

Report of Test

LLIA001065-002A

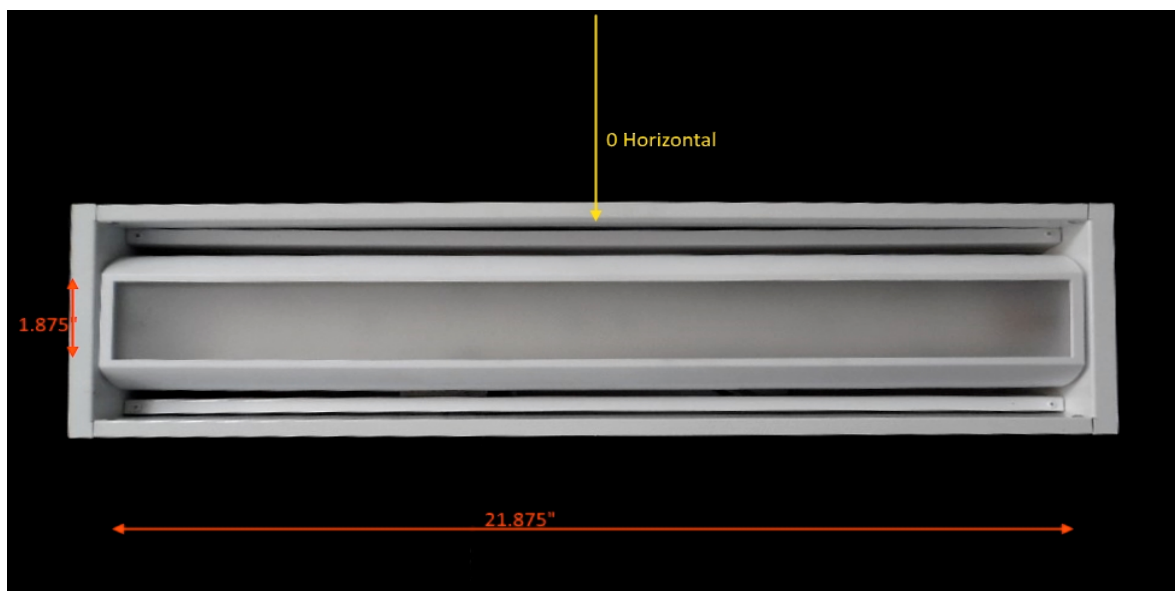
Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

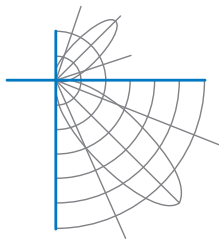
120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)



Performance Summary

Total Light Output	1991 lm
Luminaire Power	30.9 W
Luminous Efficacy	64.4 lm/W

PREPARED FOR : Brightline L.P., 580 Mayer Street, Bridgeville, PA 15017, USA



Test Report No. LLIA001065-002A

Catalog Number: FLXT1-A35-F-I, Rev A

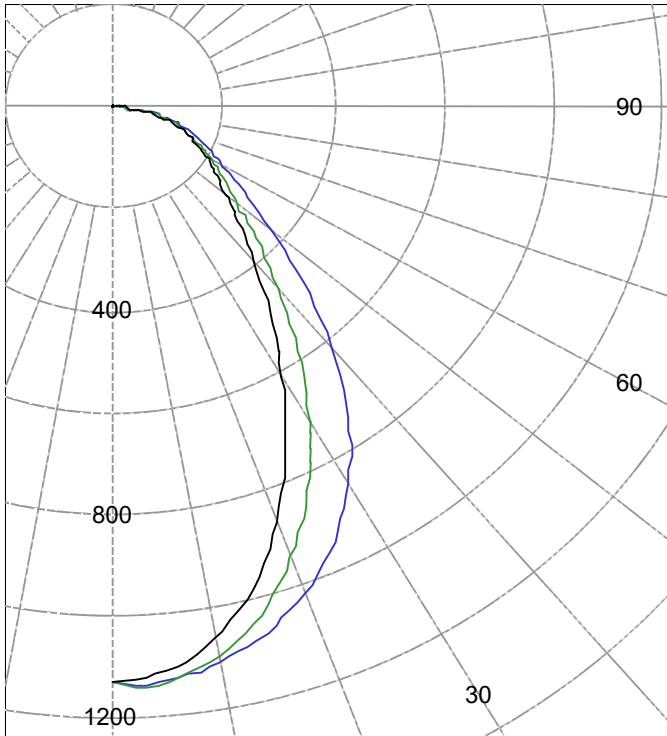
Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)

Legend: C0-Black, C45-Green, C90-Blue (cd)



(Two plane symmetry) C0-C90

AVERAGE LUMINANCE (cd / m²)

