



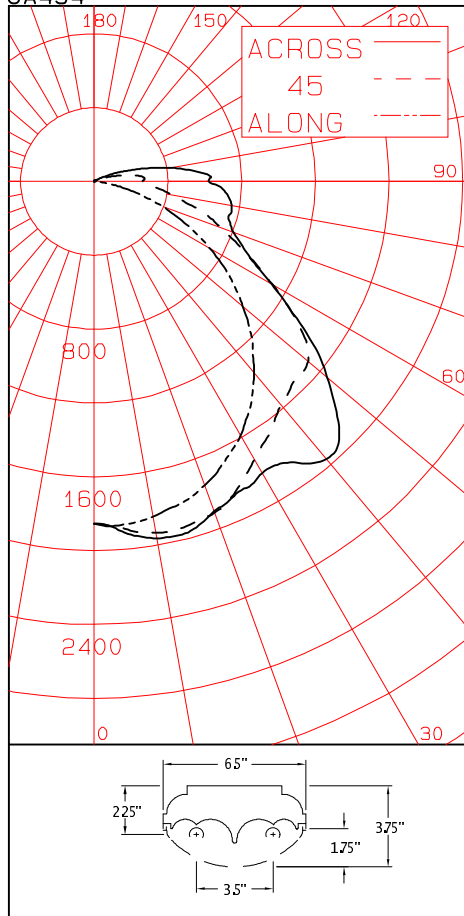
# LIGHTING SCIENCES CANADA LTD.

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 A494  
COMPUTED BY LSC PROGRAM \*\*TEST-LITE\*\*

BEGHELLI 4' ILLUMINA 100 SERIES IP65 RATED LUMINAIRE CAT. NO. HZ10048T5254AC120  
WITH SPECULAR REFLECTOR AND CLEAR WRAP LENS  
TWO 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.  
SYLVANIA 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. QTP 2x54T5HO/UNV PSN HT

CA494



## CANDLEPOWER SUMMARY

OUTPUT  
LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	1854	1854	1854	1854	1854	
5	1865	1855	1887	1913	1912	184
15	1808	1867	1933	1969	1968	539
25	1674	1771	1836	1856	1854	833
35	1480	1607	1664	1777	1859	1055
45	1212	1314	1532	1848	1878	1197
55	900	1019	1355	1433	1385	1100
65	555	762	905	927	914	827
75	234	376	581	645	754	563
85	26	132	331	608	719	400
90	0	93	262	576	621	
95	0	46	268	518	574	297
105	0	12	111	225	267	136
115	0	0	34	63	73	38
125	0	0	3	16	13	6
135	0	0	0	1	3	1
145	0	0	0	0	1	0
155	0	0	0	0	0	0
165	0	0	0	0	0	0
175	0	0	0	0	0	0
180	0	0	0	0	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1555	17.68	21.68
0-40	2610	29.67	36.38
0-60	4907	55.77	68.39
0-90	6697	76.11	93.34
40-90	4087	46.44	56.96
60-90	1790	20.34	24.94
90-180	478	5.43	6.66
0-180	7175	81.55	100.00

\*\* EFFICIENCY = 81.5% \*\*

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.6

SC (ALONG) = 1.3, SC (ACROSS) = 1.6

ANGLE	ALONG	45	ACROSS
45	8216	8882	10435
55	7411	8998	8698
65	6049	7291	6841
75	3959	6182	7250
85	1057	5458	10092

CERTIFIED BY:

*Charles Lison*

DATE:

DEC 2, 2004

PREPARED FOR:

