

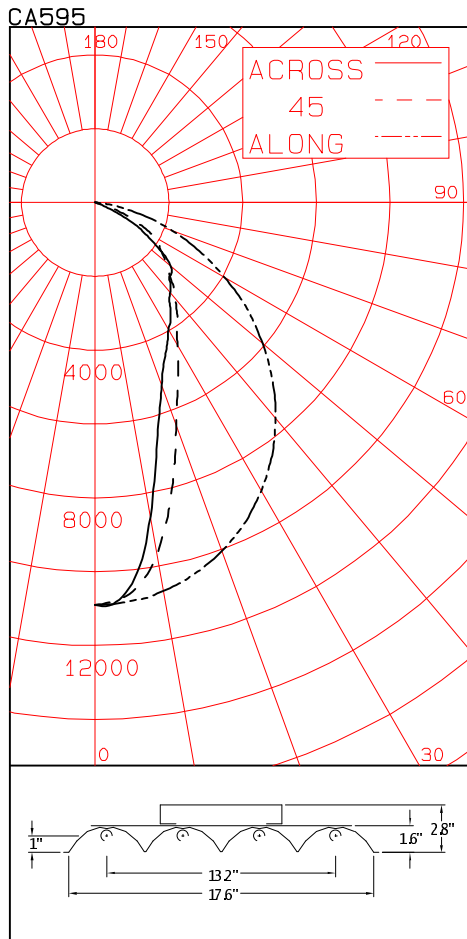


# LIGHTING SCIENCES CANADA LTD.

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 A595  
 COMPUTED BY LSC PROGRAM \*\*TEST-LITE\*\*

CUSTOM LIGHTING T5 4L SURFACE MOUNT 4' FIXTURE CAT. NO. CL-HI-5-HO(4 LAMP)  
 WITH SPECULAR REFLECTOR  
 FOUR 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.  
 ADVANCE CENTIUM 120-277V 3 OR 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	10896	10896	10896	10896	10896	
5	10839	10839	10645	10466	10498	999
10	10682	10541	9670	8860	8631	
15	10417	9869	8039	6858	6534	2320
20	10052	8878	6419	5506	5281	
25	9588	7679	5307	4608	4512	2836
30	9018	6436	4459	4087	3972	
35	8370	5293	3906	3650	3547	2933
40	7617	4339	3386	3251	3161	
45	6804	3552	2892	2850	2845	2734
50	5931	2885	2484	2621	2673	
55	5029	2328	2151	2211	2019	2268
60	4070	1848	1840	1469	1375	
65	3127	1372	1200	824	638	1317
70	2217	1025	614	166	72	
75	1340	582	80	0	0	380
80	574	104	0	0	0	
85	54	0	0	0	0	24
90	0	0	0	0	0	

### ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	6154	34.97	38.93
0-40	9086	51.63	57.48
0-60	14088	80.05	89.12
0-90	15808	89.82	100.00
40-90	6721	38.19	42.52
60-90	1720	9.78	10.88
90-180	0	.00	.00
0-180	15808	89.82	100.00

\*\* EFFICIENCY = 89.8% \*\*

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

S/MH = .6

SC(ALONG) = 1.2, SC(ACROSS) = .6

ANGLE	ALONG	45	ACROSS
45	17896	7711	7774
55	16073	6997	6801
65	13250	5208	2915
75	8816	545	0
85	853	0	0

CERTIFIED BY:

