MOUNT

COMPACT LOW BAY — EZ BAY PLUS®

**IC1
SERIES**



SPEC #	WATTAGE	CATALOG #
PULSE START METAL HALIDE		
<input type="checkbox"/> SPEC #	150W PSMH	IC1615-(a)(b)
<input type="checkbox"/> SPEC #	200W PSMH	IC1620-(a)(b)
<input type="checkbox"/> SPEC #	250W PSMH	IC1625-(a)(b)
<input type="checkbox"/> SPEC #	320W PSMH	IC1632-(a)(b)
<input type="checkbox"/> SPEC #	350W PSMH	IC1635-(a)(b)
<input type="checkbox"/> SPEC #	400W PSMH	IC1640-(a)(b)
HIGH PRESSURE SODIUM		
<input type="checkbox"/> SPEC #	150W HPS	IC1515-(a)(b)
<input type="checkbox"/> SPEC #	250W HPS	IC1525-(a)(b)
<input type="checkbox"/> SPEC #	400W HPS	IC1540-(a)(b)

(a) VOLTAGE SUFFIX KEY
M 120/208/240/277V (Standard)
T 120/277/347V (Canada Only) (Standard)
1 120V
2 277V
27 277V Reactor (150 – 400W PSMH Only)
3 208V
4 240V
5 480V
6 347V (Canada Only)

(b) OPTIONS (factory-installed)
-(a)F Fusing
K 2-Level Integrated Sensor
Q Quartz Standby (delay relay w/100W quartz lamp) (N/A on 277V Reactor)
V Polycarbonate Drop Prismatic Lens

Specify (a) Single Voltage — See Voltage Suffix Key
 • 250W, 320W or 400W PSMH

Specify (a) Voltage & (b) Options.
 • 2-Level available – consult factory.
 • Reduced envelope ED28 lamp..

For voltage availability outside the US and Canada, see Bulletin TD-9 or contact your Ruud Lighting authorized International Distributor.

Notes

GENERAL DESCRIPTION

Fixture is constructed of an aluminum die-cast ballast housing with a thermal chimney separating the ballast core and coil from the capacitor and other components. Painted spun-aluminum reflector is scientifically designed to maximize efficiency. Optical chamber is fully gasketed at connection to fixture and between lens and frame. Dacron breather gasket between lens and reflector. The reflector is held to the ballast compartment with screws. Drop prismatic refractor is precision injection-molded acrylic and secure to the reflector by supporting ring and clip assembly. Hinged Splice Box mount is designed for surface or pendant mounting configurations and has two 3/4" and six 1/2" conduit knockouts on the sides and one 3/4" knockout and mounting holes for common junction boxes on the top.

ELECTRICAL

Fixture includes clear, mogul-base lamp. Pulse-rated porcelain open, 4kv-rated screw-shell-type lampholder with spring-loaded center contact. Lamp ignitor included where required. Ballast assemblies are high-power factor and consist of the following circuit types:
 277V Reactor
 150 – 400W PSMH
 HX — High Reactance
 150W PSMH, 150W HPS
 CWA — Constant Wattage Autotransformer
 200 – 400W PSMH; 250 – 400W HPS;
 150W PSMH – 480V

PATENTS

6,394,869; 6,467,927; 6,867,959; 6,974,230;
 Patents Pending

ACCESSORIES

SC-5 Safety Cable with Hang-Fast (5/1.5 m)

LABELS

UL and cUL Listed for damp and wet (IP65-rated fixture option) locations and for a maximum ambient temperature of 40°C; most wattages higher – See Technical Data Sheet TD-12 on our web site.

FINISH

White powdercoat finish. The finish is covered by our seven-year limited warranty.



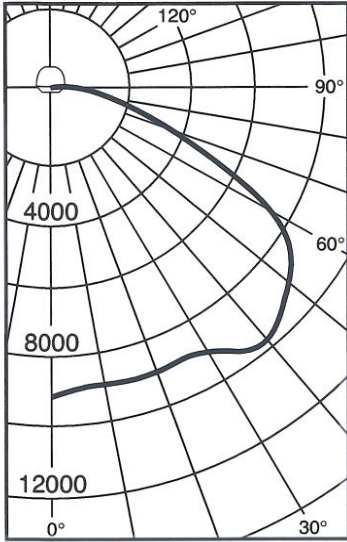
IC1
SERIES

HINGED SPLICE BOX MOUNT

COMPACT LOW BAY — EZ BAY PLUS®

High Pressure Sodium

Lamp: 400 Watt (Clear) – 50,000 lumens
 Lens: Drop Prismatic Acrylic
 Test Distance: 26' (8 m)
 Certified Test Report:
 Independent Testing Laboratories Inc.
 No. ITL 36609



