



Report of Test

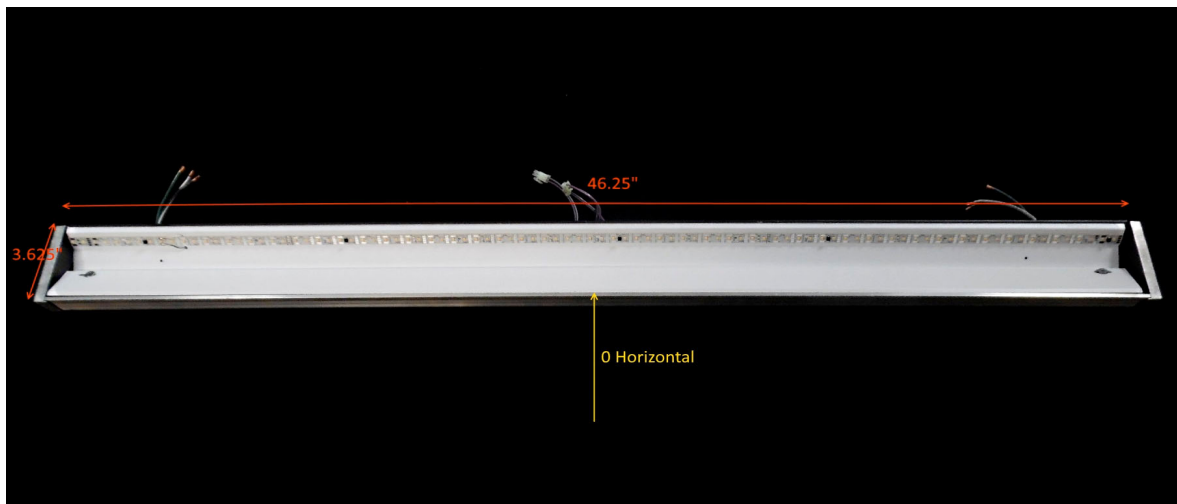
LLIA000817-003A

Catalog Number: PPXX-HO-K40-4-W-XX-UNV-OP

Wall mounted, extruded aluminum housing with cast aluminum endcaps,
formed white enamel aluminum reflector, open top.

92 white LEDs

One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver programmed to 720mA
120.0Vac, 60.00Hz, 0.2327A, 27.81W, 0.997PF, 6.0%THD(i)



Performance Summary

Total Light Output	4024 lm
Luminaire Power	27.8 W
Luminous Efficacy	144.7 lm/W

PREPARED FOR : Precision Architectural Lighting, 4830 Timber Creek Drive, Houston, TX 77017



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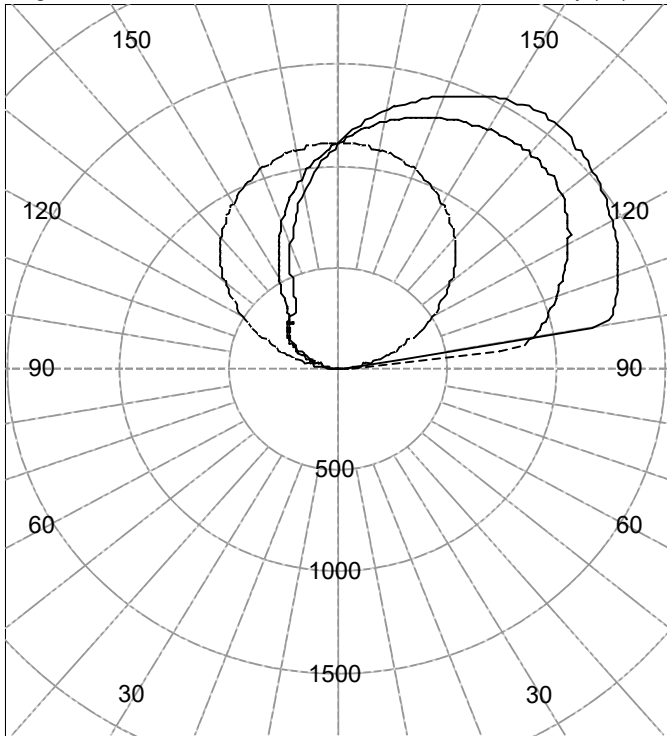
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Legend: C0/C180-Solid, C45/C225-Dashed, C90/C270-Grey (cd)



