

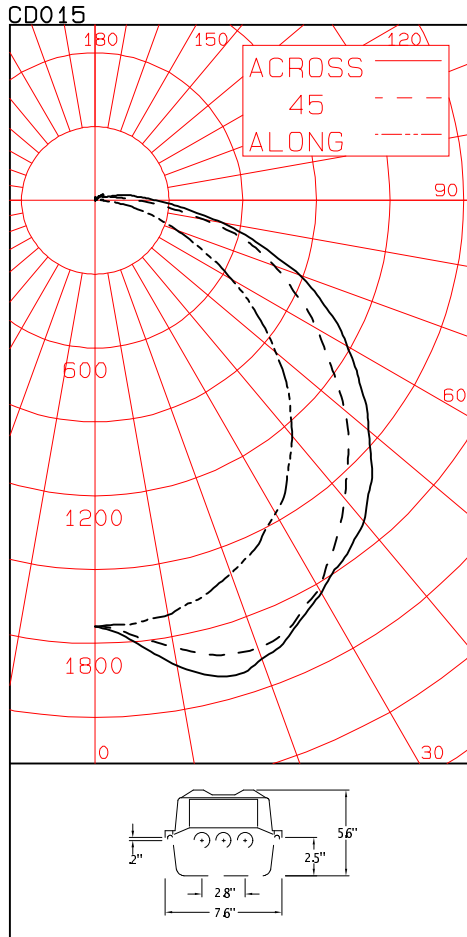


# LIGHTING SCIENCES CANADA LTD.

440 Phillip St., Unit 19, Waterloo, Ontario, Canada N2L 5R9  
 Tel: (519) 746-3140 Fax: (519) 746-3156 lsc@lightingsciences.ca

CERTIFIED TEST REPORT NO. LSC D015  
 COMPUTED BY LSC PROGRAM \*\*TEST-LITE\*\*

PIONEER LIGHTING 4' VAPOURTITE LUMINAIRE CAT. NO. TO 348-EL-SR  
 WITH SPECULAR REFLECTOR AND PATTERNED ACRYLIC LENS  
 THREE F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.  
 ONE GE PROLINE 120V 2 OR 3-LAMP ELECTRONIC BALLAST NO. GE-332-120-N



### CANDLEPOWER SUMMARY

### OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	1733	1733	1733	1733	1733	
5	1729	1737	1775	1794	1799	173
15	1672	1746	1913	1992	2003	528
25	1554	1717	1901	1928	1919	837
35	1364	1605	1704	1761	1772	1035
45	1117	1342	1457	1572	1594	1099
55	800	989	1173	1292	1319	1010
65	485	658	899	1019	1041	831
75	248	421	637	688	693	581
85	71	181	282	349	362	288
90	16	98	170	228	247	
95	33	60	113	161	173	123
105	14	32	54	55	66	53
115	5	21	46	35	33	30
125	0	2	26	31	32	18
135	0	1	16	20	23	9
145	0	0	3	8	4	3
155	0	0	0	5	10	2
165	0	0	0	0	5	2
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1537	17.38	23.23
0-40	2572	29.07	38.85
0-60	4682	52.91	70.71
0-90	6381	72.11	96.37
40-90	3808	43.03	57.51
60-90	1699	19.20	25.66
90-180	240	2.72	3.63
0-180	6622	74.83	100.00

\*\* EFFICIENCY = 74.8% \*\*

### LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.5

SC (ALONG) = 1.3, SC (ACROSS) = 1.5

ANGLE	ALONG	45	ACROSS
45	7604	7951	8200
55	6578	7155	7461
65	5230	6431	6760
75	4068	5712	5487
85	2597	3546	3812

CERTIFIED BY:

*Charles Sisson*

DATE:  
DEC 6, 2007

PREPARED FOR:

PIONEER LIGHTING  
 TORONTO, ONTARIO

TESTED ACCORDING TO IES PROCEDURES. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE.

