



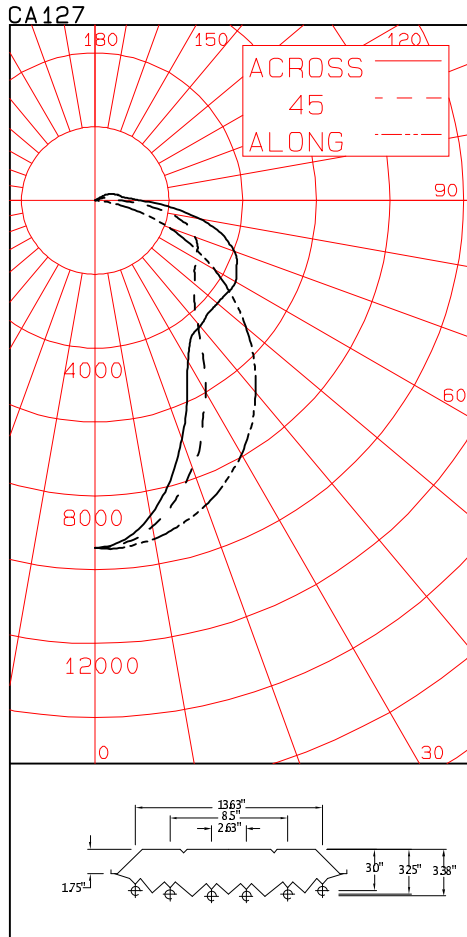
LIGHTING SCIENCES CANADA LTD.

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. LSCA127
 COMPUTED BY LSC PROGRAM **TEST-LITE**

JAFTECH 4' FLUORESCENT LUMINAIRE CAT. NO. F904-654-6UHO-HB-M
 WITH MIRROR IV SILVER SPECULAR REFLECTOR
 SIX 54W HO T5 FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.
 UNIVERSAL TRIAD 120-277V 3 OR 4-LAMP ELECTRONIC BALLAST NO. B454IUNV-E
 UNIVERSAL TRIAD 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254IUNV-E

CANDLEPOWER SUMMARY OUTPUT LUMENS



ANGLE	ALONG	22.5	45	67.5	ACROSS	9403	9403
0	9403	9403	9403	9403	9403		
5	9428	9394	9307	9229	9213	891	
15	9069	8939	8394	7980	7851	2362	
25	8396	7893	6852	6164	5895	3213	
35	7409	6487	5099	4617	4538	3473	
45	6091	4788	3804	4184	4327	3480	
55	4544	3071	3286	4068	4375	3349	
65	2910	1961	3072	3926	4237	3101	
75	1327	1370	2612	3345	3587	2545	
85	120	663	1362	1888	2057	1364	
90	0	186	673	1083	1236		
95	0	90	427	714	840	489	
105	0	0	281	523	614	296	
115	0	0	52	310	426	143	
125	0	0	0	11	78	20	
135	0	0	0	0	0	0	
145	0	0	0	0	0	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	0	

ZONE	LUMENS	% LAMP	%LUMINAIRE
0-30	6466	24.50	26.15
0-40	9939	37.65	40.20
0-60	16768	63.52	67.81
0-90	23778	90.07	96.16
40-90	13838	52.42	55.97
60-90	7009	26.55	28.35
90-180	948	3.59	3.84
0-180	24727	93.66	100.00

** EFFICIENCY = 93.7% **

LUMINANCE SUMMARY-CD. / SQ. M.

ANGLE	ALONG	45	ACROSS
45	16943	9835	10854
55	15584	10150	12964
65	13546	12246	15928
75	10084	15299	19235
85	2707	16090	20315

S/MH = .9
 SC (ALONG) = 1.3, SC (ACROSS) = .9

CERTIFIED BY:

Charles Sisson

DATE:
 FEB 2, 2004

PREPARED FOR:

JAFTECH MANUFACTURING
 NEWMARKET, ONTARIO

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. LSCA127
 COMPUTED BY LSC PROGRAM **TEST-LITE**

JAFTECH 4' FLUORESCENT LUMINAIRE CAT. NO. F904-654-6UHO-HB-M
 WITH MIRROR IV SILVER SPECULAR REFLECTOR
 SIX 54W HO T5 FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.
 UNIVERSAL TRIAD 120-277V 3 OR 4-LAMP ELECTRONIC BALLAST NO. B454IUNV-E
 UNIVERSAL TRIAD 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254IUNV-E

