

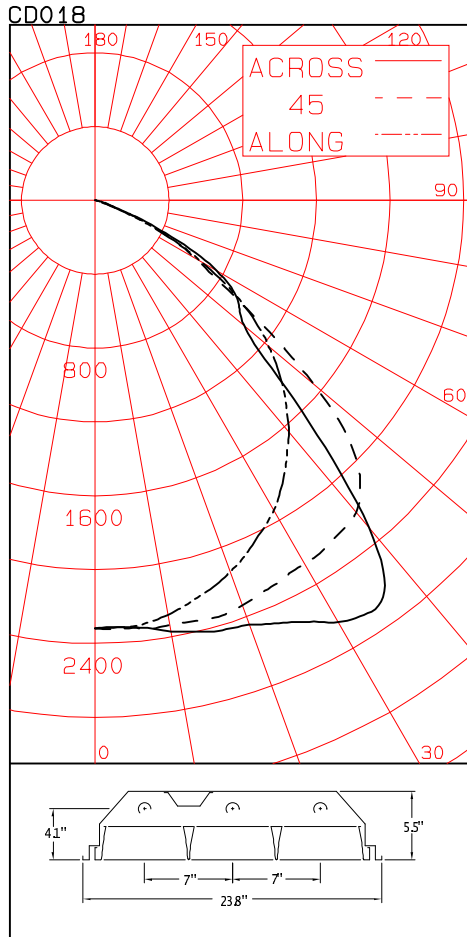


LIGHTING SCIENCES CANADA LTD.

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 D018
 COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LIGHTING 2x4 RECESSED LUMINAIRE CAT. NO. TBDC 24-348-36-EL
 WITH WHITE PAINTED INTERIOR AND 18-CELL ALUMINUM LOUVER
 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-84T



CANDLEPOWER SUMMARY OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	2318	2318	2318	2318	2318	
5	2317	2330	2325	2328	2321	226
10	2279	2317	2335	2357	2372	
15	2214	2276	2349	2394	2420	660
20	2142	2209	2335	2425	2447	
25	2041	2145	2299	2455	2521	1062
30	1939	2062	2272	2514	2639	
35	1795	1963	2247	2570	2680	1398
40	1636	1845	2206	2390	2311	
45	1445	1686	2013	1696	1525	1316
50	1231	1481	1545	1065	1053	
55	977	1193	957	879	945	896
60	666	826	630	711	762	
65	342	400	370	427	421	397
70	86	101	147	143	132	
75	28	23	30	39	50	47
80	3	8	6	7	12	
85	0	0	0	0	0	1
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1946	22.00	32.44
0-40	3345	37.80	55.73
0-60	5557	62.80	92.58
0-90	6002	67.83	100.00
40-90	2657	30.03	44.27
60-90	445	5.03	7.42
90-180	0	.00	.00
0-180	6002	67.83	100.00

** EFFICIENCY = 67.8% **

LUMINANCE SUMMARY-CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	3439	4808	3643
55	2867	2818	2782
65	1360	1478	1681
75	179	194	324
85	0	0	0

PAIN T REFLECTANCE = .85 S/MH = 1.6
 SC (ALONG) = 1.2, SC (ACROSS) = 1.6

CERTIFIED BY:

