



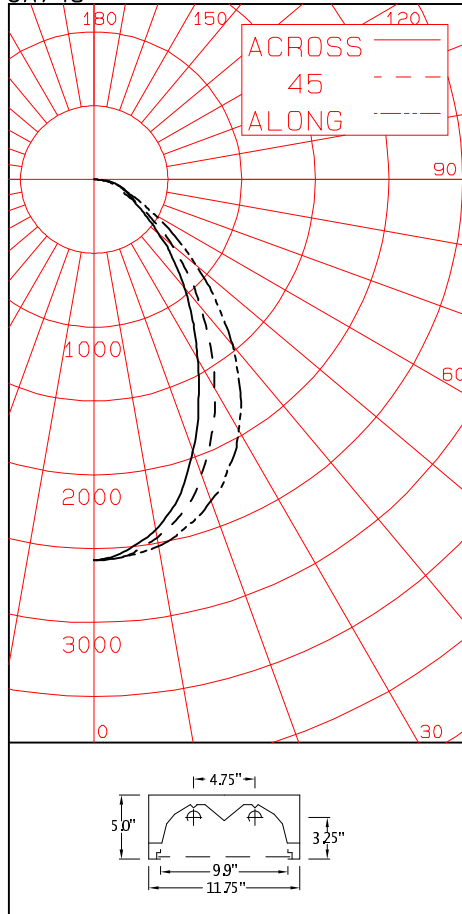
LIGHTING SCIENCES CANADA LTD.

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 A749
COMPUTED BY LSC PROGRAM **TEST-LITE**

CUSTOM LIGHTING 4' LS9R FIXTURE CAT. NO. LS9R-PS-M-142-OI-2-HD-K2-2-1-M
WITH SPECULAR REFLECTOR AND K-12 HINGE LENS
TWO PHILIPS F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE ADVANCE 120V 1 OR 2-LAMP ELECTRONIC BALLAST NO. REL-2P32-SC

CA749



CANDLEPOWER SUMMARY

OUTPUT
LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	2581	2581	2581	2581	2581	
5	2561	2555	2559	2537	2522	244
10	2521	2504	2462	2425	2410	
15	2431	2394	2331	2254	2224	650
20	2314	2251	2128	2008	1958	
25	2156	2064	1892	1742	1674	872
30	1960	1858	1635	1469	1404	
35	1725	1600	1374	1224	1167	878
40	1461	1334	1121	993	953	
45	1173	1063	897	775	749	713
50	900	800	692	604	571	
55	665	585	504	456	425	474
60	469	419	356	345	325	
65	326	293	231	261	268	276
70	228	209	177	203	224	
75	184	156	133	164	188	169
80	129	105	112	115	134	
85	55	53	53	62	53	60
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	% LUMINAIRE
0-30	1765	29.92	40.73
0-40	2643	44.80	60.99
0-60	3829	64.91	88.37
0-90	4333	73.46	100.00
40-90	1690	28.65	39.01
60-90	504	8.54	11.63
90-180	0	.00	.00
0-180	4333	73.46	100.00

** EFFICIENCY = 73.5% **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = .9

SC (ALONG) = 1.1, SC (ACROSS) = .9

ANGLE	ALONG	45	ACROSS
45	5659	4345	3625
55	3954	3008	2534
65	2635	1872	2170
75	2429	1758	2489
85	2141	2080	2065

CERTIFIED BY:

Charles Lison

DATE:

JUN 15, 2005

PREPARED FOR:

CUSTOM LIGHTING LTD.
EDMONTON, ALBERTA

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

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
.0	2581	2581	2581	2581	2581	2581	244
2.5	2574	2576	2564	2559	2561	2566	
5.0	2561	2555	2559	2537	2522	2548	
7.5	2543	2537	2509	2489	2469	2510	
10.0	2521	2504	2462	2425	2410	2464	
12.5	2485	2457	2400	2344	2319	2401	650
15.0	2431	2394	2331	2254	2224	2327	
17.5	2384	2325	2244	2134	2093	2235	
20.0	2314	2251	2128	2008	1958	2131	
22.5	2254	2162	2014	1884	1825	2025	
25.0	2156	2064	1892	1742	1674	1903	872
27.5	2076	1968	1776	1594	1539	1786	
30.0	1960	1858	1635	1469	1404	1661	
32.5	1851	1729	1507	1334	1282	1534	878
35.0	1725	1600	1374	1224	1167	1411	
37.5	1589	1475	1245	1100	1054	1285	
40.0	1461	1334	1121	993	953	1164	
42.5	1313	1186	1010	875	843	1037	
45.0	1173	1063	897	775	749	924	713
47.5	1042	937	783	692	673	817	
50.0	900	800	692	604	571	708	
52.5	783	696	600	533	502	618	474
55.0	665	585	504	456	425	523	
57.5	569	495	423	394	377	446	
60.0	469	419	356	345	325	379	
62.5	389	350	284	295	308	319	
65.0	326	293	231	261	268	271	276
67.5	266	257	198	229	251	236	
70.0	228	209	177	203	224	204	
72.5	197	185	142	195	211	181	169
75.0	184	156	133	164	188	160	
77.5	156	139	123	141	158	140	
80.0	129	105	112	115	134	116	
82.5	98	81	85	91	102	89	
85.0	55	53	53	62	53	55	60
87.5	15	22	13	17	14	17	
90.0	0	0	0	0	0	0	