CANDLEPOWER DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	9403	9403	9403	9403	9403	9403	
5	9428	9394	9307	9229	9213	9313	891
10	9303	9243	8958	8721	8657	8976	
15	9069	8939	8394	7980	7851	8443	2362
20	8777	8443	7703	7076	6870	7761	
25	8396	7893	6852	6164	5895	7014	3213
30	7943	7230	6003	5221	5036	6236	
35	7409	6487	5099	4617	4538	5544	3473
40	6779	5658	4337	4301	4439	4976	
45	6091	4788	3804	4184	4327	4496	3480
50	5338	3935	3526	4096	4331	4098	
55	4544	3071	3286	4068	4375	3721	3349
60	3745	2392	3154	4091	4402	3428	
65	2910	1961	3072	3926	4237	3133	3101
70	2120	1622	2888	3737	4024	2830	
75	1327	1370	2612	3345	3587	2446	2545
80	632	1094	2111	2682	2894	1913	
85	120	663	1362	1888	2057	1250	1364
90	0	186	673	1083	1236	640	
95	0	90	427	714	840	413	489
100	0	41	356	614	705	341	
105	0	0	281	523	614	278	296
110	0	0	178	435	527	219	
115	0	0	52	310	426	144	143
120	0	0	0	140	266	68	
125	0	0	0	11	78	12	20
130	0	0	0	0	0	0	
135	0	0	0	0	0	0	0
140	0	0	0	0	0	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	

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

CERTIFIED TEST REPORT NO. LSCA127
 COMPUTED BY LSC PROGRAM **TEST-LITE**

JAFTECH 4' FLUORESCENT LUMINAIRE CAT. NO. F904-654-6UHO-HB-M
 WITH MIRROR IV SILVER SPECULAR REFLECTOR
 SIX 54W HO T5 FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.
 UNIVERSAL TRIAD 120-277V 3 OR 4-LAMP ELECTRONIC BALLAST NO. B454IUNV-E
 UNIVERSAL TRIAD 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254IUNV-E

AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)				ACROSS
		22.5	45	67.5		
0	18496(5398)	18496(5398)	18496(5398)	18496(5398)	18496(5398)	18496(5398)
30	18041(5265)	16066(4689)	13066(3813)	11209(3271)	10736(3133)	10736(3133)
40	17407(5080)	14054(4102)	10444(3048)	10179(2971)	10408(3037)	10408(3037)
45	16943(4945)	12781(3730)	9835(2870)	10569(3084)	10854(3167)	10854(3167)
50	16336(4768)	11493(3354)	9851(2875)	11174(3261)	11676(3408)	11676(3408)
55	15584(4548)	9936(2900)	10150(2962)	12174(3553)	12964(3783)	12964(3783)
60	14734(4300)	8784(2563)	10907(3183)	13659(3986)	14476(4225)	14476(4225)
65	13546(3953)	8360(2440)	12246(3574)	14974(4370)	15928(4648)	15928(4648)
70	12191(3558)	8365(2441)	13652(3984)	16728(4882)	17649(5151)	17649(5151)
75	10084(2943)	8996(2625)	15299(4465)	18344(5354)	19235(5614)	19235(5614)
80	7161(2090)	9986(2914)	16509(4818)	19095(5573)	19958(5825)	19958(5825)
85	2707(790)	10046(2932)	16090(4696)	19479(5685)	20315(5929)	20315(5929)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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

CERTIFIED TEST REPORT NO. LSCA127
 COMPUTED BY LSC PROGRAM **TEST-LITE**

JAFTECH 4' FLUORESCENT LUMINAIRE CAT. NO. F904-654-6UHO-HB-M
 WITH MIRROR IV SILVER SPECULAR REFLECTOR
 SIX 54W HO T5 FLUORESCENT LAMPS. LUMEN RATING = 4400 LMS.
 UNIVERSAL TRIAD 120-277V 3 OR 4-LAMP ELECTRONIC BALLAST NO. B454IUNV-E
 UNIVERSAL TRIAD 120-277V 1 OR 2-LAMP ELECTRONIC BALLAST NO. B254IUNV-E

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	1.111	1.111	1.111	1.11	1.081	1.081	1.081	1.08	1.021	1.021	1.02	.97	.97	.97	.92	.92	.92	.90			
1	1.00	.95	.91	.87	.97	.93	.89	.85	.88	.85	.82	.84	.81	.78	.80	.77	.75	.73			
2	.91	.83	.76	.70	.88	.80	.74	.69	.76	.71	.67	.73	.68	.65	.69	.66	.63	.60			
3	.83	.72	.65	.58	.80	.71	.64	.58	.68	.61	.56	.64	.59	.55	.62	.57	.53	.51			
4	.76	.64	.56	.50	.73	.63	.55	.49	.60	.53	.48	.57	.52	.47	.55	.50	.46	.44			
5	.69	.57	.48	.42	.67	.56	.48	.42	.53	.46	.41	.51	.45	.40	.49	.44	.39	.37			
6	.64	.51	.43	.37	.62	.50	.42	.36	.48	.41	.36	.46	.40	.35	.44	.39	.34	.32			
7	.59	.46	.38	.32	.57	.45	.38	.32	.44	.36	.31	.42	.36	.31	.40	.35	.30	.28			
8	.55	.42	.34	.28	.53	.41	.33	.28	.39	.32	.28	.38	.32	.27	.37	.31	.27	.25			
9	.51	.38	.30	.25	.49	.37	.30	.24	.36	.29	.24	.34	.28	.24	.33	.28	.23	.22			
10	.47	.35	.27	.22	.46	.34	.27	.22	.33	.26	.22	.32	.25	.21	.31	.25	.21	.19			

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 350.0
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 BALLAST FACTORS HAVE NOT BEEN APPLIED.