Gamma	C0	C45	C90
45.0	16926	19430	25770
55.0	14645	15813	18839
65.0	14486	15338	16876
75.0	14786	15813	17359
85.0	12108	13317	16195

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
0.0	1132	1132	1132	1132	1132	
5.0	1113	1117	1134	1106	1133	106
10.0	1063	1071	1096	1080	1109	
15.0	979	992	1032	1036	1072	286
20.0	867	886	944	973	1018	
25.0	739	763	834	891	946	381
30.0	611	634	710	790	855	
35.0	494	514	583	673	743	373
40.0	396	411	465	549	616	
45.0	319	330	367	431	486	297
50.0	265	271	293	335	373	
55.0	224	229	242	266	288	224
60.0	192	196	205	219	232	
65.0	163	166	173	182	190	173
70.0	134	137	142	149	155	
75.0	102	104	109	115	120	115
80.0	67	68	73	77	81	
85.0	28	29	31	35	38	36
90.0	0	0	0	0	0	

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
0-30	773	N / A	38.8
0-40	1146	N / A	57.5
0-60	1667	N / A	83.7
0-90	1991	N / A	100.0
40-90	846	N / A	42.5
60-90	324	N / A	16.3
90-180	0	N / A	0.0
0-180	1991	N / A	100.0

Total Light Output = 1,991 lm

Spacing Criterion: 0-180 0.9
Spacing Criterion: 90-270 1.1

Signed:

Authorized Signatory

Date of test 27-Dec-2018
Date of report 3-Jan-2019



Test Report No. LLIA001065-002A

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)

Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	1132	1132	1132	1132	1132
2.5	1125	1129	1143	1113	1138
5.0	1113	1117	1134	1106	1133
7.5	1092	1098	1118	1095	1123
10.0	1063	1071	1096	1080	1109
12.5	1025	1035	1067	1060	1092
15.0	979	992	1032	1036	1072
17.5	925	942	991	1007	1047
20.0	867	886	944	973	1018
22.5	804	826	891	935	984
25.0	739	763	834	891	946
27.5	675	699	773	843	903
30.0	611	634	710	790	855
32.5	550	573	646	733	802
35.0	494	514	583	673	743
37.5	442	460	522	611	681
40.0	396	411	465	549	616
42.5	355	368	413	488	550
45.0	319	330	367	431	486
47.5	290	298	327	380	426
50.0	265	271	293	335	373
52.5	243	248	265	297	326
55.0	224	229	242	266	288
57.5	208	211	222	240	257
60.0	192	196	205	219	232
62.5	178	181	188	200	210
65.0	163	166	173	182	190
67.5	149	152	158	166	172
70.0	134	137	142	149	155
72.5	119	121	126	133	138
75.0	102	104	109	115	120
77.5	85	87	91	97	101
80.0	67	68	73	77	81
82.5	48	49	52	57	60
85.0	28	29	31	35	38
87.5	11	11	11	13	15
90.0	0	0	0	0	0



Test Report No. LLIA001065-002A

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)

Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	0	0	0	0	0
92.5	0	0	0	0	0
95.0	0	0	0	0	0
97.5	0	0	0	0	0
100.0	0	0	0	0	0
102.5	0	0	0	0	0
105.0	0	0	0	0	0
107.5	0	0	0	0	0
110.0	0	0	0	0	0
112.5	0	0	0	0	0
115.0	0	0	0	0	0
117.5	0	0	0	0	0
120.0	0	0	0	0	0
122.5	0	0	0	0	0
125.0	0	0	0	0	0
127.5	0	0	0	0	0
130.0	0	0	0	0	0
132.5	0	0	0	0	0
135.0	0	0	0	0	0
137.5	0	0	0	0	0
140.0	0	0	0	0	0
142.5	0	0	0	0	0
145.0	0	0	0	0	0
147.5	0	0	0	0	0
150.0	0	0	0	0	0
152.5	0	0	0	0	0
155.0	0	0	0	0	0
157.5	0	0	0	0	0
160.0	0	0	0	0	0
162.5	0	0	0	0	0
165.0	0	0	0	0	0
167.5	0	0	0	0	0
170.0	0	0	0	0	0
172.5	0	0	0	0	0
175.0	0	0	0	0	0
177.5	0	0	0	0	0
180.0	0	0	0	0	0



Test Number: LLIA001065-002A

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)