BEGHELLI CANADA INC.  
MARKHAM, ONTARIO

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

LIGHTING SCIENCES CANADA LTD.  
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 WATERLOO, ONTARIO

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CANDLEPOWER DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	1854	1854	1854	1854	1854	1854	
5	1865	1855	1887	1913	1912	1886	184
10	1845	1869	1932	1962	1963	1917	
15	1808	1867	1933	1969	1968	1914	539
20	1752	1823	1910	1916	1901	1869	
25	1674	1771	1836	1856	1854	1807	833
30	1589	1693	1739	1811	1824	1738	
35	1480	1607	1664	1777	1859	1679	1055
40	1348	1470	1578	1862	1962	1641	
45	1212	1314	1532	1848	1878	1560	1197
50	1052	1169	1515	1659	1651	1423	
55	900	1019	1355	1433	1385	1238	1100
60	725	890	1118	1161	1113	1022	
65	555	762	905	927	914	832	827
70	392	589	728	730	804	661	
75	234	376	581	645	754	524	563
80	109	221	434	642	759	433	
85	26	132	331	608	719	361	400
90	0	93	262	576	621	310	
95	0	46	268	518	574	280	297
100	0	18	199	373	426	202	
105	0	12	111	225	267	120	136
110	0	7	63	138	153	71	
115	0	0	34	63	73	33	38
120	0	0	12	32	31	15	
125	0	0	3	16	13	6	6
130	0	0	0	2	9	2	
135	0	0	0	1	3	1	1
140	0	0	0	0	1	0	
145	0	0	0	0	0	0	0
150	0	0	0	0	0	0	
155	0	0	0	0	0	0	0
160	0	0	0	0	0	0	
165	0	0	0	0	0	0	0
170	0	0	0	0	0	0	
175	0	0	0	0	0	0	0
180	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	9211 ( 2688)	9211 ( 2688)	9211 ( 2688)	9211 ( 2688)		9211 ( 2688)
30	8928 ( 2606)	9027 ( 2634)	8894 ( 2595)	9044 ( 2639)		9053 ( 2642)
40	8484 ( 2476)	8572 ( 2502)	8672 ( 2531)	9921 ( 2895)		10380 ( 3029)
45	8216 ( 2398)	8132 ( 2373)	8882 ( 2592)	10315 ( 3010)		10435 ( 3045)
50	7792 ( 2274)	7794 ( 2274)	9313 ( 2718)	9788 ( 2856)		9660 ( 2819)
55	7411 ( 2163)	7398 ( 2159)	8998 ( 2626)	9055 ( 2642)		8698 ( 2538)
60	6773 ( 1976)	7173 ( 2093)	8088 ( 2360)	7945 ( 2318)		7542 ( 2201)
65	6049 ( 1765)	6930 ( 2022)	7291 ( 2128)	6994 ( 2041)		6841 ( 1996)
70	5179 ( 1511)	6238 ( 1820)	6656 ( 1942)	6172 ( 1801)		6715 ( 1960)
75	3959 ( 1155)	4799 ( 1400)	6182 ( 1804)	6268 ( 1829)		7250 ( 2116)
80	2575 ( 751)	3576 ( 1043)	5604 ( 1635)	7382 ( 2154)		8589 ( 2506)
85	1057 ( 308)	2942 ( 858)	5458 ( 1593)	8689 ( 2536)		10092 ( 2945)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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# COEFFICIENTS OF UTILIZATION

## ZONAL CAVITY METHOD

EFFECTIVE FLOOR CAVITY REFLECTANCE = .20

CC	80				70				50				30				10				0
WALL	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	0
RCR																					
0	.96	.96	.96	.96	.93	.93	.93	.93	.88	.88	.88	.83	.83	.83	.78	.78	.78	.78	.78	.78	.76
1	.87	.82	.79	.75	.84	.80	.77	.73	.75	.73	.70	.71	.69	.67	.68	.66	.64	.68	.66	.64	.62
2	.79	.72	.66	.61	.76	.70	.64	.60	.66	.61	.58	.62	.59	.55	.59	.56	.53	.59	.56	.53	.51
3	.72	.63	.56	.51	.69	.61	.55	.50	.58	.53	.49	.55	.51	.47	.52	.49	.45	.52	.49	.45	.43
4	.66	.56	.48	.43	.63	.54	.48	.42	.52	.46	.41	.49	.44	.40	.47	.42	.39	.47	.42	.39	.37
5	.60	.49	.42	.36	.58	.48	.41	.36	.45	.39	.35	.43	.38	.34	.41	.37	.33	.41	.37	.33	.31
6	.55	.44	.36	.31	.53	.43	.36	.31	.41	.34	.30	.39	.33	.29	.37	.32	.28	.37	.32	.28	.27
7	.50	.39	.32	.27	.49	.38	.31	.26	.36	.30	.26	.35	.29	.25	.33	.28	.25	.33	.28	.25	.23
8	.46	.35	.28	.23	.45	.34	.27	.23	.33	.26	.22	.31	.26	.22	.30	.25	.21	.30	.25	.21	.20
9	.43	.31	.24	.20	.41	.31	.24	.19	.29	.23	.19	.28	.23	.19	.27	.22	.18	.27	.22	.18	.17
10	.39	.28	.22	.17	.38	.28	.21	.17	.27	.21	.17	.25	.20	.16	.24	.20	.16	.24	.20	.16	.14

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES  
 LUMINAIRE INPUT WATTS = 107.9  
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.  
 BALLAST FACTORS HAVE NOT BEEN APPLIED.