Charles Sisson

DATE:
 DEC 7, 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
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
.0	2318	2318	2318	2318	2318	2318	
2.5	2317	2328	2326	2312	2313	2320	
5.0	2317	2330	2325	2328	2321	2325	226
7.5	2302	2327	2339	2334	2338	2330	
10.0	2279	2317	2335	2357	2372	2334	
12.5	2249	2306	2339	2383	2391	2337	
15.0	2214	2276	2349	2394	2420	2334	660
17.5	2184	2247	2352	2409	2432	2329	
20.0	2142	2209	2335	2425	2447	2316	
22.5	2097	2185	2313	2439	2483	2307	
25.0	2041	2145	2299	2455	2521	2295	1062
27.5	1991	2103	2280	2488	2573	2288	
30.0	1939	2062	2272	2514	2639	2284	
32.5	1869	2020	2268	2550	2672	2277	
35.0	1795	1963	2247	2570	2680	2254	1398
37.5	1712	1909	2229	2528	2580	2203	
40.0	1636	1845	2206	2390	2311	2104	
42.5	1540	1770	2130	2065	1910	1922	
45.0	1445	1686	2013	1696	1525	1720	1316
47.5	1342	1598	1825	1344	1207	1510	
50.0	1231	1481	1545	1065	1053	1308	
52.5	1113	1356	1246	959	989	1153	
55.0	977	1193	957	879	945	998	896
57.5	831	1031	761	803	875	862	
60.0	666	826	630	711	762	720	
62.5	516	623	503	582	614	568	
65.0	342	400	370	427	421	394	397
67.5	200	216	238	255	274	237	
70.0	86	101	147	143	132	125	
72.5	45	48	63	75	86	63	
75.0	28	23	30	39	50	33	47
77.5	4	7	12	27	33	16	
80.0	3	8	6	7	12	7	
82.5	2	0	0	3	0	1	
85.0	0	0	0	0	0	0	1
87.5	0	0	0	0	0	0	
90.0	0	0	0	0	0	0	

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AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)			
		22.5	45	67.5	ACROSS
0	3899(1138)	3899(1138)	3899(1138)	3899(1138)	3899(1138)
30	3767(1099)	4016(1172)	4426(1291)	4895(1428)	5127(1496)
40	3592(1048)	4063(1185)	4850(1415)	5263(1536)	5075(1481)
45	3439(1003)	4017(1172)	4808(1403)	4047(1181)	3643(1063)
50	3221(940)	3890(1135)	4045(1180)	2794(815)	2756(804)
55	2867(836)	3506(1023)	2818(822)	2585(754)	2782(812)
60	2242(654)	2789(814)	2121(619)	2399(700)	2565(748)
65	1360(396)	1595(465)	1478(431)	1703(497)	1681(490)
70	424(123)	500(146)	722(211)	707(206)	649(189)
75	179(52)	151(44)	194(56)	255(74)	324(94)
80	26(7)	75(22)	55(16)	71(20)	120(35)
85	0(0)	0(0)	0(0)	0(0)	0(0)

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	.81	.81	.81	.81	.79	.79	.79	.79	.75	.75	.75	.72	.72	.72	.69	.69	.69	.68				
1	.76	.73	.71	.69	.74	.72	.70	.68	.69	.67	.66	.66	.65	.64	.64	.63	.62	.61				
2	.70	.66	.63	.60	.69	.65	.62	.59	.63	.60	.58	.61	.58	.56	.59	.57	.55	.54				
3	.65	.60	.55	.52	.64	.59	.55	.51	.57	.53	.50	.55	.52	.50	.53	.51	.49	.48				
4	.60	.54	.49	.45	.59	.53	.48	.45	.51	.47	.44	.50	.46	.44	.48	.45	.43	.42				
5	.56	.48	.43	.39	.54	.47	.42	.39	.46	.42	.38	.45	.41	.38	.44	.40	.37	.36				
6	.51	.43	.38	.34	.50	.43	.38	.34	.42	.37	.34	.40	.36	.33	.39	.36	.33	.32				
7	.47	.39	.34	.30	.46	.38	.33	.30	.37	.33	.29	.36	.32	.29	.36	.32	.29	.28				
8	.44	.35	.30	.26	.43	.34	.29	.26	.34	.29	.26	.33	.28	.25	.32	.28	.25	.24				
9	.40	.31	.26	.22	.39	.31	.26	.22	.30	.25	.22	.29	.25	.22	.29	.25	.22	.21				
10	.37	.28	.23	.20	.36	.28	.23	.20	.27	.23	.19	.27	.22	.19	.26	.22	.19	.18				

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 82.7
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST FACTORS HAVE NOT BEEN APPLIED.