Coefficients Of Utilization - Zonal Cavity Method

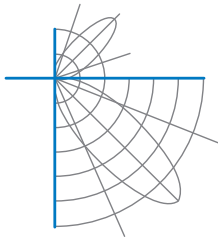
Effective Floor Cavity Reflectance 0.20

RC	80				70				50			30			10			0
	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	102	98	107	103	100	96	99	96	93	95	93	91	92	90	88	86
2	101	94	87	82	98	92	86	81	88	83	79	85	81	78	82	79	76	74
3	93	84	76	70	91	82	75	70	79	73	68	76	71	67	74	70	66	64
4	86	75	67	61	84	74	67	61	72	65	60	69	64	59	67	62	58	56
5	80	68	60	54	78	67	60	54	65	58	53	63	57	53	62	56	52	50
6	75	62	54	48	73	61	54	48	60	53	48	58	52	47	57	51	47	45
7	70	57	49	44	68	57	49	43	55	48	43	54	47	43	52	47	43	41
8	65	53	45	40	64	52	45	39	51	44	39	50	44	39	49	43	39	37
9	61	49	41	36	60	48	41	36	47	41	36	46	40	36	45	40	36	34
10	58	46	38	33	57	45	38	33	44	38	33	43	37	33	42	37	33	31

For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 3) The room is spectrally neutral. When luminaires are not evenly distributed throughout the room, or do not exhibit lateral symmetry, CU values may differ from actual performance.

Circle of Light Plot

Height(ft)	Illuminance at Nadir (fc)	Beam Width (across 50% Nadir Illum)	
		0-180	90-270
6.0	31.4	5.48	6.83
8.0	17.7	7.30	9.10
10.0	11.3	9.13	11.38
12.0	7.9	10.95	13.66
14.0	5.8	12.78	15.93
16.0	4.4	14.60	18.21



Test Report No. LLIA001065-002A

Catalog Number: FLXT1-A35-F-I, Rev A

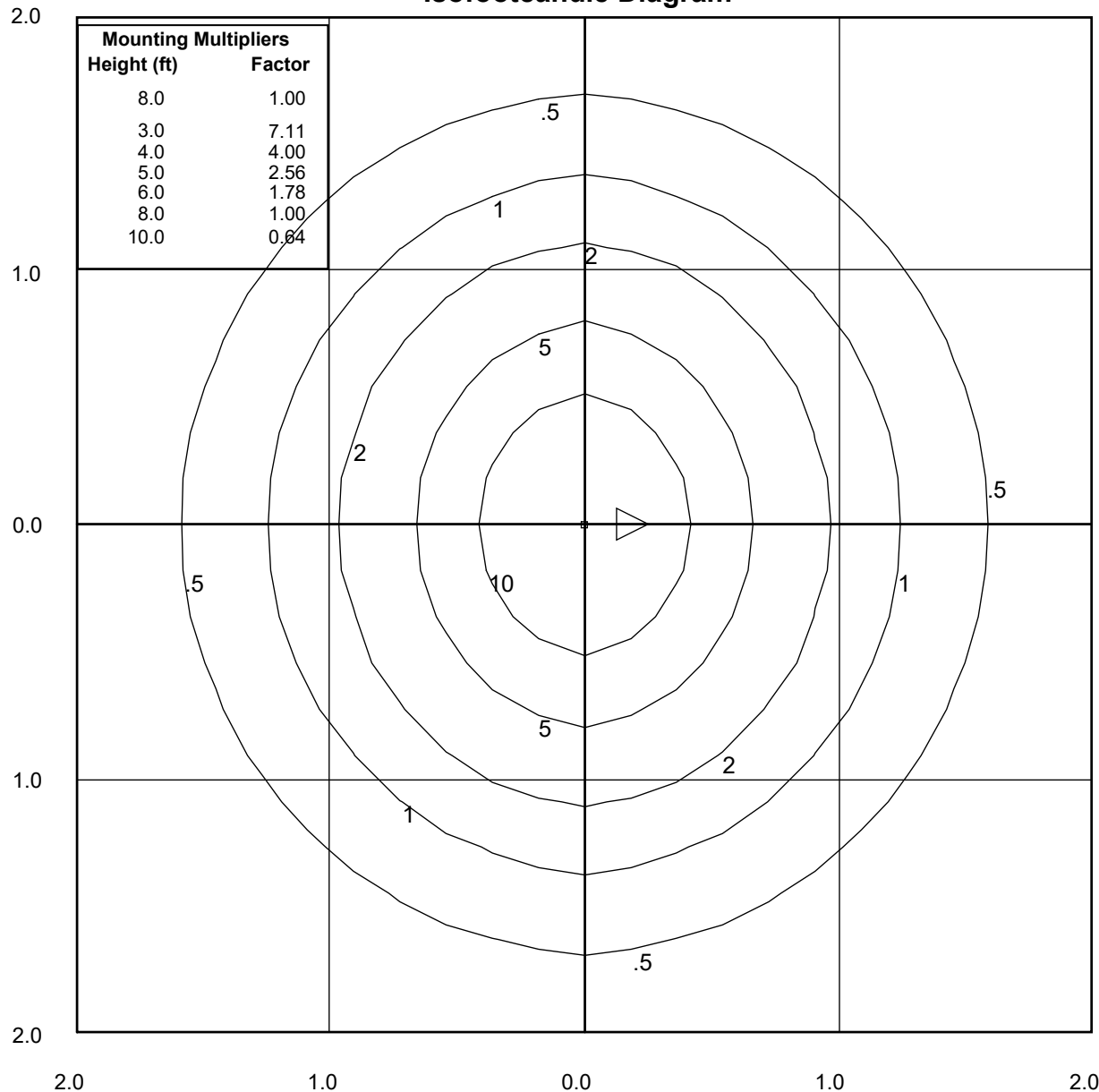
Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