C180-C270 (Symmetric about C0/C180) C0-C90

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
90.0	0	0	0	0	0	
95.0	6	7	7	406	44	124
100.0	1178	1155	902	517	117	
105.0	1310	1226	986	630	203	531
110.0	1360	1283	1060	750	296	
115.0	1405	1329	1138	855	390	625
120.0	1443	1374	1212	932	485	
125.0	1482	1424	1278	993	580	667
130.0	1515	1465	1331	1043	669	
135.0	1541	1501	1362	1083	753	645
140.0	1559	1520	1373	1115	826	
145.0	1553	1512	1373	1143	891	570
150.0	1528	1487	1362	1164	947	
155.0	1482	1449	1343	1179	997	457
160.0	1427	1398	1315	1185	1039	
165.0	1363	1339	1279	1180	1070	300
170.0	1291	1275	1233	1166	1093	
175.0	1209	1200	1178	1142	1106	105
180.0	1111	1111	1111	1111	1111	

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
180-150	863	N / A	21.4
180-140	1432	N / A	35.6
180-120	2744	N / A	68.2
180-90	4024	N / A	100.0
140-90	2592	N / A	64.4
120-90	1280	N / A	31.8
90-0	0	N / A	0.0
180-0	4024	N / A	100.0

Total Light Output = 4,024 lm

Signed:

Authorized Signatory

Date of test

7-Jul-2017

Date of report

11-Jul-2017



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	0	0	0	0	0
92.5	2	2	3	3	14
95.0	6	7	7	406	44
97.5	11	23	855	464	77
100.0	1178	1155	902	517	117
102.5	1281	1192	946	569	159
105.0	1310	1226	986	630	203
107.5	1337	1258	1025	690	249
110.0	1360	1283	1060	750	296
112.5	1383	1307	1096	805	343
115.0	1405	1329	1138	855	390
117.5	1424	1350	1176	896	438
120.0	1443	1374	1212	932	485
122.5	1463	1399	1248	965	533
125.0	1482	1424	1278	993	580
127.5	1499	1445	1307	1018	625
130.0	1515	1465	1331	1043	669
132.5	1528	1483	1350	1063	713
135.0	1541	1501	1362	1083	753
137.5	1552	1513	1368	1100	791
140.0	1559	1520	1373	1115	826
142.5	1559	1519	1374	1130	859
145.0	1553	1512	1373	1143	891
147.5	1543	1502	1368	1154	920
150.0	1528	1487	1362	1164	947
152.5	1506	1469	1354	1173	973
155.0	1482	1449	1343	1179	997
157.5	1456	1425	1329	1183	1019
160.0	1427	1398	1315	1185	1039
162.5	1396	1370	1298	1183	1056
165.0	1363	1339	1279	1180	1070
167.5	1328	1308	1257	1174	1083
170.0	1291	1275	1233	1166	1093
172.5	1252	1239	1207	1155	1101
175.0	1209	1200	1178	1142	1106
177.5	1163	1157	1146	1126	1110
180.0	1111	1111	1111	1111	1111



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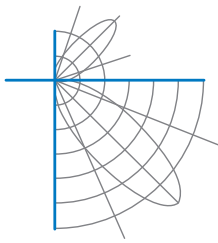
Wall mounted, extruded aluminum housing with cast aluminum endcaps,
formed white enamel aluminum reflector, open top.

92 white LEDs

One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver programmed to 720mA
120.0Vac, 60.00Hz, 0.2327A, 27.81W, 0.997PF, 6.0%THD(i)

Intensity data (cd)

Gamma	C-Plane				
	C90	C112.5	C135	C157.5	C180
90.0	0	0	0	0	0
92.5	14	8	7	6	6
95.0	44	20	18	17	17
97.5	77	37	32	30	29
100.0	117	59	49	45	44
102.5	159	92	68	62	60
105.0	203	119	88	81	78
107.5	249	139	111	101	98
110.0	296	155	142	121	118
112.5	343	169	173	144	138
115.0	390	184	200	174	164
117.5	438	197	224	205	196
120.0	485	212	240	233	226
122.5	533	237	252	257	253
125.0	580	270	263	278	276
127.5	625	307	273	290	295
130.0	669	347	283	299	305
132.5	713	389	292	308	314
135.0	753	433	298	315	321
137.5	791	480	311	322	328
140.0	826	527	342	328	333
142.5	859	574	382	331	337
145.0	891	621	427	342	339
147.5	920	666	477	378	353
150.0	947	711	530	423	392
152.5	973	755	584	477	441
155.0	997	798	640	535	498
157.5	1019	839	695	595	559
160.0	1039	878	750	658	623
162.5	1056	914	802	721	688
165.0	1070	948	854	783	753
167.5	1083	981	903	844	816
170.0	1093	1010	950	903	879
172.5	1101	1038	996	960	939
175.0	1106	1063	1038	1015	997
177.5	1110	1085	1078	1066	1052
180.0	1111	1111	1111	1111	1111



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120.0Vac, 60.00Hz, 0.2327A, 27.81W, 0.997PF, 6.0%THD(i)

Test Distance 9.5 m
Test Temperature 25.0 °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

LLIA000817-003B

Integrating Sphere Report

Catalog Number: PPXX-HO-K40-4-W-XX-UNV-OP

Wall mounted, extruded aluminum housing with cast aluminum endcaps,
formed white enamel aluminum reflector, open top.

