

Mercmaster™ III HID 50–250 Watt PRE-PAK™ Luminaires

Factory-Assembled Fixtures

For 70 W, 100 W or 150 W High Pressure Sodium Lamps, or 175 W Pulse Start Metal Halide Lamps. Mogul Base Lamps.

NEC/CEC:

Class I, Division 2, Groups A, B, C, D
Class I, Zone 2, AEx nA nR IIC (Z2)
Class I, Zone 2, Ex nR IIC (Z)
Class I, Zone 2, AEx nR IIC (ZB)

NEC/CEC:

Class II, Division 1 and 2, Groups E, F, G
Class III
Simultaneous Exposure (Class I, Division 2/
Class II, Division 1)

NEC/CEC:

Fixtures Outside Type (Salt Water)
Type 4X
IP66

These pre-packaged fixture component combinations are delivered fully assembled and packed in a single carton. They are available with or without lamp, and with choice of globe or NEMA Type I, III or V refractors – all with or without guards. PRE-PAK units simplify ordering, stocking and shipping, and result in savings on job-site assembly and installation time and costs.

Catalog numbers do not include mounting hood or reflector. For mounting hood and reflectors selection, see below and order separately. Hood and Reflector will be packaged separately.



PRE-PAK Fixtures ①

Lamp Type and Watts	Ballast Assembly with Globe Only	Ballast Assembly with Globe and Guard	Ballast Assembly with G3 Globe Only	Ballast Assembly with Refractor Only ②	Ballast Assembly with Refractor and Guard
175 W PSMH	KPBU175P-MT	KPBU175PG-MT	—	KPBU175PJ5-MT	KPBU175PJ5G-MT
70 W HPS	KPBU70L-MT	KPBU70LG-MT	—	KPBU70LJ5-MT	KPBU70LJ5G-MT
100 W HPS	KPBU100L-MT	KPBU100LG-MT	KPBUG3100L-MT	KPBU100LJ5-MT	KPBU100LJ5G-MT
150 W HPS	KPBU150L-MT	KPBU150LG-MT	—	KPBU150LJ5-MT	KPBU150LJ5G-MT

Mounting Hoods

Description	Hub Size (Inches)	Catalog Number
Pendant One Hub, Rigid Mounting	3/4	KPA-75
	1	KPA-100
Pendant – Flexible One Hub, Flexible Mounting	3/4	KPAF-75
	1	KPAF-100
Pendant Cone One Hub, Rigid	3/4	KPCH-75
	1	KPCH-100
Ceiling Five Hubs, Four Close-Up Plugs	3/4	KPC-75
	1	KPC-100
Wall Five Hubs, Four Close-Up Plugs	3/4	KPWB-75
	1	KPWB-100
25° Stanchion One Hub	1-1/4	KPS-125
	1-1/2	KPS-150
90° Stanchion One Hub	1-1/4	KPST-125
	1-1/2	KPST-150

White Polyester Reflectors

Description	Catalog Number
Standard Dome For Globe Fixtures	KR2-ST
30° Angle For Globe Fixtures	KR2-AN
Standard Dome For Glass Refractor Fixtures	CMR-4ST
30° Angle For Glass Refractor Fixtures	CMR-4AN

① All catalog numbers above are fixtures without lamp. To order fixture complete with appropriate installed lamp, add suffix L to catalog number. All PRE-PAK fixtures include multi-tap ballast for operation on 120 V, 208 V, 240 V or 277 V lines. Fixture component combinations listed are furnished completely assembled in a single carton.

② Refractor catalog numbers listed are for NEMA Type V. To order fixture with Type III refractor, change J5 in catalog number to J3; for Type I refractor, change J5 to J1.

Mercmaster™ III HID 50–250 Watt Luminaires

150 W HPS

* Photometric data is based on fixtures with 150-watt clear High Pressure Sodium lamp (16,000 lumen). For candlepower values of fixtures with other HPS lamps, use the following multipliers: for 70 W (6,400 lumen) HPS lamp – 0.40; for 50 W (4,000 lumen) HPS lamp – 0.25. For candlepower values of fixture with guard, multiply by 0.95.