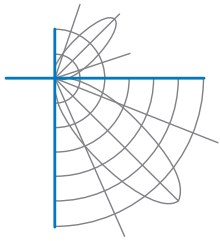
One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)

Isofootcandle Diagram



Note: The isofootcandle levels are based on a mounting height of H = 8.0 feet. Grid values show multiples of mounting height. The isofootcandle contour units are expressed as footcandles. The left and right sides of photometric data have been averaged.



Test Report No. LLIA001065-002A

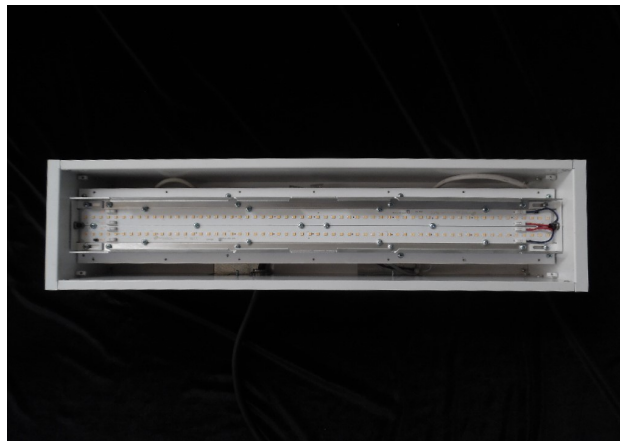
Catalog Number: FLXT1-A35-F-I, Rev A

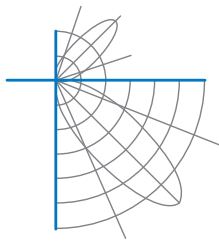
Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)





Test Report No. LLIA001065-002A

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

120.0Vac, 60.00Hz, 0.2597A, 30.94W, 0.993PF, 8.7%THD(i)

Test Distance 9.5 m
Test Temperature 25.1 °C

Notes

The laboratory has not participated in the selection of samples to be tested. All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Tested in accordance with the applicable sections of publications: IES LM-79-08 (Sec. 12), IES LM-16-93, IES LM-58-13, CIE 13.3:1995, CIE 15:2004, ANSI C78.377:2015, ANSI C82.77-10:2014.

The luminous intensity values, and other derived quantities, contained in this report are based on the absolute data, as measured.

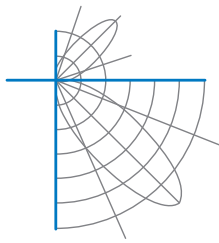
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections.

Photometric intensity values are reported using the CIE Gamma coordinate system as defined in CIE publication number 121.

This report may contain data that are not covered by the NVLAP accreditation. Quantities marked with * are not covered.

This report must not be used by the customer to claim product certification, approval or endorsement by NVLAP, NIST, or any agency of the Federal Government.



Report of Test

LLIA001065-002B

Integrating Sphere Report

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver



Performance Summary

Voltage	120.0 Vac
Current	0.2595 A
Power	30.93 W
Frequency	59.99 Hz
Power Factor	0.993
Current THD	8.6 %

Total Luminous Flux	1988.5 lm
Efficacy	64.3 lm/W
Chromaticity (x,y)	(0.4021, 0.3818)
(u',v')	(0.2373, 0.5070)
Duv	-0.0032
CCT	3498 K
CRI (Ra)	98
R9	95
TM-30: Rf	95
TM-30: Rg	103

Prepared For:

Brightline L.P.