LIGHTING SCIENCES CANADA LTD.
440 PHILLIP ST., UNIT 19
WATERLOO, ONTARIO

CERTIFIED TEST REPORT NO. LSC A749
COMPUTED BY LSC PROGRAM **TEST-LITE**

CUSTOM LIGHTING 4' LS9R FIXTURE CAT. NO. LS9R-PS-M-142-OI-2-HD-K2-2-1-M
WITH SPECULAR REFLECTOR AND K-12 HINGE LENS
TWO PHILIPS F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE ADVANCE 120V 1 OR 2-LAMP ELECTRONIC BALLAST NO. REL-2P32-SC

AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M.		(FOOTLAMBERTS)		ACROSS
		22.5	45	67.5		
0	8802 (2569)	8802 (2569)	8802 (2569)	8802 (2569)		8802 (2569)
30	7718 (2252)	7338 (2141)	6455 (1884)	5799 (1692)		5531 (1614)
40	6503 (1898)	5956 (1738)	4997 (1458)	4433 (1293)		4245 (1238)
45	5659 (1651)	5134 (1498)	4345 (1268)	3747 (1093)		3625 (1058)
50	4778 (1394)	4259 (1243)	3675 (1072)	3213 (937)		3028 (883)
55	3954 (1154)	3486 (1017)	3008 (878)	2722 (794)		2534 (739)
60	3197 (933)	2867 (836)	2430 (709)	2361 (689)		2214 (646)
65	2635 (769)	2365 (690)	1872 (546)	2114 (617)		2170 (633)
70	2271 (663)	2089 (609)	1771 (516)	2029 (592)		2233 (651)
75	2429 (708)	2066 (603)	1758 (513)	2169 (633)		2489 (726)
80	2542 (742)	2079 (606)	2206 (644)	2261 (660)		2639 (770)
85	2141 (625)	2082 (607)	2080 (607)	2433 (710)		2065 (602)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

LIGHTING SCIENCES CANADA LTD.
440 PHILLIP ST., UNIT 19
WATERLOO, ONTARIO

CERTIFIED TEST REPORT NO. LSC A749
COMPUTED BY LSC PROGRAM **TEST-LITE**

CUSTOM LIGHTING 4' LS9R FIXTURE CAT. NO. LS9R-PS-M-142-OI-2-HD-K2-2-1-M
WITH SPECULAR REFLECTOR AND K-12 HINGE LENS
TWO PHILIPS F32T8/TL841 32W T8 FLUORESCENT LAMPS. LUMEN RATING = 2950 LMS.
ONE ADVANCE 120V 1 OR 2-LAMP ELECTRONIC BALLAST NO. REL-2P32-SC

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	.82	.82	.82	.78	.78	.78	.75	.75	.75	.75	.75	.75	.73
1	.82	.79	.76	.74	.80	.77	.75	.73	.74	.72	.71	.71	.70	.69	.69	.68	.67	.67	.67	.67	.65
2	.76	.71	.67	.64	.74	.70	.66	.63	.67	.64	.62	.65	.63	.60	.63	.61	.59	.59	.59	.59	.58
3	.71	.64	.60	.56	.69	.63	.59	.55	.61	.57	.54	.59	.56	.53	.58	.55	.53	.53	.53	.53	.51
4	.66	.58	.53	.49	.64	.58	.53	.49	.56	.52	.48	.54	.51	.48	.53	.50	.47	.47	.47	.47	.46
5	.61	.53	.47	.43	.59	.52	.47	.43	.51	.46	.43	.49	.45	.42	.48	.45	.42	.42	.42	.42	.40
6	.57	.48	.43	.39	.56	.48	.42	.38	.46	.42	.38	.45	.41	.38	.44	.40	.38	.38	.38	.38	.36
7	.53	.44	.39	.35	.52	.44	.38	.34	.43	.38	.34	.41	.37	.34	.41	.37	.34	.34	.34	.34	.32
8	.49	.40	.35	.31	.48	.40	.34	.31	.39	.34	.31	.38	.34	.30	.37	.33	.30	.30	.30	.30	.29
9	.46	.37	.31	.27	.45	.36	.31	.27	.35	.30	.27	.35	.30	.27	.34	.30	.27	.27	.27	.27	.26
10	.42	.34	.28	.25	.42	.33	.28	.24	.32	.28	.24	.32	.27	.24	.31	.27	.24	.24	.24	.24	.23

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
LUMINAIRE INPUT WATTS = 57.5
LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
BALLAST FACTORS HAVE NOT BEEN APPLIED.