92 white LEDs

One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver programmed to 720mA



Performance Summary

Voltage	120.0 Vac
Current	0.2325 A
Power	27.80 W
Frequency	60.00 Hz
Power Factor	0.997
Current THD	5.9 %

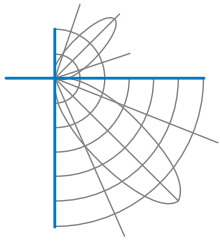
Total Luminous Flux	4164.3 lm
Efficacy	149.8 lm/W
Chromaticity (x,y)	(0.3799, 0.3784)
(u',v')	(0.2241, 0.5022)
Duv	0.0009
CCT	4027 K
CRI (Ra)	84
R9	19

Prepared For:

Precision Architectural Lighting
4830 Timber Creek Drive
Houston, TX 77017, USA

Test date: 07/09/2017

Report date: 07/10/2017



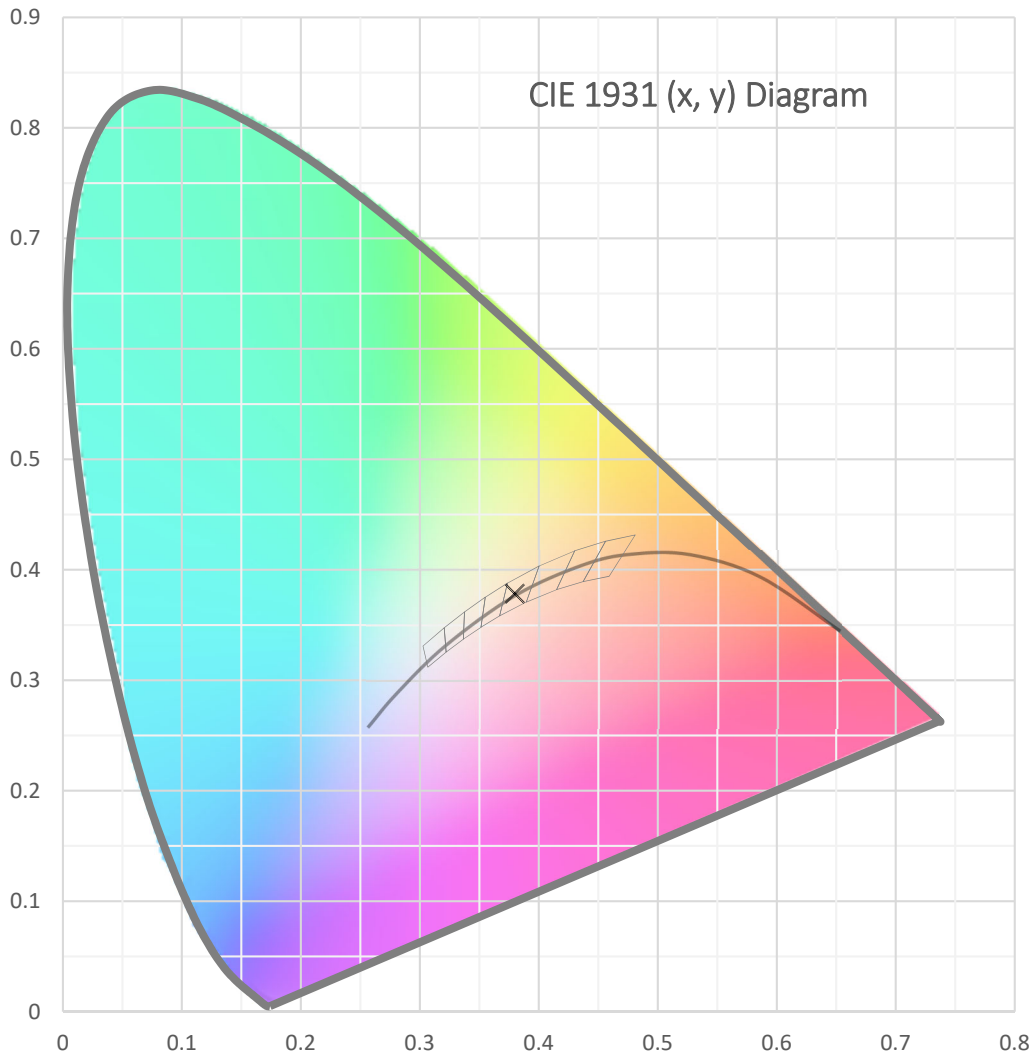
Test Report Number: LLIA000817-003B

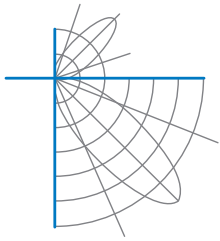