Efficiency = 74.6%; SC = 1.6

Candlepower Summary

Angle	Mean CP	Lumens
0	9011	
5	8870	843
15	8776	2492
25	8835	4112
35	9474	5938
45	9480	7325
55	8243	7244
65	5038	4974
75	2419	2610
85	900	978
95	270	307
105	235	245
115	158	161
125	82	78
135	0	0
145	0	0
155	0	0
165	0	0
175	0	0
180	0	0

Zonal Lumens and Percentages

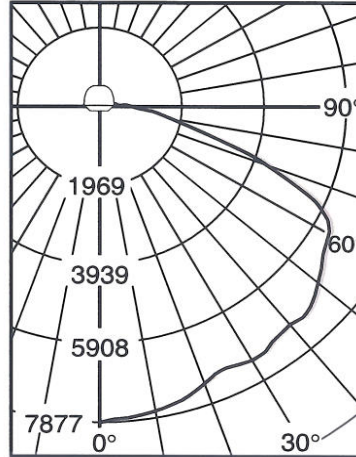
Zone	Lumens	% Lamp	% Fixture
0-30	7447	14.90	20.00
0-40	13385	26.80	35.90
0-60	27953	55.90	74.90
0-90	36515	73.00	97.90
90-120	713	1.40	1.90
90-130	791	1.60	2.10
90-150	791	1.60	2.10
90-180	91	1.60	2.10
0-180	37306	74.60	100.00

Luminance Data

Angle	Average (FL)
45°	36321
55°	35294
65°	25317
75°	15271
85°	7967

Pulse Start Metal Halide

Lamp: 400 Watt (Clear) – 36,000 lumens
 Lens: Drop Prismatic Acrylic
 Test Distance: 26' (8 m)



Efficiency = 76.3%; SC = 1.6

Candlepower Summary

Angle	Mean CP	Lumens
0	6418	
5	6331	601
15	6149	1742
25	6127	2838
35	6336	4028
45	6605	5081
55	5888	5271
65	4876	4677
75	1862	2062
85	595	679
95	190	216
105	158	167
115	92	87
125	11	20
135	0	0
145	0	0
155	0	0
165	0	0
175	0	0
180	0	0

Zonal Lumens and Percentages

Zone	Lumens	% Lamp	% Fixture
0-30	5181	14.40	18.90
0-40	9209	25.60	33.50
0-60	19561	54.30	71.20
0-90	26979	74.90	98.20
90-120	470	1.30	1.70
90-130	489	1.40	1.80
90-150	489	1.40	1.80
90-180	489	1.40	1.80
0-180	27468	76.30	100.00

