

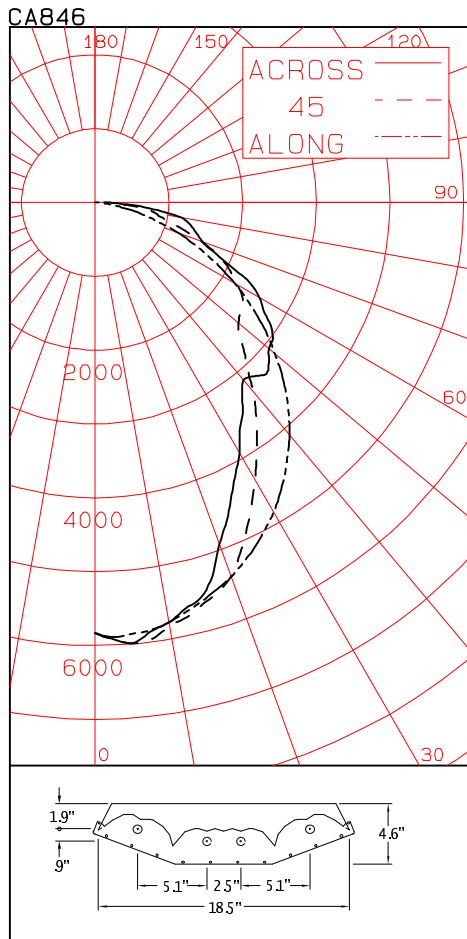


LIGHTING SCIENCES CANADA LTD.

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 A846
 COMPUTED BY LSC PROGRAM **TEST-LITE**

CUSTOM LIGHTING SURFACE MOUNT FIXTURE CAT. NO. CL-GYM-T5HO-4L-W
 WITH SPECULAR REFLECTOR AND WIREGUARD
 FOUR 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.
 ONE ADVANCE 120-277V 1 TO 4-LAMP ELECTRONIC BALLAST NO. ICN-4S54-90C-2LS-G



CANDLEPOWER SUMMARY OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	OUTPUT LUMENS
0	5829	5829	5829	5829	5829	
5	5863	5956	5994	5978	5989	572
10	5774	5972	5818	5749	5776	
15	5591	5765	5636	5598	5542	1576
20	5397	5460	5390	5067	4932	
25	5139	5222	4874	4529	4383	2223
30	4844	4886	4337	4026	3919	
35	4487	4535	3823	3519	3487	2477
40	4109	4012	3332	3154	3134	
45	3669	3442	2863	3039	3281	2468
50	3183	2880	2540	2996	3077	
55	2692	2325	2432	2805	2907	2299
60	2182	1803	2221	2476	2578	
65	1663	1403	1945	2056	2016	1792
70	1189	1173	1514	1535	1549	
75	744	891	1060	1258	1377	1141
80	359	540	832	1120	1192	
85	92	270	478	600	616	478
90	0	61	118	168	185	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	4371	24.84	29.09
0-40	6848	38.91	45.57
0-60	11615	66.00	77.30
0-90	15027	85.39	100.00
40-90	8179	46.47	54.43
60-90	3411	19.39	22.70
90-180	0	.00	.00
0-180	15027	85.39	100.00

** EFFICIENCY = 85.4% **

LUMINANCE SUMMARY-CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	9055	6783	7635
55	8191	6971	8128
65	6870	7339	7339
75	5016	6108	7504
85	1837	6296	7115

S/MH = 1.0

SC (ALONG) = 1.2, SC (ACROSS) = 1.0

CERTIFIED BY:

Charles Sisson

DATE:
AUG 25, 2005

PREPARED FOR:

