



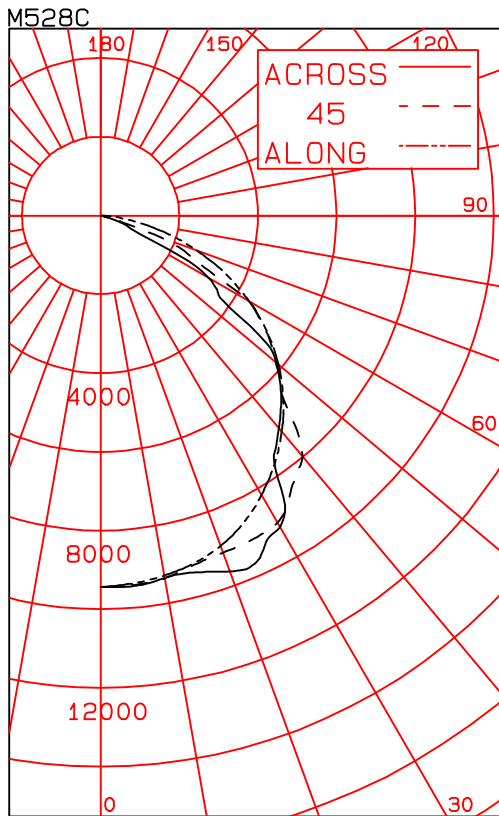
60 St. George Street, Suite 331
 Toronto, Ontario, M5S 1A7
 (647) 479-8820
 email: services@lumentra.com

160 Frobisher Drive, Unit 5
 Waterloo, Ontario, N2V 2B1
 (647) 479-7820
 http://lumentra.com



TEST REPORT NO. M528C
 ACCREDITED BY NVLAP (LAB CODE 500084-0) TO ISO/IES 17025:2005 FOR IES LM-79-08

PIONEER LED HIGHBAY LUMINAIRE CAT. NO. S HB-1246-30L-30K-120
 WITH SPECULAR REFLECTORS
 EIGHT PHILIPS FORTIMO LED BOARDS (72 LEDS EACH). LUMEN OUTPUT = 26016 LMS.
 TWO PHILIPS ADVANCE XITANIUM 120-277V LED DRIVERS MODEL XI095C275V054BSS1



CANDLEPOWER SUMMARY

OUTPUT LUMENS

ANGLE	ALONG	22.5	45	67.5	ACROSS	ACROSS
0	9439	9439	9439	9439	9439	
5	9385	9419	9422	9431	9453	911
15	9145	9207	9186	9308	9387	2618
25	8605	8644	9093	9544	9586	4171
35	7711	7880	8465	8356	7698	5062
45	6563	7050	6559	6513	6492	5165
55	5175	5625	5144	4794	3823	4467
65	3512	3448	2592	2043	1068	2634
75	1734	1315	464	174	111	861
85	270	73	90	102	101	129
90	0	0	0	0	0	0
95	0	0	0	0	0	0
105	0	0	0	0	0	0
115	0	0	0	0	0	0
125	0	0	0	0	0	0
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	7699	29.59	29.59
0-40	12761	49.05	49.05
0-60	22393	86.07	86.07
0-90	26016	100.00	100.00
40-90	13255	50.95	50.95
60-90	3623	13.93	13.93
90-180	0	.00	.00
0-180	26016	100.00	100.00

** EFFICACY = 126.1 LMS/WATT **

LUMINANCE SUMMARY-CD. / SQ. M.

S/MH = 1.3
 SC = 1.3

ANGLE	ALONG	45	ACROSS
45	26980	27064	26788
55	26224	26166	19449
65	24153	17891	7370
75	19469	5212	1245
85	9005	3009	3364

DATE:
 AUG 16, 2018

PREPARED FOR:
 PIONEER ENGINEERING INC.
 TORONTO, ONTARIO

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. M528C
 COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LED HIGHBAY LUMINAIRE CAT. NO. S HB-1246-30L-30K-120
 WITH SPECULAR REFLECTORS
 EIGHT PHILIPS FORTIMO LED BOARDS (72 LEDS EACH). LUMEN OUTPUT = 26016 LMS.
 TWO PHILIPS ADVANCE XITANIUM 120-277V LED DRIVERS MODEL XI095C275V054BSS1

CANDLEPOWER DATA

ANGLE	PLANE						OUTPUT LUMENS
	ALONG	22.5	45	67.5	ACROSS	AVERAGE	
0	9439	9439	9439	9439	9439	9439	
5	9385	9419	9422	9431	9453	9423	911
10	9290	9333	9361	9350	9347	9340	
15	9145	9207	9186	9308	9387	9242	2618
20	8927	8979	9113	9470	9626	9209	
25	8605	8644	9093	9544	9586	9094	4171
30	8194	8267	9003	9015	9130	8737	
35	7711	7880	8465	8356	7698	8101	5062
40	7165	7496	7991	7108	7059	7426	
45	6563	7050	6559	6513	6492	6662	5165
50	5905	6430	5828	5872	5847	6001	
55	5175	5625	5144	4794	3823	5015	4467
60	4368	4551	4345	3215	3182	3971	
65	3512	3448	2592	2043	1068	2593	2634
70	2616	2568	1639	674	651	1628	
75	1734	1315	464	174	111	718	861
80	910	306	107	114	108	259	
85	270	73	90	102	101	112	129
90	0	0	0	0	0	0	
95	0	0	0	0	0	0	0
100	0	0	0	0	0	0	
105	0	0	0	0	0	0	0
110	0	0	0	0	0	0	
115	0	0	0	0	0	0	0
120	0	0	0	0	0	0	
125	0	0	0	0	0	0	0
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	