NEC/CEC:
 Class I, Division 2, Groups A, B, C, D
 Class I, Zone 2, AEx nA nR IIC (Z2)
 Class I, Zone 2, AEx nR IIC (ZB)
 Class II, Division 1 and 2, Groups E, F, G
 Class III

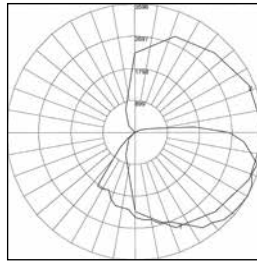
NEC/CEC:
 Simultaneous Exposure (Class I, Division 2)
 Class II, Division 1)
 Fixtures Outside Type (Salt Water)
 Type 4X
 IP66

Photometric Data

Zone Lumens Total Luminaire Efficiency = 73.1%

Zone	Lumens	CIE Type – Direct	
		Plane	Spacing Criteria
0-10	222.62		
10-20	664.6		
20-30	1084.32		
30-40	1536.55	0-180	2.06
40-50	1771.90	90-270	1.58
50-60	1771.51	Diagonal	1.62

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0-30	1971.54	12.3	16.9
0-40	3508.09	21.9	30.0
0-60	7051.50	44.1	60.3
0-90	11137.33	69.6	95.2
90-120	557.80	3.5	4.8
90-130	559.01	3.5	4.8
90-150	559.04	3.5	4.8
90-180	559.04	3.5	4.8
180-0	11696.38	73.1	100.0



REPORT NUMBER: **KP15LAN**

Lamps: 150 W High Pressure Sodium with
 30° Angle Dome Reflector *

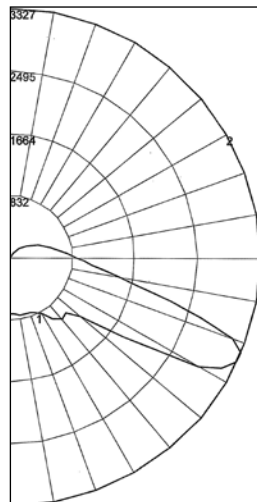
Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20																								
% Ceiling Rcc	80				70				50				30				10				0			
% Walls	Rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
	0	86	86	86	86	84	84	84	84	79	79	79	75	75	75	71	71	71	70					
	1	76	71	67	63	73	69	65	62	65	62	59	62	59	57	58	56	54	52					
	2	68	60	54	49	65	58	53	48	55	50	46	52	48	45	49	46	43	41					
	3	61	52	45	39	59	50	44	39	48	42	37	45	40	36	43	39	35	33					
	4	55	45	38	32	53	44	37	32	42	36	31	39	34	30	37	33	29	27					
	5	50	40	33	27	49	39	32	27	37	31	26	35	30	25	33	29	25	23					
	6	46	36	28	23	45	35	28	23	33	27	22	31	26	22	30	25	21	20					
	7	43	32	25	20	41	31	25	20	30	24	19	28	23	19	27	22	19	17					
	8	40	29	22	18	38	28	22	17	27	21	17	26	21	17	25	20	16	15					
	9	37	26	20	16	36	26	20	16	25	19	15	24	19	15	23	18	15	13					
	10	35	24	18	14	33	24	18	14	23	17	14	22	17	13	21	16	13	12					

Zone Lumens Total Luminaire Efficiency = 81.1%

Zone	Lumens	CIE Type – Semi-Direct	
		Plane	Spacing Criteria
0-10	72.83		
10-20	222.26		
20-30	380.73		
30-40	621.11	0-180	1.98
40-50	852.53	90-270	1.98
50-60	1765.29	Diagonal	3.40

Zonal Lumen Summary			
Zone	Lumens	% Lamp	% Fixture
0-30	675.83	4.2	5.2
0-40	1296.93	8.1	10.0
0-60	3914.76	24.5	30.2
0-90	10704.60	66.9	82.5
90-120	1661.70	10.4	12.8
90-130	1985.14	12.4	15.3
90-150	2251.45	14.1	15.3
90-180	2275.34	14.2	17.5
180-0	12979.94	81.1	100.0



REPORT NUMBER: **KP15LJR5**

Lamps: 150 W High Pressure Sodium with
 8" Prismatic Glass Refractor – NEMA Type V *

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20																								
% Ceiling Rcc	80				70				50				30				10				0			
% Walls	Rw	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0		
	0	93	93	93	93	89	89	89	89	82	82	82	76	76	76	70	70	70	67					
	1	80	73	68	63	76	70	65	61	64	60	56	58	55	52	53	50	48	45					
	2	69	59	51	45	65	56	49	43	51	45	40	46	41	37	41	37	34	31					
	3	61	49	40	33	57	47	38	32	42	35	29	38	32	27	34	29	25	22					
	4	54	42	32	25	51	40	31	24	35	28	22	32	26	21	28	23	19	16					
	5	49	36	27	20	46	34	26	19	31	23	18	27	21	16	24	19	15	12					
	6	45	32	23	16	42	30	22	16	27	20	14	24	18	13	21	16	12	10					
	7	41	28	20	14	38	27	19	13	24	17	12	21	15	11	19	14	10	8					
	8	38	25	17	12	36	24	16	11	22	15	10	19	14	9	17	12	8	6					
	9	35	23	15	10	33	22	15	10	20	13	9	18	12	8	16	11	7	5					
	10	33	21	14	9	31	20	13	9	18	12	8	16	11	7	15	10	6	5					