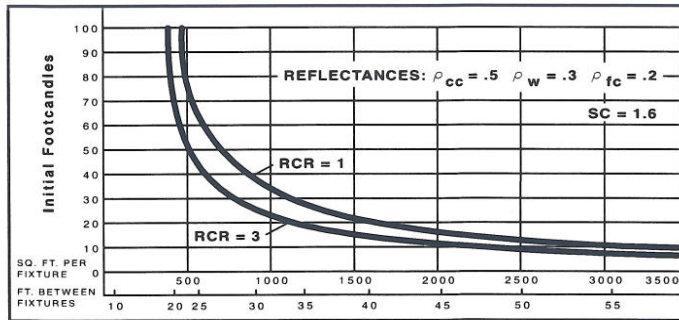
Luminance Data

Angle	Average (FL)
45°	25306
55°	25211
65°	24503
75°	11755
85°	5262

Coefficients of Utilization

Effective Floor Cavity Reflectance = 0.20

CC	80				70				50				30				10			
	WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10		
RCR	0	0.88	0.88	0.88	0.88	0.86	0.86	0.86	0.86	0.82	0.82	0.82	0.78	0.78	0.78	0.75	0.75	0.75		
	1	0.81	0.77	0.74	0.71	0.79	0.75	0.72	0.70	0.72	0.69	0.67	0.69	0.67	0.65	0.66	0.64	0.63		
2	0.74	0.67	0.62	0.58	0.71	0.66	0.61	0.57	0.63	0.59	0.56	0.60	0.57	0.54	0.58	0.55	0.53			
	3	0.67	0.59	0.53	0.48	0.65	0.58	0.52	0.47	0.55	0.50	0.46	0.53	0.49	0.45	0.51	0.47	0.44		
4	0.61	0.52	0.46	0.41	0.59	0.51	0.45	0.40	0.49	0.44	0.39	0.47	0.42	0.39	0.45	0.41	0.38			
	5	0.56	0.46	0.39	0.34	0.54	0.45	0.39	0.34	0.43	0.38	0.33	0.42	0.37	0.33	0.40	0.36	0.32		
6	0.51	0.41	0.34	0.29	0.49	0.40	0.33	0.29	0.38	0.32	0.28	0.37	0.32	0.28	0.35	0.31	0.27			
	7	0.46	0.36	0.29	0.24	0.45	0.35	0.29	0.24	0.34	0.28	0.24	0.32	0.27	0.23	0.31	0.27	0.23		
8	0.43	0.32	0.25	0.21	0.41	0.31	0.25	0.21	0.30	0.25	0.20	0.29	0.24	0.20	0.28	0.23	0.20			
	9	0.39	0.29	0.22	0.18	0.38	0.28	0.22	0.18	0.27	0.21	0.17	0.26	0.21	0.17	0.25	0.21	0.17		
10	0.36	0.26	0.20	0.15	0.35	0.25	0.19	0.15	0.24	0.19	0.15	0.24	0.19	0.15	0.23	0.18	0.15			



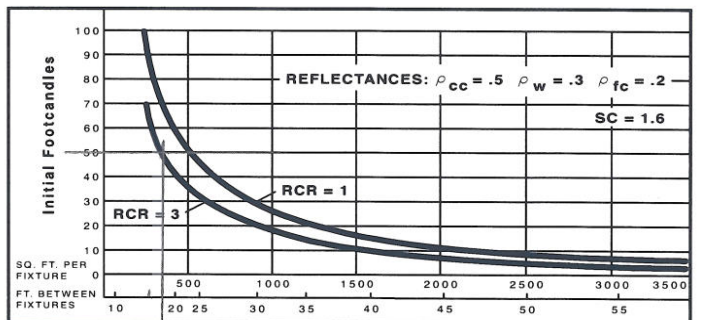
QUICK CALCULATOR: Use this chart to determine the number and spacing of Ruud Compact Low Bay lights with 50,000 lumen, clear 400W HPS lamp. Determine number and spacing for other wattages by using these multipliers:

150W HPS 0.32 250W HPS 0.55

Coefficients of Utilization

Effective Floor Cavity Reflectance = 0.20

CC	80				70				50				30				10			
	WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10		
RCR	0	0.91	0.91	0.91	0.91	0.88	0.88	0.88	0.88	0.84	0.84	0.84	0.80	0.80	0.80	0.77	0.77	0.77		
	1	0.82	0.79	0.75	0.72	0.80	0.77	0.74	0.71	0.73	0.71	0.68	0.70	0.68	0.66	0.67	0.65	0.64		
2	0.75	0.68	0.63	0.58	0.73	0.67	0.62	0.58	0.64	0.60	0.56	0.61	0.58	0.55	0.59	0.56	0.53			
	3	0.68	0.59	0.53	0.48	0.66	0.58	0.52	0.47	0.56	0.50	0.46	0.53	0.49	0.45	0.51	0.47	0.44		
4	0.62	0.52	0.45	0.40	0.60	0.51	0.45	0.40	0.49	0.43	0.39	0.47	0.42	0.38	0.45	0.41	0.38			
	5	0.56	0.46	0.39	0.33	0.54	0.45	0.38	0.33	0.43	0.37	0.32	0.41	0.36	0.32	0.40	0.35	0.31		
6	0.51	0.40	0.33	0.28	0.49	0.39	0.33	0.28	0.38	0.32	0.27	0.36	0.31	0.27	0.35	0.30	0.27			
	7	0.46	0.35	0.28	0.23	0.45	0.35	0.28	0.23	0.33	0.27	0.23	0.32	0.27	0.23	0.31	0.26	0.22		
8	0.43	0.32	0.25	0.20	0.41	0.31	0.25	0.20	0.30	0.24	0.20	0.29	0.24	0.20	0.28	0.23	0.19			
	9	0.39	0.28	0.22	0.17	0.38	0.28	0.22	0.17	0.27	0.21	0.17	0.26	0.21	0.17	0.25	0.20	0.17		
10	0.36	0.26	0.19	0.15	0.35	0.25	0.19	0.15	0.24	0.19	0.15	0.24	0.18	0.15	0.23	0.18	0.14			



