

Mercmaster™ II HID 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 100 W (9,500 lumen) HPS lamp – 0.594; 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:

- Class I, Division 2, Groups A, B, C, D ①
- Class II, Division 1 and 2, Groups E, F, G ②
- Class III
- Fixtures Outside Type (Salt Water)

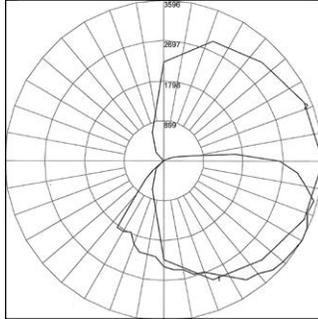
Photometric Data

Total Luminaire Efficiency = 73.1%

CIE Type – Direct

Plane	Spacing Criteria
0-180	2.06
90-270	1.58
Diagonal	1.62

Zone	Lumens
0-10	222.62
10-20	664.60
20-30	1084.32
30-40	1536.55
40-50	1771.90
50-60	1771.51
60-70	1668.93
70-80	1422.36
80-90	994.54
90-100	432.23
100-110	104.58
110-120	20.99
120-130	1.21
130-140	0.04
140-150	0.00
150-160	0.00
160-170	0.00
170-180	0.00



REPORT NUMBER: LP15LAN

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

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

% Ceiling Rcc	% Walls	Rw	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	
0	86	86	86	86	84	84	84	84	79	79	79	75	75	75	71	71	71	70	0				
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					

Zonal Lumen Summary

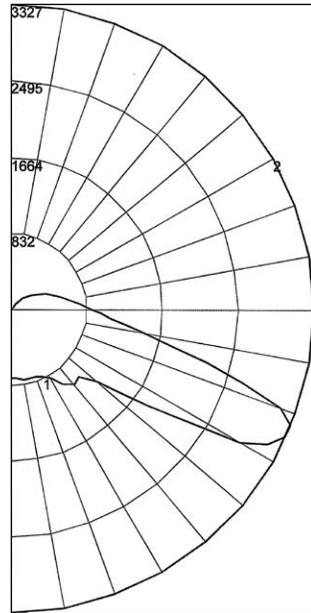
Zone	Lumens	% Lamp	% Fixture	Zone	Lumens	% Lamp	% Fixture
0-30	1971.54	12.3	16.9	90-120	557.80	3.5	4.8
0-40	3508.09	21.9	30.0	90-130	559.01	3.5	4.8
0-60	7051.50	44.1	60.3	90-150	559.04	3.5	4.8
0-90	11137.33	69.6	95.2	90-180	559.04	3.5	4.8
0-180	11696.38	73.1	100.0				

Total Luminaire Efficiency = 81.1%

CIE Type – Semi-Direct

Plane	Spacing Criteria
0-180	1.98
90-270	1.98
Diagonal	3.40

Zone	Lumens
0-10	72.83
10-20	222.26
20-30	380.73
30-40	621.11
40-50	852.53
50-60	1765.29
60-70	3192.58
70-80	2366.61
80-90	1230.65
90-100	450.14
100-110	712.41
110-120	499.15
120-130	323.44
130-140	185.00
140-150	81.31
150-160	21.08
160-170	2.81
170-180	0.00



REPORT NUMBER: LP15LJ

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

Coefficients of Utilization – Zonal Cavity Method

Effective Floor Cavity Reflectance 0.20

% Ceiling Rcc	% Walls	Rw	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	
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	24	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					

Zonal Lumen Summary

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

① For specific Class I suitability of each fixture listed, see Thermal Suitability.

② For 175 W and 200 W fixtures, use 12" refractor only for Groups E, F and G. Heat-resistant glass globe supplied with 175 W and 200 W fixtures.