



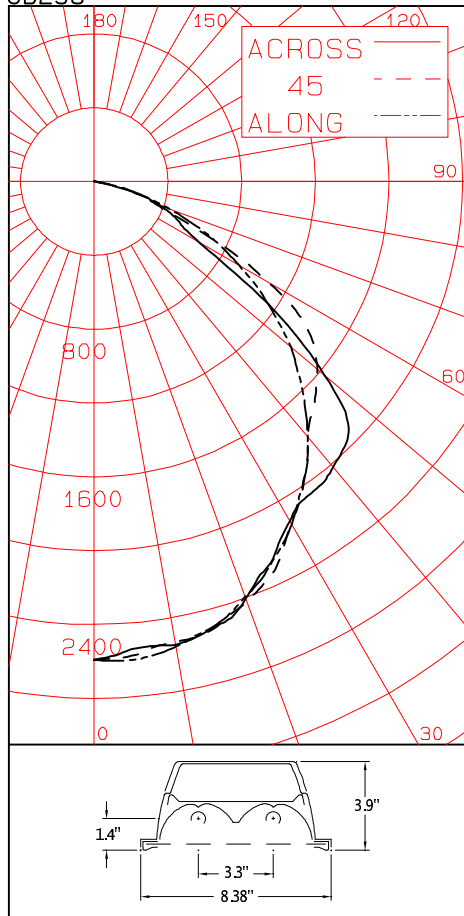
LIGHTING SCIENCES CANADA LTD.

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 B298
COMPUTED BY LSC PROGRAM **TEST-LITE**

BEGHELLI BS120 SERIES 4' LUMINAIRE CAT. NO. BS120 4 HT F 120V
WITH SPECULAR REFLECTOR AND CLEAR FLAT GLASS LENS
TWO 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4450 LMS.
ONE UNIVERSAL ACCUSTART 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254PUNV-D

CB298



CANDLEPOWER SUMMARY

OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	2592	2592	2592	2592	2592	
5	2600	2581	2574	2564	2540	248
10	2559	2524	2532	2549	2548	
15	2498	2453	2509	2523	2500	702
20	2395	2375	2422	2436	2406	
25	2279	2267	2321	2272	2276	1050
30	2145	2141	2139	2136	2124	
35	1982	1989	1986	2019	2059	1254
40	1801	1820	1804	1974	2019	
45	1601	1603	1693	1894	1949	1334
50	1394	1379	1582	1702	1632	
55	1148	1145	1423	1270	1149	1102
60	909	951	1093	745	661	
65	683	783	635	495	503	630
70	439	576	358	373	384	
75	247	274	215	218	215	248
80	76	81	76	25	27	
85	0	0	0	0	2	12
90	0	0	0	0	0	

ZONAL LUMENS AND PERCENTAGES

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	1999	22.46	30.39
0-40	3253	36.55	49.45
0-60	5689	63.92	86.48
0-90	6578	73.92	100.00
40-90	3325	37.36	50.55
60-90	889	9.99	13.52
90-180	0	.00	.00
0-180	6578	73.92	100.00

** EFFICIENCY = 73.9% **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.2
SC = 1.2

ANGLE	ALONG	45	ACROSS
45	10335	10970	12632
55	9137	11374	9184
65	7374	6881	5452
75	4358	3802	3799
85	0	0	117

CERTIFIED BY:

K. Frank Lin
PREPARED FOR:

DATE:
AUG 4, 2006

BEGHELLI NORTH AMERICA
MIRAMAR, FL, USA

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

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

CERTIFIED TEST REPORT NO. LSC B298
 COMPUTED BY LSC PROGRAM **TEST-LITE**

BEGHELLI BS120 SERIES 4' LUMINAIRE CAT. NO. BS120 4 HT F 120V
 WITH SPECULAR REFLECTOR AND CLEAR FLAT GLASS LENS
 TWO 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4450 LMS.
 ONE UNIVERSAL ACCUSTART 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254PUNV-D