QUICK CALCULATOR: Use this chart to determine the number and spacing of Ruud Compact Low Bay lights with 36,000 lumen, clear 400W PSMH lamp. Determine number and spacing for other wattages by using these multipliers:

250W PSMH 0.57 400W PSMH 1.17

max spacing = 17ft x 0.57 = 9'-8 1/4"



© 2012 Ruud Lighting, Inc. – A Cree Company. All rights reserved. The information in this document is subject to change without notice.

9201 Washington Avenue • Racine, Wisconsin 53406-3772 • PHONE: (800) 236-7000 • FAX: (800) 236-7500 • WEB: www.ruudlightingdirect.com Rev. 07/05/12



FEATURES & SPECIFICATIONS

INTENDED USE — ES8P provides a high-performance T8 (HPT8) energy-saving alternative to 3-lamp, 18-cell parabolic fixtures. Used in place of parabolics, ES8P can provide 44% energy savings while meeting IESNA recommended illuminance levels. Ideal for retail, educational, and commercial applications requiring lighting power density as low as 0.6 watts/square foot.

CONSTRUCTION — Designed and optimized for use with CEE (Consortium for Energy Efficiency) qualified, high-lumen T8 lamps and energy-efficient electronic ballasts.

Highly reflective surfaces combine with efficient design to produce up to 86% photometric efficiency and a Luminaire Efficacy Rating (LER) of up to 86 using listed lamps and ballast.

Constructed to comply with New York City electric code. Made in USA.

Robust design, precision-tooling and automated assembly combine to create the industry's strongest louver. Rotary sockets provide for simple lamp insertion and positive engagement into lamp contacts. Mechanical light seal requires no foam gasketing. Integral T-bar clips secure fixture to T-bar system. Housing formed of cold-rolled steel.

Finish: Five-stage iron-phosphate pre-treatment ensures superior paint adhesion and rust resistance. Housing painted after fabrication with environmentally friendly, high gloss, very high reflectivity polyester powder-coat.

Louver painted after fabrication with low gloss, high reflectivity polyester powder coat.

OPTICS — Mechanical shielding is provided with angled length blades, and linear faceted cross baffles. Contoured housing efficiently directs light downward. Lamp cut-out maximizes shielding even in shallow plenum applications and softens light distribution to deliver a balanced amount of light to both vertical and horizontal surfaces.

ELECTRICAL — Standard ballast is high-efficiency, CEE qualified, instant-start, ≤10% THD, universal voltage and sound rated A.

Optional program-start and step-dimming ballasts available.

LISTINGS — UL Listed.

WARRANTY — Light fixture is guaranteed for one year against mechanical defects in manufacture.

Ballast is warranted for five years, and lamp is warranted for three years under system warranty terms provided by lamp and ballast manufacturer. For options, see below.

U.S. PATENT NO.: 6,210,025; 6,231,213, additional patents pending.

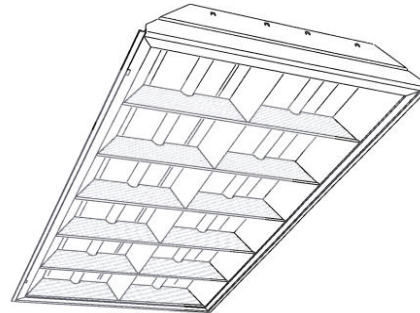
Note: Specifications subject to change without notice.

Catalog Number
Notes
Type



ES8P 2'X4' NY

2 Lamps
T8



Specifications

Length: 48 (121.9)

Width: 24 (60.9)

Depth: 3-11/16 (9.4)

Weight: 26 lbs (11.7 kg)

All dimensions are in inches (centimeters) unless otherwise indicated.

ORDERING INFORMATION

For shortest lead times, configure product using **standard options (shown in bold)**.