CUSTOM LIGHTING LTD.
EDMONTON, ALBERTA

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	5829	5829	5829	5829	5829	5829	
2.5	5890	5881	5924	5935	5925	5912	
5.0	5863	5956	5994	5978	5989	5964	572
7.5	5841	6013	5960	5800	5852	5905	
10.0	5774	5972	5818	5749	5776	5829	
12.5	5682	5909	5753	5646	5634	5741	
15.0	5591	5765	5636	5598	5542	5642	1576
17.5	5494	5604	5532	5378	5295	5477	
20.0	5397	5460	5390	5067	4932	5270	
22.5	5269	5354	5142	4772	4664	5059	
25.0	5139	5222	4874	4529	4383	4846	2223
27.5	4990	5050	4599	4243	4128	4613	
30.0	4844	4886	4337	4026	3919	4408	
32.5	4673	4728	4082	3808	3657	4195	
35.0	4487	4535	3823	3519	3487	3966	2477
37.5	4294	4264	3582	3338	3277	3742	
40.0	4109	4012	3332	3154	3134	3530	
42.5	3889	3709	3055	3054	3189	3340	
45.0	3669	3442	2863	3039	3281	3205	2468
47.5	3434	3168	2647	3075	3201	3052	
50.0	3183	2880	2540	2996	3077	2887	
52.5	2944	2582	2475	2875	3034	2730	
55.0	2692	2325	2432	2805	2907	2590	2299
57.5	2443	2065	2366	2665	2709	2418	
60.0	2182	1803	2221	2476	2578	2220	
62.5	1927	1620	2088	2312	2375	2043	
65.0	1663	1403	1945	2056	2016	1811	1792
67.5	1418	1281	1759	1765	1728	1594	
70.0	1189	1173	1514	1535	1549	1398	
72.5	945	1051	1286	1342	1461	1221	
75.0	744	891	1060	1258	1377	1067	1141
77.5	544	718	915	1180	1300	934	
80.0	359	540	832	1120	1192	817	
82.5	212	377	729	844	908	628	
85.0	92	270	478	600	616	426	478
87.5	26	156	285	353	332	243	
90.0	0	61	118	168	185	110	

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AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)			
		22.5	45	67.5	ACROSS
0	10175 (2969)	10175 (2969)	10175 (2969)	10175 (2969)	10175 (2969)
30	9762 (2849)	9736 (2841)	8537 (2491)	7862 (2294)	7614 (2222)
40	9363 (2732)	8979 (2620)	7318 (2135)	6860 (2002)	6772 (1976)
45	9055 (2643)	8301 (2422)	6783 (1980)	7098 (2071)	7635 (2228)
50	8644 (2522)	7623 (2225)	6540 (1908)	7614 (2222)	7756 (2263)
55	8191 (2390)	6846 (1998)	6971 (2034)	7885 (2301)	8128 (2372)
60	7616 (2222)	6056 (1767)	7190 (2098)	7852 (2291)	8089 (2361)
65	6870 (2005)	5506 (1607)	7339 (2142)	7547 (2202)	7339 (2142)
70	6066 (1770)	5626 (1642)	6880 (2008)	6741 (1967)	6711 (1958)
75	5016 (1464)	5519 (1610)	6108 (1782)	6958 (2031)	7504 (2190)
80	3611 (1054)	4773 (1393)	6662 (1944)	8412 (2455)	8757 (2556)
85	1837 (536)	4224 (1232)	6296 (1837)	7162 (2090)	7115 (2076)

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	1.0	.21	.021	.021	.02	.99	.99	.99	.99	.95	.95	.95	.91	.91	.91	.87	.87	.87	.85			
1	.93	.89	.86	.82	.91	.87	.84	.81	.84	.81	.78	.80	.78	.76	.77	.75	.74	.72				
2	.85	.78	.73	.68	.83	.77	.71	.67	.74	.69	.65	.71	.67	.64	.68	.65	.63	.61				
3	.78	.69	.63	.57	.76	.68	.62	.57	.66	.60	.56	.63	.59	.55	.61	.57	.54	.52				
4	.72	.62	.55	.49	.70	.61	.54	.49	.59	.53	.48	.57	.52	.47	.55	.50	.47	.45				
5	.66	.55	.47	.42	.64	.54	.47	.41	.52	.46	.41	.50	.45	.41	.49	.44	.40	.38				
6	.61	.49	.42	.36	.59	.48	.41	.36	.47	.41	.36	.45	.40	.36	.44	.39	.35	.33				
7	.56	.44	.37	.32	.55	.44	.37	.32	.42	.36	.32	.41	.35	.31	.40	.35	.31	.29				
8	.52	.40	.33	.28	.50	.39	.33	.28	.38	.32	.28	.37	.31	.27	.36	.31	.27	.25				
9	.48	.36	.29	.24	.46	.36	.29	.24	.35	.28	.24	.34	.28	.24	.33	.28	.24	.22				
10	.44	.33	.26	.22	.43	.32	.26	.21	.32	.26	.21	.31	.25	.21	.30	.25	.21	.20				

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 240.0
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST FACTORS HAVE NOT BEEN APPLIED.