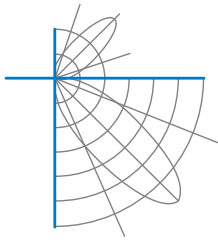
580 Mayer Street

Suite 7

Bridgeville, PA 15017, USA

Test date: 12/27/2018

Report date: 01/02/2019



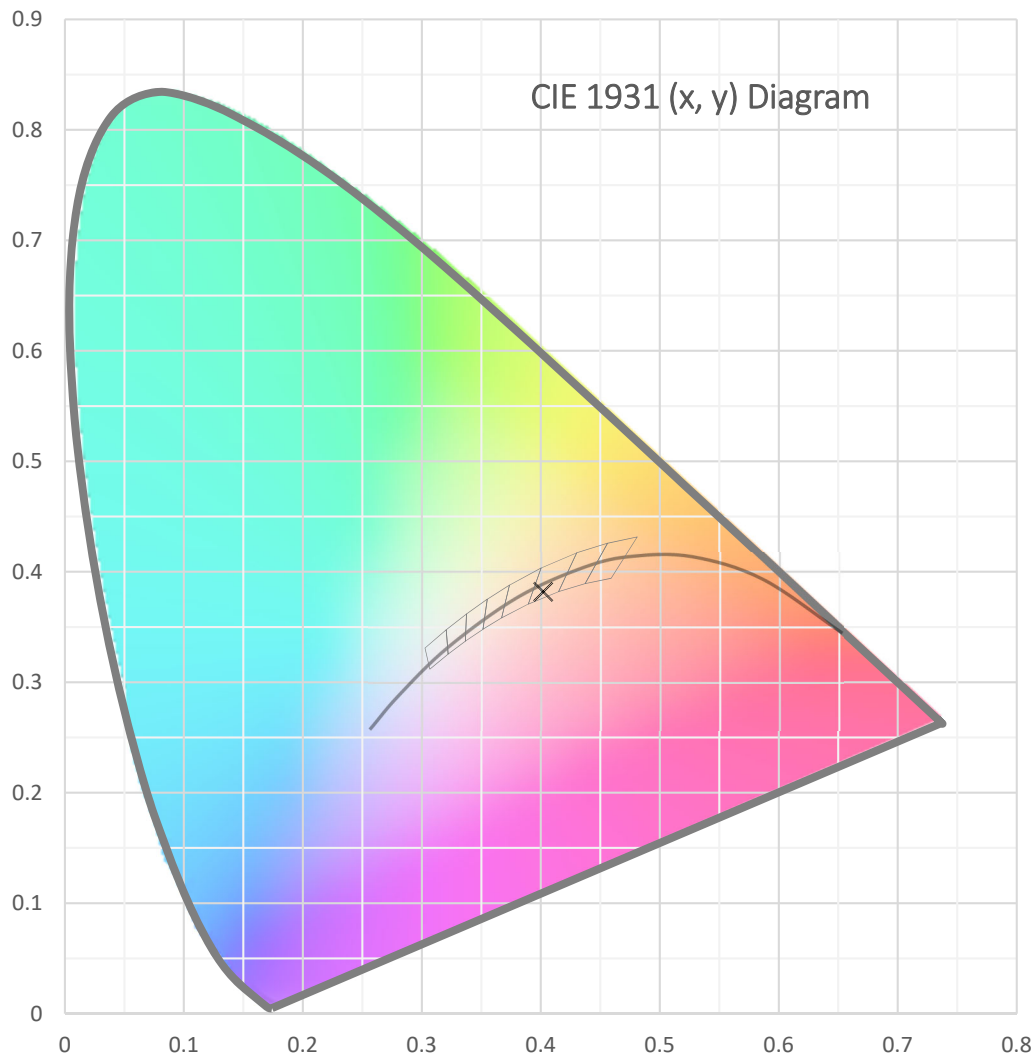
Test Report Number: LLIA001065-002B

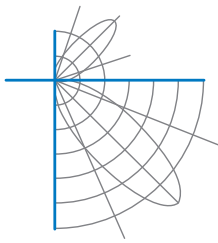
Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.

120 white LEDs, two Brightline LED strips with 60 LEDs each.