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

TEST REPORT NO. M528C
 COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LED HIGHBAY LUMINAIRE CAT. NO. S HB-1246-30L-30K-120
 WITH SPECULAR REFLECTORS
 EIGHT PHILIPS FORTIMO LED BOARDS (72 LEDS EACH). LUMEN OUTPUT = 26016 LMS.
 TWO PHILIPS ADVANCE XITANIUM 120-277V LED DRIVERS MODEL XI095C275V054BSS1

AVERAGE LUMINANCE DATA

ANGLE	ALONG	CD. / SQ. M. (FOOTLAMBERTS)			ACROSS
		22.5	45	67.5	
0	27438(8008)	27438(8008)	27438(8008)	27438(8008)	27438(8008)
30	27502(8026)	27826(8121)	30297(8842)	30332(8853)	30645(8944)
40	27186(7934)	28518(8323)	30349(8858)	27043(7893)	26784(7817)
45	26980(7874)	29017(8469)	27064(7899)	26853(7837)	26788(7818)
50	26704(7794)	29186(8518)	26360(7693)	26625(7771)	26442(7717)
55	26224(7653)	28556(8334)	26166(7637)	24369(7112)	19449(5676)
60	25391(7410)	26549(7748)	25286(7380)	18739(5469)	18499(5399)
65	24153(7049)	23735(6927)	17891(5221)	14097(4114)	7370(2151)
70	22233(6489)	21899(6391)	13970(4077)	5740(1675)	5528(1613)
75	19469(5682)	14820(4325)	5212(1521)	1955(570)	1245(363)
80	15225(4443)	5142(1500)	1789(522)	1902(555)	1807(527)
85	9005(2628)	2443(713)	3009(878)	3397(991)	3364(982)

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES

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

TEST REPORT NO. M528C
 COMPUTED BY LSC PROGRAM **TEST-LITE**

PIONEER LED HIGHBAY LUMINAIRE CAT. NO. S HB-1246-30L-30K-120
 WITH SPECULAR REFLECTORS
 EIGHT PHILIPS FORTIMO LED BOARDS (72 LEDS EACH). LUMEN OUTPUT = 26016 LMS.
 TWO PHILIPS ADVANCE XITANIUM 120-277V LED DRIVERS MODEL XI095C275V054BSS1

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	1.19	1.19	1.19	1.19	1.16	1.16	1.16	1.16	1.11	1.11	1.11	1.11	1.06	1.06	1.06	1.06	1.02	1.02	1.02	1.02	1.00
1	1.11	1.07	1.03	1.00	1.08	1.05	1.01	.98	1.00	.98	.95	.97	.95	.93	.93	.93	.91	.90	.90	.90	.88
2	1.02	.96	.90	.85	1.00	.94	.89	.84	.90	.86	.82	.87	.84	.80	.84	.81	.79	.79	.79	.79	.77
3	.94	.85	.78	.73	.92	.84	.77	.72	.81	.76	.71	.78	.74	.70	.76	.72	.69	.69	.69	.69	.67
4	.87	.77	.69	.63	.85	.76	.69	.63	.73	.67	.62	.71	.66	.61	.69	.64	.60	.60	.60	.60	.58
5	.81	.69	.61	.55	.78	.68	.60	.54	.66	.59	.54	.64	.58	.53	.62	.57	.53	.53	.53	.53	.51
6	.74	.62	.54	.48	.72	.61	.53	.47	.59	.52	.47	.57	.51	.47	.56	.50	.46	.46	.46	.46	.44
7	.68	.55	.47	.41	.66	.54	.47	.41	.53	.46	.41	.51	.45	.40	.50	.44	.40	.40	.40	.40	.38
8	.63	.50	.42	.36	.62	.49	.42	.36	.48	.41	.36	.47	.40	.36	.46	.40	.35	.35	.35	.35	.34
9	.58	.45	.37	.32	.57	.45	.37	.32	.44	.37	.32	.43	.36	.31	.41	.36	.31	.31	.31	.31	.29
10	.54	.41	.33	.28	.53	.41	.33	.28	.40	.33	.28	.39	.32	.28	.38	.32	.28	.28	.28	.28	.26

DETERMINED IN ACCORDANCE WITH CURRENT IES PUBLISHED PROCEDURES
 LUMINAIRE INPUT WATTS = 206.3
 LABORATORY RESULT MAY NOT BE REPRESENTATIVE OF FIELD PERFORMANCE.
 ABSOLUTE PHOTOMETRY TAKEN.

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

TEST REPORT NO. M528C

PIONEER LED HIGHBAY LUMINAIRE CAT. NO. S HB-1246-30L-30K-120
WITH SPECULAR REFLECTORS
EIGHT PHILIPS FORTIMO LED BOARDS (72 LEDS EACH). LUMEN OUTPUT = 26016 LMS.
TWO PHILIPS ADVANCE XITANIUM 120-277V LED DRIVERS MODEL XI095C275V054BSS1

AMBIENT TEMPERATURE: 25.6 °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: 1.723 ARMS
INPUT WATTAGE: 206.30
POWER FACTOR: 0.998
THDi: 5.11



Prepared By:

Charles Sisson

Charles Sisson
Senior Technologist

NOTE: This report must not be used by anyone to claim product certification, approval or endorsement by NVLAP, NIST, or any Agency of the US Federal Government. The duplication of this report or any parts thereof and its use for advertising purposes is only allowed with the express written consent of Lumentra Inc. Reports are issued on the basis of information, documents and/or materials and samples provided by, or on behalf of, the Client. The information in this document is provided in connection with the supplied product only.

END OF REPORT