CANDLEPOWER DATA
 IN 2.5 DEGREE STEPS

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
.0	2592	2592	2592	2592	2592	2592	
2.5	2600	2583	2585	2581	2571	2584	
5.0	2600	2581	2574	2564	2540	2572	248
7.5	2584	2560	2542	2543	2538	2552	
10.0	2559	2524	2532	2549	2548	2540	
12.5	2524	2495	2530	2537	2532	2523	
15.0	2498	2453	2509	2523	2500	2496	702
17.5	2453	2412	2459	2481	2477	2454	
20.0	2395	2375	2422	2436	2406	2409	
22.5	2345	2329	2373	2353	2325	2348	
25.0	2279	2267	2321	2272	2276	2284	1050
27.5	2217	2211	2230	2214	2187	2214	
30.0	2145	2141	2139	2136	2124	2137	
32.5	2059	2066	2069	2053	2072	2063	
35.0	1982	1989	1986	2019	2059	2003	1254
37.5	1903	1911	1899	1990	2050	1944	
40.0	1801	1820	1804	1974	2019	1877	
42.5	1701	1716	1737	1945	1989	1811	
45.0	1601	1603	1693	1894	1949	1741	1334
47.5	1493	1481	1635	1839	1849	1657	
50.0	1394	1379	1582	1702	1632	1544	
52.5	1268	1273	1511	1506	1402	1406	
55.0	1148	1145	1423	1270	1149	1247	1102
57.5	1035	1043	1295	1018	860	1076	
60.0	909	951	1093	745	661	893	
62.5	800	865	886	584	552	753	
65.0	683	783	635	495	503	626	630
67.5	556	682	440	436	446	515	
70.0	439	576	358	373	384	430	
72.5	327	421	278	307	312	331	
75.0	247	274	215	218	215	234	248
77.5	145	138	164	118	95	135	
80.0	76	81	76	25	27	58	
82.5	31	33	9	0	0	14	
85.0	0	0	0	0	2	0	12
87.5	0	0	0	0	0	0	
90.0	0	0	0	0	0	0	

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

CERTIFIED TEST REPORT NO. LSC B298
 COMPUTED BY LSC PROGRAM **TEST-LITE**

BEGHELLI BS120 SERIES 4' LUMINAIRE CAT. NO. BS120 4 HT F 120V
 WITH SPECULAR REFLECTOR AND CLEAR FLAT GLASS LENS
 TWO 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4450 LMS.
 ONE UNIVERSAL ACCUSTART 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254PUNV-D

AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M.		(FOOTLAMBERTS)		ACROSS
		22.5	45	67.5		
0	11832 (3453)	11832 (3453)	11832 (3453)	11832 (3453)		11832 (3453)
30	11309 (3300)	11318 (3303)	11305 (3299)	11287 (3294)		11195 (3267)
40	10736 (3133)	10878 (3175)	10762 (3141)	11797 (3443)		12035 (3512)
45	10335 (3016)	10365 (3025)	10970 (3201)	12268 (3580)		12632 (3687)
50	9903 (2890)	9831 (2869)	11241 (3280)	12122 (3538)		11589 (3382)
55	9137 (2667)	9130 (2664)	11374 (3319)	10141 (2959)		9184 (2680)
60	8297 (2421)	8713 (2543)	9994 (2916)	6817 (1989)		6031 (1760)
65	7374 (2152)	8464 (2470)	6881 (2008)	5359 (1564)		5452 (1591)
70	5858 (1709)	7712 (2250)	4799 (1400)	4990 (1456)		5124 (1495)
75	4358 (1272)	4845 (1414)	3802 (1109)	3857 (1125)		3799 (1108)
80	1995 (582)	2140 (624)	2002 (584)	659 (192)		707 (206)
85	0 (0)	19 (5)	0 (0)	0 (0)		117 (34)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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

CERTIFIED TEST REPORT NO. LSC B298
 COMPUTED BY LSC PROGRAM **TEST-LITE**

BEGHELLI BS120 SERIES 4' LUMINAIRE CAT. NO. BS120 4 HT F 120V
 WITH SPECULAR REFLECTOR AND CLEAR FLAT GLASS LENS
 TWO 54W T5 HO FLUORESCENT LAMPS. LUMEN RATING = 4450 LMS.
 ONE UNIVERSAL ACCUSTART 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254PUNV-D

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	.88	.88	.88	.88	.86	.86	.86	.86	.82	.82	.82	.79	.79	.79	.75	.75	.75	.74			
1	.82	.79	.76	.74	.80	.78	.75	.73	.74	.72	.71	.71	.70	.68	.69	.68	.66	.65			
2	.76	.71	.66	.63	.74	.69	.65	.62	.67	.63	.60	.64	.62	.59	.62	.60	.58	.56			
3	.70	.63	.58	.54	.68	.62	.57	.53	.60	.56	.52	.58	.54	.51	.56	.53	.51	.49			
4	.64	.56	.51	.46	.63	.55	.50	.46	.54	.49	.45	.52	.48	.45	.50	.47	.44	.43			
5	.59	.50	.44	.39	.57	.49	.43	.39	.48	.43	.39	.46	.42	.38	.45	.41	.38	.37			
6	.54	.45	.39	.34	.53	.44	.38	.34	.43	.38	.34	.42	.37	.34	.41	.36	.33	.32			
7	.50	.40	.34	.30	.49	.40	.34	.30	.39	.33	.30	.38	.33	.29	.37	.32	.29	.28			
8	.46	.36	.30	.26	.45	.36	.30	.26	.35	.29	.26	.34	.29	.25	.33	.29	.25	.24			
9	.42	.33	.27	.22	.41	.32	.26	.22	.31	.26	.22	.30	.25	.22	.30	.25	.22	.21			
10	.39	.30	.24	.20	.38	.29	.24	.20	.28	.23	.20	.28	.23	.19	.27	.23	.19	.18			

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 109.0
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST FACTORS HAVE NOT BEEN APPLIED.