One Philips Advance XI040C110V054BST1 LED driver

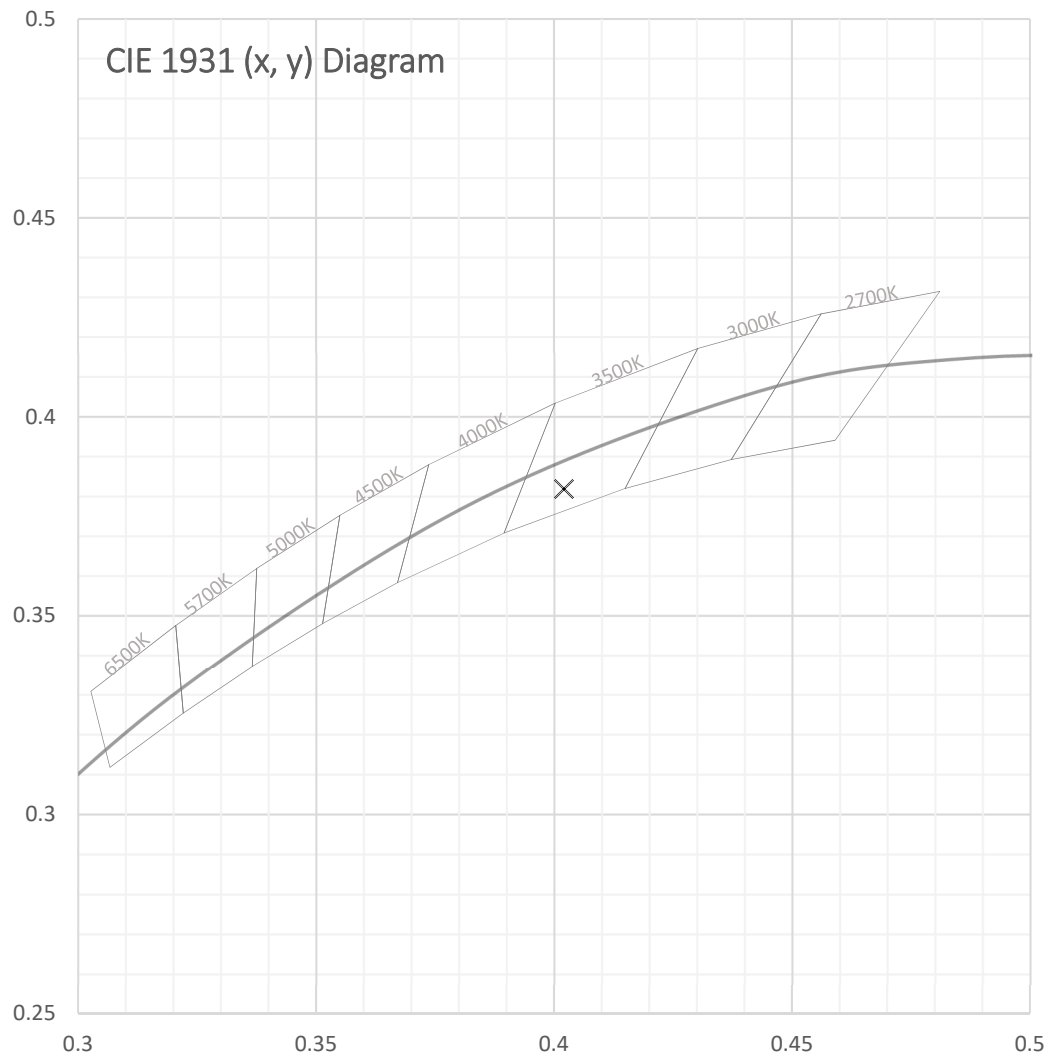




Test Report Number: LLIA001065-002B

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.
120 white LEDs, two Brightline LED strips with 60 LEDs each.
One Philips Advance XI040C110V054BST1 LED driver





Test Report Number: LLIA001065-002B

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.
120 white LEDs, two Brightline LED strips with 60 LEDs each.
One Philips Advance XI040C110V054BST1 LED driver

Spectral Data

Total Radiant Flux	7.342 W
Total Luminous Flux	1988.5 Lm
Chromaticity CIE 1931 (x, y)	(0.4021, 0.3818)
Chromaticity CIE 1976 (u', v')	(0.2373, 0.5070)
Correlated Color Temperature (CCT)	3498 K
Color Rendering Index (Ra)	98
R1	99
R2	99
R3	97
R4	95
R5	99
R6	97
R7	96
R8	97
R9	95
R10	98
R11	93
R12	92
R13	99
R14	98
TM-30: Rf	95
TM-30: Rg	103
Distance from Planckian Locus (Duv)	-0.0032
Scotopic/Photopic Ratio *	1.674

Electrical Data

Voltage	120.0 Vac
Current	0.2595 A
Power	30.93 W
Frequency	59.99 Hz
Power Factor	0.993
Current THD	8.6 %