Example: 2ES8P 232 BILP L835HT8 NY3

2ES8P		232						
Series	Trim type	Number of lamps/wattage	Voltage	Ballast	Lamp ²	Options		
2ES8P	(blank) Lay-in grid	232 2-lamp, 32W T8 (48") Included.	(blank) MVOLT ¹	BILP IS, high efficiency, .78 bf (low) BINP IS, high efficiency, .88 bf (normal) BIHP IS, high efficiency, 1.20 bf (high) BSNP PS, step-dimming, high efficiency, .88 bf (normal)	L835HT8 3100 lumen, long life, 3500K L830HT8 3100 lumen, long life, 3000K L841HT8 3100 lumen, long life, 4100K	EL Emergency battery pack (nominal 300 lumens) EL14 Emergency battery pack (nominal 1400 lumens) PWS90N1836 6' prewire, 3/8" dia., 18-gauge, 1 circuit NY3 I.B.E.W. Local 3 union made		

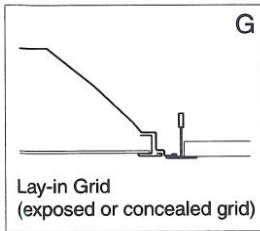
Accessories: Order as separate catalog number.	
DGA 2x4	Drywall grid adaptor

Notes

- MVOLT (120-277 volt).
- Required. All fixtures shipped with lamps installed.

ES8P 2'x4' NY Premium High-Performance T8 Lighting

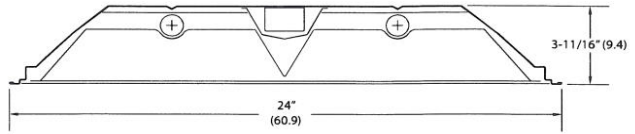
MOUNTING DATA



Notes

For hard-ceiling applications, order a drywall grid adaptor (DGA 2x4) as an accessory.

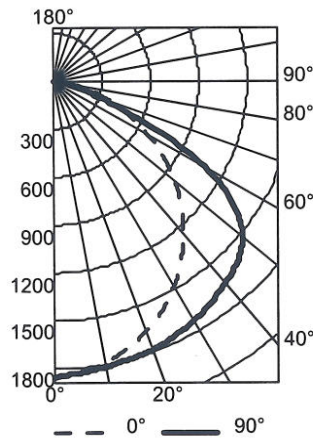
DIMENSIONS



All dimensions are inches (centimeters) unless otherwise indicated. Specifications subject to change without notice.

PHOTOMETRICS

2ES8P 232, 3100 lumens per lamp, test no. LTL 16106



CP Summary	Coefficients of Utilization												Zonal Lumen Summary			
	0°		pf	80%			20%			50%			Zone	Lumens	% Lamp	% Fixture
	0°	90°		70%	50%	30%	50%	30%	10%	50%	30%	10%				
0°	1850	1850	0	102	102	102	99	99	99	95	95	95	0° - 30°	1441	23.2	27.2
5°	1833	1831	1	94	90	86	88	85	82	84	82	79	0° - 40°	2389	38.5	45.0
15°	1733	1800	2	85	78	73	77	72	67	74	69	66	0° - 60°	4375	70.6	82.5
25°	1581	1761	3	78	69	62	68	61	56	65	60	55	0° - 90°	5304	85.6	100.0
35°	1371	1693	4	71	61	54	60	53	48	58	52	47	90° - 180°	0	0.0	0.0
45°	1119	1606	5	65	54	47	53	46	41	52	45	41	0° - 180°	5304	85.6	100.0
55°	827	1360	6	60	49	41	48	41	36	47	40	35				
65°	522	653	7	56	44	37	44	36	31	42	36	31				
75°	233	185	8	52	40	33	40	33	28	39	32	28				
85°	56	33	9	48	37	30	36	30	25	35	29	25				
90°	0	0	10	45	34	27	34	27	23	33	27	23				

Efficiency: 85.6%

ENERGY AND LIGHT LEVEL COMPARISON

System	Light level	Input watts	Watts/SF	Watts saved	% Savings	\$ Savings per year	LER
Parabolic, (3) 2800 lumen T8 lamps .88 ballast factor	69	85	1.06	Base	Base	Base	65
ES8P, (2) 3100 lumen T8 lamps, .78 ballast factor	52	48	0.60	37	44%	\$11.84	86

Light level in footcandles is calculated based on 8x10 mounting centers 9 foot ceilings, 60 x 60 room, 80/50/20 reflectances, .95 LLD, .90 LDD, horizontal light level on 2.5 foot workplane height. Annual savings based on 4000 operating hours, \$.08/kwh. Luminaire Efficacy Rating (LER) is fixture lumen output divided by fixture input wattage.



2ES8P-2x4-NY