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CANDLEPOWER DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1733	1733	1733	1733	1733	1733	
5	1729	1737	1775	1794	1799	1767	173
10	1711	1749	1844	1902	1919	1827	
15	1672	1746	1913	1992	2003	1872	528
20	1614	1742	1936	1992	1983	1867	
25	1554	1717	1901	1928	1919	1821	837
30	1468	1672	1823	1838	1840	1747	
35	1364	1605	1704	1761	1772	1660	1035
40	1247	1483	1581	1677	1703	1554	
45	1117	1342	1457	1572	1594	1432	1099
50	959	1164	1327	1441	1452	1284	
55	800	989	1173	1292	1319	1129	1010
60	640	817	1039	1157	1185	981	
65	485	658	899	1019	1041	835	831
70	355	538	776	868	886	701	
75	248	421	637	688	693	554	581
80	154	303	449	504	525	399	
85	71	181	282	349	362	257	288
90	16	98	170	228	247	157	
95	33	60	113	161	173	109	123
100	25	50	72	101	122	74	
105	14	32	54	55	66	45	53
110	9	27	52	37	36	35	
115	5	21	46	35	33	30	30
120	7	9	42	45	34	29	
125	0	2	26	31	32	19	18
130	0	6	8	20	35	13	
135	0	1	16	20	23	12	9
140	0	0	7	12	22	8	
145	0	0	3	8	4	3	3
150	0	0	0	4	5	2	
155	0	0	0	5	10	3	2
160	0	0	0	5	7	3	
165	0	0	0	0	5	3	2
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	0	0	0	0	0	0	

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AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)			ACROSS
		22.5	45	67.5	
0	8770 ( 2559)	8770 ( 2559)	8770 ( 2559)	8770 ( 2559)	8770 ( 2559)
30	8333 ( 2432)	8791 ( 2565)	9028 ( 2635)	8806 ( 2570)	8752 ( 2554)
40	7898 ( 2305)	8419 ( 2457)	8259 ( 2410)	8390 ( 2448)	8444 ( 2464)
45	7604 ( 2219)	8021 ( 2341)	7951 ( 2320)	8141 ( 2376)	8200 ( 2393)
50	7113 ( 2076)	7433 ( 2169)	7585 ( 2214)	7789 ( 2273)	7764 ( 2266)
55	6578 ( 1919)	6806 ( 1986)	7155 ( 2088)	7369 ( 2150)	7461 ( 2177)
60	5946 ( 1735)	6167 ( 1800)	6799 ( 1984)	7033 ( 2052)	7109 ( 2074)
65	5230 ( 1526)	5526 ( 1612)	6431 ( 1877)	6695 ( 1954)	6760 ( 1973)
70	4600 ( 1342)	5162 ( 1506)	6158 ( 1797)	6245 ( 1822)	6271 ( 1830)
75	4068 ( 1187)	4735 ( 1382)	5712 ( 1667)	5529 ( 1613)	5487 ( 1601)
80	3472 ( 1013)	4165 ( 1215)	4699 ( 1371)	4614 ( 1346)	4706 ( 1373)
85	2597 ( 758)	3210 ( 937)	3546 ( 1035)	3760 ( 1097)	3812 ( 1112)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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COEFFICIENTS OF UTILIZATION

ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC WALL	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
RCR																					
0	.88	.88	.88	.88	.86	.86	.86	.86	.82	.82	.82	.78	.78	.78	.74	.74	.74	.74	.74	.74	.72
1	.80	.77	.73	.70	.78	.75	.71	.69	.71	.68	.66	.67	.65	.63	.64	.63	.61	.61	.61	.61	.59
2	.73	.67	.61	.57	.71	.65	.60	.56	.62	.58	.54	.59	.56	.53	.56	.53	.51	.51	.51	.51	.49
3	.66	.58	.52	.47	.64	.57	.51	.47	.55	.50	.46	.52	.48	.44	.50	.46	.43	.43	.43	.43	.42
4	.61	.52	.45	.40	.59	.51	.45	.40	.48	.43	.39	.46	.42	.38	.44	.40	.37	.37	.37	.37	.35
5	.55	.46	.39	.34	.53	.45	.38	.33	.43	.37	.33	.41	.36	.32	.39	.35	.31	.31	.31	.31	.30
6	.51	.41	.34	.29	.49	.40	.33	.29	.38	.32	.28	.37	.32	.28	.35	.31	.27	.27	.27	.27	.26
7	.47	.36	.30	.25	.45	.36	.29	.25	.34	.28	.24	.33	.28	.24	.32	.27	.24	.24	.24	.24	.22
8	.43	.33	.26	.22	.42	.32	.26	.21	.31	.25	.21	.30	.24	.21	.28	.24	.20	.20	.20	.20	.19
9	.40	.29	.23	.18	.38	.29	.23	.18	.28	.22	.18	.27	.21	.18	.26	.21	.18	.18	.18	.18	.16
10	.37	.27	.20	.16	.36	.26	.20	.16	.25	.20	.16	.24	.19	.16	.23	.19	.15	.15	.15	.15	.14

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES  
 LUMINAIRE INPUT WATTS = 72.8  
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST FACTORS HAVE NOT BEEN APPLIED.