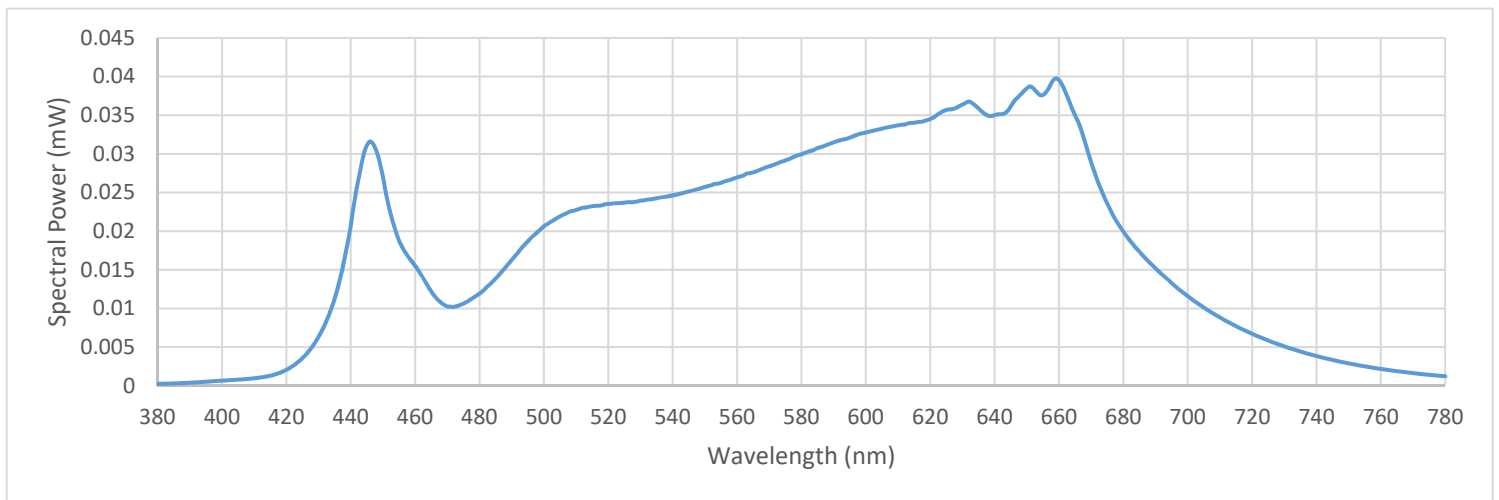
Test Report Number: LLIA001065-002B

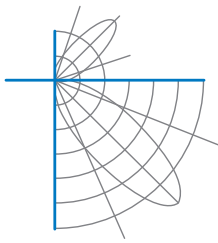
Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.
120 white LEDs, two Brightline LED strips with 60 LEDs each.
One Philips Advance XI040C110V054BST1 LED driver

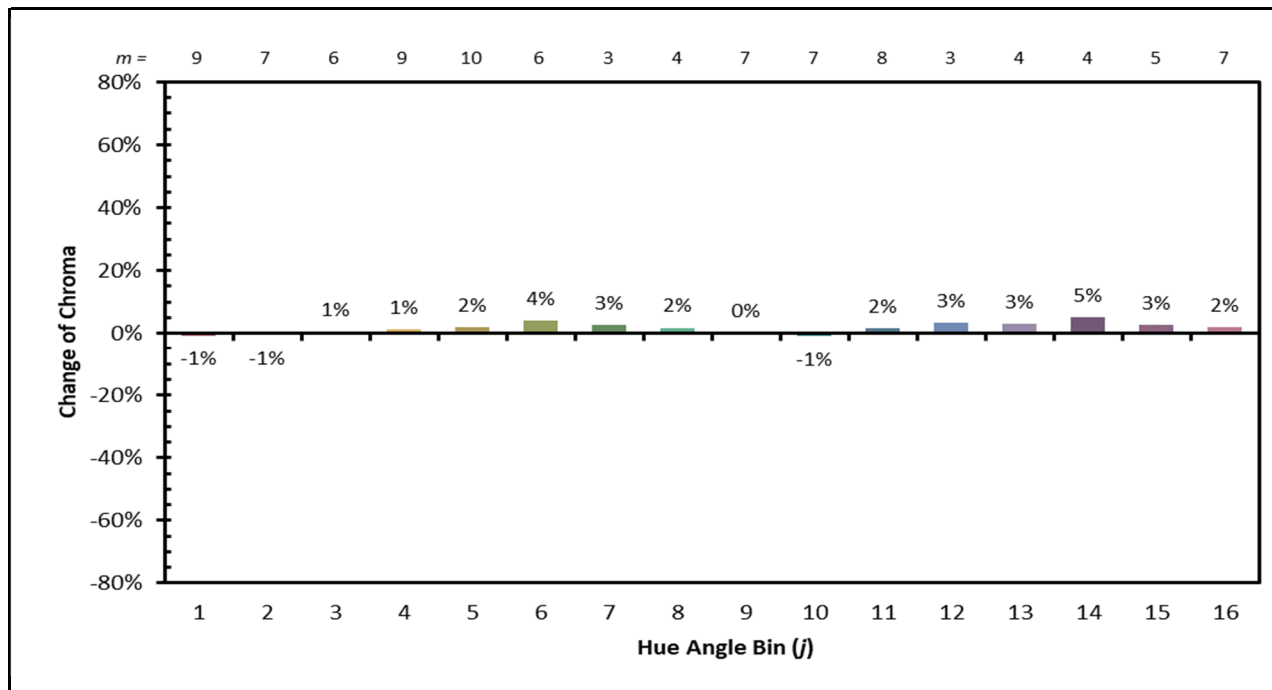
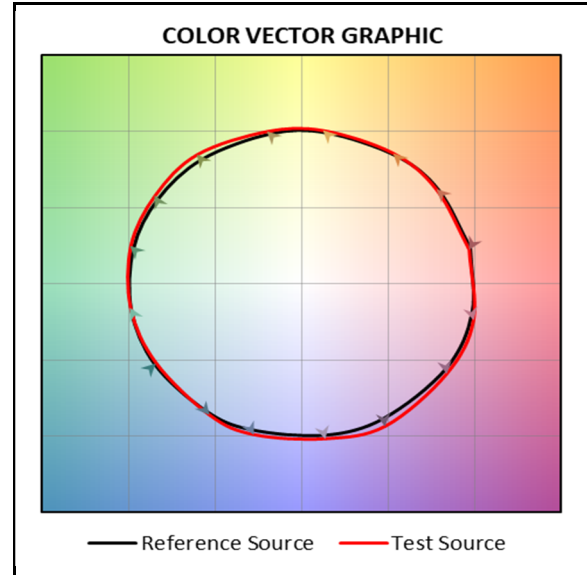
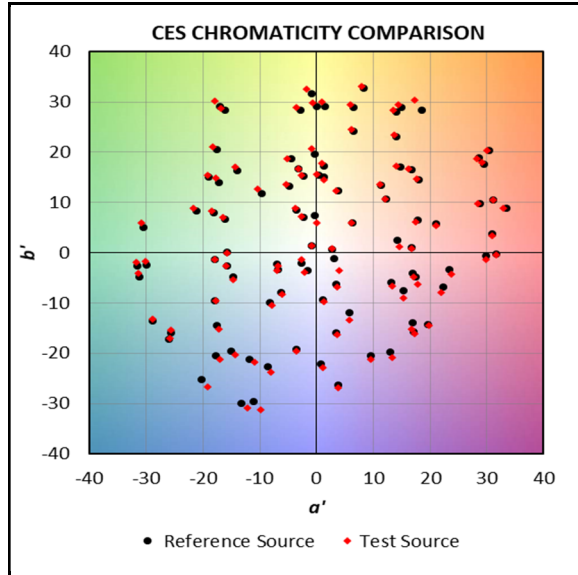
Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

