



LIGHTING SCIENCES CANADA LTD.

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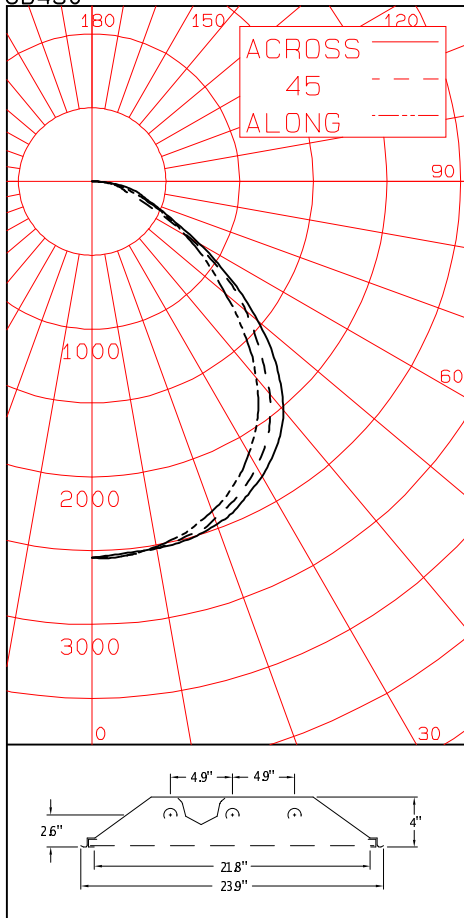
CERTIFIED TEST REPORT NO. LSC B450
 COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER FLUORESCENT 2'x4' TROFFER LUMINAIRE CAT. NO. TB 24-348-EL
 WITH WHITE PAINTED INTERIOR AND ACRYLIC K12 LENS
 THREE F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
 ONE SYLVANIA 120-277V 2 OR 3-LAMP ELECTRONIC BALLAST NO. QTP3x32T8/UNV ISN-SC

CANDLEPOWER SUMMARY

OUTPUT
LUMENS

CB450



ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	2547	2547	2547	2547	2547	
5	2547	2549	2544	2527	2527	246
10	2510	2525	2523	2523	2523	
15	2461	2469	2486	2507	2510	701
20	2376	2402	2431	2458	2471	
25	2270	2298	2345	2382	2397	1076
30	2127	2164	2231	2279	2305	
35	1956	1994	2087	2155	2186	1290
40	1729	1772	1875	1974	2020	
45	1459	1513	1608	1703	1771	1237
50	1177	1257	1358	1412	1465	
55	946	981	1084	1117	1145	942
60	734	721	770	807	842	
65	555	512	492	562	585	544
70	403	356	315	415	434	
75	288	270	222	312	344	297
80	207	180	177	214	257	
85	97	94	88	120	133	109
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	2022	22.86	31.40
0-40	3313	37.44	51.43
0-60	5492	62.06	85.25
0-90	6442	72.79	100.00
40-90	3128	35.35	48.57
60-90	949	10.73	14.75
90-180	0	.00	.00
0-180	6442	72.79	100.00

** EFFICIENCY = 72.8% **

LUMINANCE SUMMARY-CD. / SQ. M.

PAINT REFLECTANCE = .84 S/MH = 1.3
 SC (ALONG) = 1.2, SC (ACROSS) = 1.3

ANGLE	ALONG	45	ACROSS
45	3196	3535	3894
55	2554	2939	3103
65	2035	1809	2150
75	1726	1331	2067
85	1724	1568	2365

CERTIFIED BY:

