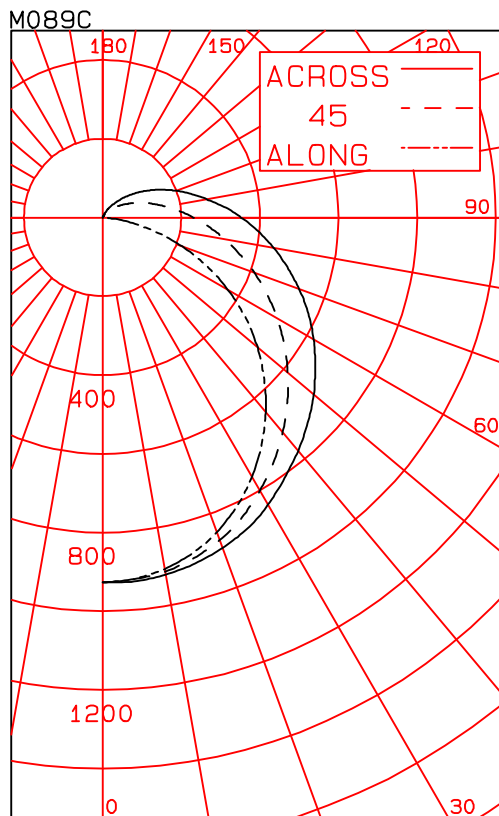


TEST REPORT NO. M089C
 ACCREDITED BY NVLAP (LAB CODE 500084-0) TO ISO/IES 17025:2005 FOR IES LM-79-08
 CUSTOM LIGHTING 4' LED STRIP LUMINAIRE CAT. NO. CL-LSTRIP-PFW-41-40K4400-120-WA
 WITH WHITE REFLECTOR AND CURVED ACRYLIC LENS
 ONE PHILIPS FORTIMO LED STRIP WITH 96 LEDS. LUMEN OUTPUT = 3778 LMS.
 PHILIPS ADVANCE XITANIUM 120-277V LED DRIVER MODEL XI054C150V054BST1



CANDLEPOWER SUMMARY

OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	
0	927	927	927	927	927	
5	921	925	922	925	928	89
15	883	892	896	903	910	253
25	808	820	840	861	872	387
35	705	723	758	793	807	474
45	582	608	664	718	738	511
55	444	485	564	634	660	500
65	293	357	461	547	578	445
75	140	236	361	454	486	361
85	19	139	272	366	397	270
90	0	103	231	322	353	
95	0	75	194	281	310	193
105	0	40	134	208	232	132
115	0	20	88	147	167	85
125	0	7	53	96	111	48
135	0	0	26	56	66	23
145	0	0	7	24	31	8
155	0	0	0	2	5	1
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	728	19.29	19.29
0-40	1202	31.82	31.82
0-60	2212	58.56	58.56
0-90	3288	87.05	87.05
40-90	2086	55.22	55.22
60-90	1076	28.48	28.48
90-180	489	12.95	12.95
0-180	3778	100.00	100.00

** EFFICACY = 127.7 LMS/WATT **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.4

SC(ALONG) = 1.2, SC(ACROSS) = 1.4

ANGLE	ALONG	45	ACROSS
45	10103	8762	8843
55	9514	8313	8608
65	8512	7964	8535
75	6642	7805	8590
85	2706	8231	9070

DATE:
 FEB 6, 2018

PREPARED FOR:
 CUSTOM LIGHTING
 EDMONTON, ALBERTA

TESTED ACCORDING TO IES LM-79-2008 SEC. 10. TEST DISTANCE EXCEEDS FIVE TIMES THE GREATEST LUMINOUS OPENING OF LUMINAIRE

LUMENTRA, INC.
 160 FROBISHER DRIVE, UNIT 5
 WATERLOO, ONTARIO

TEST REPORT NO. M089C
 COMPUTED BY LSC PROGRAM **TEST-LITE**

CUSTOM LIGHTING 4' LED STRIP LUMINAIRE CAT. NO. CL-LSTRIP-PFW-41-40K4400-120-WA
 WITH WHITE REFLECTOR AND CURVED ACRYLIC LENS
 ONE PHILIPS FORTIMO LED STRIP WITH 96 LEDS. LUMEN OUTPUT = 3778 LMS.
 PHILIPS ADVANCE XITANIUM 120-277V LED DRIVER MODEL XI054C150V054BST1

CANDLEPOWER DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	927	927	927	927	927	927	
5	921	925	922	925	928	924	89
10	907	911	914	918	922	914	
15	883	892	896	903	910	897	253
20	850	861	871	885	893	872	
25	808	820	840	861	872	840	387
30	760	774	800	828	842	801	
35	705	723	758	793	807	758	474
40	645	667	712	756	774	711	
45	582	608	664	718	738	662	511
50	515	547	614	676	701	611	
55	444	485	564	634	660	559	500
60	370	421	513	592	620	505	
65	293	357	461	547	578	450	445
70	215	295	411	501	533	395	
75	140	236	361	454	486	341	361
80	72	184	315	410	442	291	
85	19	139	272	366	397	246	270
90	0	103	231	322	353	208	
95	0	75	194	281	310	176	193
100	0	54	162	242	269	148	
105	0	40	134	208	232	124	132
110	0	29	110	176	199	103	
115	0	20	88	147	167	85	85
120	0	13	70	120	138	68	
125	0	7	53	96	111	53	48
130	0	2	39	75	88	40	
135	0	0	26	56	66	29	23
140	0	0	15	39	47	19	
145	0	0	7	24	31	12	8
150	0	0	1	12	17	5	
155	0	0	0	2	5	1	1
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	