*Charles Sisson*

DATE:  
FEB 23, 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	10896	10896	10896	10896	10896	10896	
2.5	10882	10891	10814	10776	10883	10841	
5.0	10839	10839	10645	10466	10498	10655	999
7.5	10796	10736	10270	9837	9733	10277	
10.0	10682	10541	9670	8860	8631	9682	
12.5	10572	10244	8892	7842	7510	9005	
15.0	10417	9869	8039	6858	6534	8310	2320
17.5	10242	9406	7215	6109	5833	7692	
20.0	10052	8878	6419	5506	5281	7118	
22.5	9826	8286	5813	5023	4825	6612	
25.0	9588	7679	5307	4608	4512	6161	2836
27.5	9305	7034	4871	4377	4250	5765	
30.0	9018	6436	4459	4087	3972	5369	
32.5	8697	5827	4141	3828	3799	5011	
35.0	8370	5293	3906	3650	3547	4702	2933
37.5	7999	4773	3621	3434	3308	4371	
40.0	7617	4339	3386	3251	3161	4091	
42.5	7220	3926	3170	3012	3012	3806	
45.0	6804	3552	2892	2850	2845	3529	2734
47.5	6382	3190	2667	2688	2813	3286	
50.0	5931	2885	2484	2621	2673	3073	
52.5	5474	2613	2326	2475	2392	2837	
55.0	5029	2328	2151	2211	2019	2553	2268
57.5	4552	2079	2039	1814	1674	2261	
60.0	4070	1848	1840	1469	1375	1970	
62.5	3613	1579	1542	1179	1021	1654	
65.0	3127	1372	1200	824	638	1319	1317
67.5	2675	1194	935	465	312	1022	
70.0	2217	1025	614	166	72	737	
72.5	1777	827	278	6	0	500	
75.0	1340	582	80	0	0	333	380
77.5	933	329	0	0	0	199	
80.0	574	104	0	0	0	98	
82.5	260	0	0	0	0	33	
85.0	54	0	0	0	0	7	24
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)				ACROSS
		22.5	45	67.5		
0	20973( 6121)	20973( 6121)	20973( 6121)	20973( 6121)	20973( 6121)	20973( 6121)
30	19648( 5734)	14081( 4109)	9796( 2859)	9037( 2637)	8828( 2576)	8828( 2576)
40	18594( 5427)	10643( 3106)	8343( 2435)	8099( 2363)	7944( 2318)	7944( 2318)
45	17896( 5223)	9378( 2737)	7711( 2250)	7677( 2240)	7774( 2269)	7774( 2269)
50	17050( 4976)	8349( 2436)	7226( 2109)	7747( 2261)	8005( 2336)	8005( 2336)
55	16073( 4691)	7482( 2183)	6997( 2042)	7301( 2131)	6801( 1985)	6801( 1985)
60	14773( 4311)	6760( 1973)	6799( 1984)	5543( 1617)	5295( 1545)	5295( 1545)
65	13250( 3867)	5848( 1707)	5208( 1520)	3657( 1067)	2915( 850)	2915( 850)
70	11381( 3322)	5314( 1551)	3245( 947)	902( 263)	403( 117)	403( 117)
75	8816( 2573)	3878( 1132)	545( 159)	0( 0)	0( 0)	0( 0)
80	5311( 1550)	973( 284)	0( 0)	0( 0)	0( 0)	0( 0)
85	853( 249)	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	1.0	0.71	0.071	0.071	1.0	0.41	0.041	0.041	1.0	0.01	0.001	0.001	0.96	0.96	0.96	0.92	0.92	0.92	0.90		
1	1.00	.97	.94	.91	.98	.95	.92	.90	.91	.89	.87	.88	.86	.85	.85	.83	.82	.80			
2	.93	.87	.83	.79	.91	.86	.81	.78	.83	.79	.76	.80	.77	.74	.77	.75	.73	.71			
3	.86	.79	.73	.68	.85	.78	.72	.68	.75	.71	.67	.73	.69	.66	.71	.67	.65	.63			
4	.80	.71	.65	.60	.78	.70	.64	.59	.68	.63	.59	.66	.62	.58	.64	.60	.57	.56			
5	.74	.64	.57	.52	.72	.63	.57	.52	.61	.56	.51	.60	.55	.51	.58	.54	.50	.49			
6	.69	.58	.51	.46	.67	.58	.51	.46	.56	.50	.46	.55	.49	.45	.53	.49	.45	.43			
7	.64	.53	.46	.42	.63	.53	.46	.41	.51	.45	.41	.50	.45	.40	.49	.44	.40	.39			
8	.59	.48	.41	.37	.58	.48	.41	.36	.47	.41	.36	.46	.40	.36	.44	.40	.36	.34			
9	.55	.44	.37	.32	.54	.43	.37	.32	.42	.36	.32	.42	.36	.32	.41	.36	.32	.30			
10	.51	.40	.34	.29	.50	.40	.34	.29	.39	.33	.29	.38	.33	.29	.37	.32	.29	.27			

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES  
 LUMINAIRE INPUT WATTS = 233.5  
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST FACTORS HAVE NOT BEEN APPLIED.