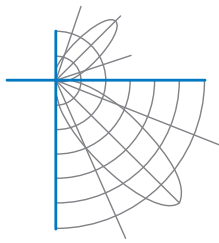
380	0.000262	480	0.011945	580	0.029949	680	0.019913
385	0.000302	485	0.013864	585	0.030760	685	0.017373
390	0.000398	490	0.016292	590	0.031489	690	0.015184
395	0.000519	495	0.018669	595	0.032081	695	0.013267
400	0.000655	500	0.020628	600	0.032768	700	0.011604
405	0.000793	505	0.021931	605	0.033289	705	0.010117
410	0.000970	510	0.022742	610	0.033707	710	0.008818
415	0.001302	515	0.023230	615	0.034018	715	0.007717
420	0.002075	520	0.023516	620	0.034497	720	0.006724
425	0.003572	525	0.023671	625	0.035678	725	0.005853
430	0.006362	530	0.023955	630	0.036374	730	0.005099
435	0.011262	535	0.024255	635	0.035901	735	0.004423
440	0.020699	540	0.024611	640	0.035009	740	0.003836
445	0.031091	545	0.025144	645	0.036103	745	0.003335
450	0.027072	550	0.025723	650	0.038472	750	0.002891
455	0.018761	555	0.026258	655	0.037606	755	0.002511
460	0.015525	560	0.026958	660	0.039568	760	0.002187
465	0.012178	565	0.027613	665	0.035002	765	0.001895
470	0.010276	570	0.028386	670	0.028898	770	0.001638
475	0.010639	575	0.029154	675	0.023611	775	0.001422
						780	0.001235





IES TM-30 Summary





Test Report Number: LLIA001065-002B

Catalog Number: FLXT1-A35-F-I, Rev A

Recessed mounted, formed white enamel steel housing, extruded aluminum adjustable inner housing, frosted plastic insert with plastic outer trim.
120 white LEDs, two Brightline LED strips with 60 LEDs each.
One Philips Advance XI040C110V054BST1 LED driver

Test Equipment Configuration: LightLab International Allentown 2m Integrating Sphere
Measurements acquired using a Labsphere CDS 2600 spectroradiometer
Testing was performed using 4 π geometry

Test Temperature: 24.4 °C

Test Procedure: Tested in accordance with the applicable sections of:
LM-79-08, LM-78-07, LM-58-13, ANSI_ANSLG C78.377-2015,
ANSI C82-77-10:2014, TM-30-15

Significance: The laboratory has not participated in the selection of samples to be tested.
All testing is performed on the understanding that the significance of the report is limited to the extent that the test sample is representative of production units.

Notes: The measurements and other derived quantities contained in this report are based on the absolute data as measured.

Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

This report is free of erasures and corrections

This report may contain data that are not covered by the NVLAP accreditation.
Quantities marked with * are not covered.