LUMENTRA, INC.
 160 FROBISHER DRIVE, UNIT 5
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 WITH WHITE REFLECTOR AND CURVED ACRYLIC LENS
 ONE PHILIPS FORTIMO LED STRIP WITH 96 LEDS. LUMEN OUTPUT = 3778 LMS.
 PHILIPS ADVANCE XITANIUM 120-277V LED DRIVER MODEL XI054C150V054BST1

AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)				ACROSS
		22.5	45	67.5		
0	11392(3324)	11392(3324)	11392(3324)	11392(3324)	11392(3324)	
30	10781(3146)	10002(2919)	9599(2801)	9478(2766)	9461(2761)	
40	10347(3019)	9351(2729)	8997(2625)	8989(2623)	8988(2623)	
45	10103(2948)	9014(2630)	8762(2557)	8808(2571)	8843(2581)	
50	9837(2871)	8684(2534)	8485(2476)	8630(2518)	8693(2537)	
55	9514(2776)	8335(2432)	8313(2426)	8516(2485)	8608(2512)	
60	9083(2651)	7979(2328)	8104(2365)	8435(2461)	8519(2486)	
65	8512(2484)	7562(2207)	7964(2324)	8388(2448)	8535(2491)	
70	7737(2258)	7194(2099)	7859(2293)	8379(2445)	8509(2483)	
75	6642(1938)	6824(1991)	7805(2278)	8427(2459)	8590(2507)	
80	5097(1487)	6572(1918)	7924(2312)	8577(2503)	8729(2547)	
85	2706(789)	6582(1921)	8231(2402)	8916(2602)	9070(2647)	

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

LUMENTRA, INC.
 160 FROBISHER DRIVE, UNIT 5
 WATERLOO, ONTARIO

TEST REPORT NO. M089C
 COMPUTED BY LSC PROGRAM **TEST-LITE**

CUSTOM LIGHTING 4' LED STRIP LUMINAIRE CAT. NO. CL-LSTRIP-PFW-41-40K4400-120-WA
 WITH WHITE REFLECTOR AND CURVED ACRYLIC LENS
 ONE PHILIPS FORTIMO LED STRIP WITH 96 LEDS. LUMEN OUTPUT = 3778 LMS.
 PHILIPS ADVANCE XITANIUM 120-277V LED DRIVER MODEL XI054C150V054BST1

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	1.16	1.16	1.16	1.16	1.12	1.12	1.12	1.12	1.04	1.04	1.04	.97	.97	.97	.90	.90	.90	.87			
1	1.04	.98	.93	.89	1.00	.95	.90	.86	.88	.84	.81	.82	.79	.76	.76	.74	.71	.68			
2	.94	.85	.78	.71	.90	.82	.75	.69	.76	.71	.66	.71	.66	.62	.66	.62	.59	.56			
3	.85	.74	.65	.59	.82	.71	.64	.57	.67	.60	.54	.62	.57	.52	.58	.53	.49	.47			
4	.78	.66	.57	.50	.75	.64	.55	.49	.59	.52	.47	.55	.49	.45	.52	.47	.43	.40			
5	.72	.58	.49	.42	.68	.56	.48	.41	.53	.45	.40	.49	.43	.38	.46	.41	.37	.34			
6	.66	.52	.43	.36	.63	.50	.42	.36	.47	.40	.34	.44	.38	.33	.42	.36	.32	.29			
7	.60	.47	.38	.32	.58	.45	.37	.31	.42	.35	.30	.40	.33	.28	.37	.32	.27	.25			
8	.56	.42	.34	.28	.54	.41	.33	.27	.38	.31	.26	.36	.30	.25	.34	.28	.24	.22			
9	.52	.38	.30	.24	.50	.37	.29	.24	.35	.28	.23	.33	.27	.22	.31	.25	.21	.19			
10	.48	.35	.27	.21	.46	.34	.26	.21	.32	.25	.20	.30	.24	.19	.29	.23	.19	.17			

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 29.6
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 ABSOLUTE PHOTOMETRY TAKEN.

LUMENTRA, INC.
160 FROBISHER DRIVE, UNIT 5
WATERLOO, ONTARIO

TEST REPORT NO. M089C

CUSTOM LIGHTING 4' LED STRIP LUMINAIRE CAT. NO. CL-LSTRIP-PFW-41-40K4400-120-WA
WITH WHITE REFLECTOR AND CURVED ACRYLIC LENS
ONE PHILIPS FORTIMO LED STRIP WITH 96 LEDS. LUMEN OUTPUT = 3778 LMS.
PHILIPS ADVANCE XITANIUM 120-277V LED DRIVER MODEL XI054C150V054BST1

AMBIENT TEMPERATURE: 24.7 °C

STABILIZATION TIME: 1 HOUR

THE LUMINAIRE WAS OPERATED IN THE ORIENTATION INDICATED BY THE PICTURES BELOW
LSI MOVING MIRROR GONIOPHOTOMETER 6240T WAS USED

ELECTRICAL CONSUMPTION

INPUT VOLTAGE: 120.0 VRMS
INPUT CURRENT: 0.248 ARMS
INPUT WATTAGE: 29.58
POWER FACTOR: 0.994



Prepared By:



BalaKumar Bhaskaran
Senior Engineer

Approved By:



Charles Sisson
Senior Technologist

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END OF REPORT