Charles Sisson

DATE:
NOV 24, 2006

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	2547	2547	2547	2547	2547	2547	
2.5	2553	2552	2546	2529	2536	2543	
5.0	2547	2549	2544	2527	2527	2539	246
7.5	2529	2537	2536	2533	2524	2533	
10.0	2510	2525	2523	2523	2523	2522	
12.5	2486	2502	2508	2513	2520	2506	
15.0	2461	2469	2486	2507	2510	2487	701
17.5	2418	2437	2476	2492	2494	2465	
20.0	2376	2402	2431	2458	2471	2429	
22.5	2332	2349	2390	2424	2444	2388	
25.0	2270	2298	2345	2382	2397	2340	1076
27.5	2206	2237	2293	2334	2350	2286	
30.0	2127	2164	2231	2279	2305	2223	
32.5	2043	2083	2162	2217	2248	2152	
35.0	1956	1994	2087	2155	2186	2077	1290
37.5	1849	1888	1983	2071	2110	1981	
40.0	1729	1772	1875	1974	2020	1874	
42.5	1608	1641	1735	1833	1900	1740	
45.0	1459	1513	1608	1703	1771	1610	1237
47.5	1326	1377	1482	1559	1628	1474	
50.0	1177	1257	1358	1412	1465	1337	
52.5	1058	1117	1236	1278	1307	1203	
55.0	946	981	1084	1117	1145	1057	942
57.5	844	858	926	970	987	917	
60.0	734	721	770	807	842	772	
62.5	650	605	627	681	700	647	
65.0	555	512	492	562	585	534	544
67.5	485	426	393	485	505	450	
70.0	403	356	315	415	434	376	
72.5	349	310	249	355	379	319	
75.0	288	270	222	312	344	280	297
77.5	251	219	202	257	308	239	
80.0	207	180	177	214	257	201	
82.5	154	136	142	161	198	154	
85.0	97	94	88	120	133	104	109
87.5	49	36	35	53	58	44	
90.0	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	3944 (1151)	3944 (1151)	3944 (1151)	3944 (1151)	3944 (1151)
30	3805 (1110)	3881 (1132)	4000 (1167)	4086 (1192)	4123 (1203)
40	3496 (1020)	3592 (1048)	3795 (1107)	4003 (1168)	4084 (1192)
45	3196 (932)	3318 (968)	3535 (1031)	3742 (1092)	3894 (1136)
50	2835 (827)	3041 (887)	3274 (955)	3411 (995)	3530 (1030)
55	2554 (745)	2653 (774)	2939 (858)	3024 (882)	3103 (905)
60	2273 (663)	2240 (654)	2388 (697)	2507 (731)	2609 (761)
65	2035 (594)	1880 (548)	1809 (528)	2067 (603)	2150 (627)
70	1823 (532)	1615 (471)	1428 (416)	1882 (549)	1965 (573)
75	1726 (503)	1623 (473)	1331 (388)	1871 (546)	2067 (603)
80	1843 (538)	1612 (470)	1584 (462)	1909 (557)	2292 (668)
85	1724 (503)	1678 (489)	1568 (457)	2135 (623)	2365 (690)

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	.87	.87	.87	.87	.85	.85	.85	.85	.81	.81	.81	.77	.77	.77	.74	.74	.74	.74	.74	.74	.73
1	.80	.77	.75	.72	.78	.76	.73	.71	.73	.71	.69	.70	.68	.67	.67	.66	.65	.65	.65	.65	.63
2	.74	.69	.65	.61	.72	.68	.64	.60	.65	.62	.59	.63	.60	.58	.61	.58	.56	.56	.56	.56	.55
3	.68	.62	.56	.52	.67	.61	.56	.52	.59	.54	.51	.57	.53	.50	.55	.52	.49	.49	.49	.49	.48
4	.63	.55	.50	.45	.62	.54	.49	.45	.53	.48	.44	.51	.47	.44	.49	.46	.43	.43	.43	.43	.42
5	.58	.49	.43	.39	.56	.49	.43	.39	.47	.42	.38	.46	.41	.38	.44	.41	.37	.37	.37	.37	.36
6	.54	.45	.38	.34	.52	.44	.38	.34	.43	.37	.34	.41	.37	.33	.40	.36	.33	.33	.33	.33	.32
7	.49	.40	.34	.30	.48	.40	.34	.30	.38	.33	.30	.37	.33	.29	.37	.32	.29	.29	.29	.29	.28
8	.46	.36	.30	.26	.45	.35	.30	.26	.35	.29	.26	.34	.29	.26	.33	.29	.25	.25	.25	.25	.24
9	.42	.33	.27	.23	.41	.32	.26	.23	.31	.26	.22	.30	.26	.22	.30	.25	.22	.22	.22	.22	.21
10	.39	.30	.24	.20	.38	.29	.24	.20	.28	.23	.20	.28	.23	.20	.27	.23	.20	.20	.20	.20	.18

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 84.2
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST FACTORS HAVE NOT BEEN APPLIED.