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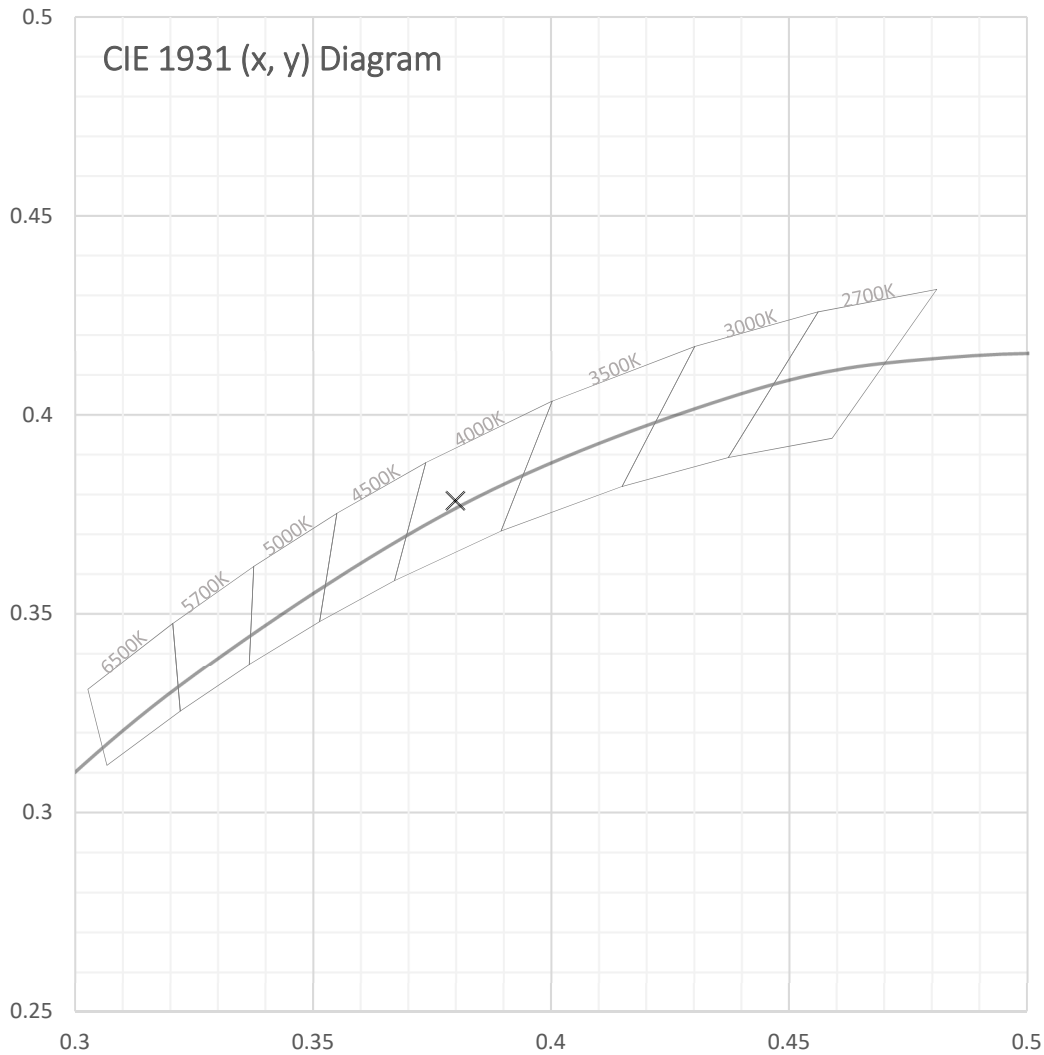
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Spectral Data	Total Radiant Flux	12.97 W
	Total Luminous Flux	4164.3 Lm
	Chromaticity CIE 1931 (x, y)	(0.3799, 0.3784)
	Chromaticity CIE 1976 (u', v')	(0.2241, 0.5022)
	Correlated Color Temperature (CCT)	4027 K
	Color Rendering Index (Ra)	84
	R1	83
	R2	91
	R3	96
	R4	82
	R5	82
	R6	87
	R7	87
	R8	68
	R9	19
	R10	78
	R11	80
	R12	60
	R13	85
	R14	98
	Distance from Planckian Locus (Duv)	0.0009
	Scotopic/Photopic Ratio *	1.721

Electrical Data

Voltage	120.0 Vac
Current	0.2325 A
Power	27.80 W
Frequency	60.00 Hz
Power Factor	0.997
Current THD	5.9 %



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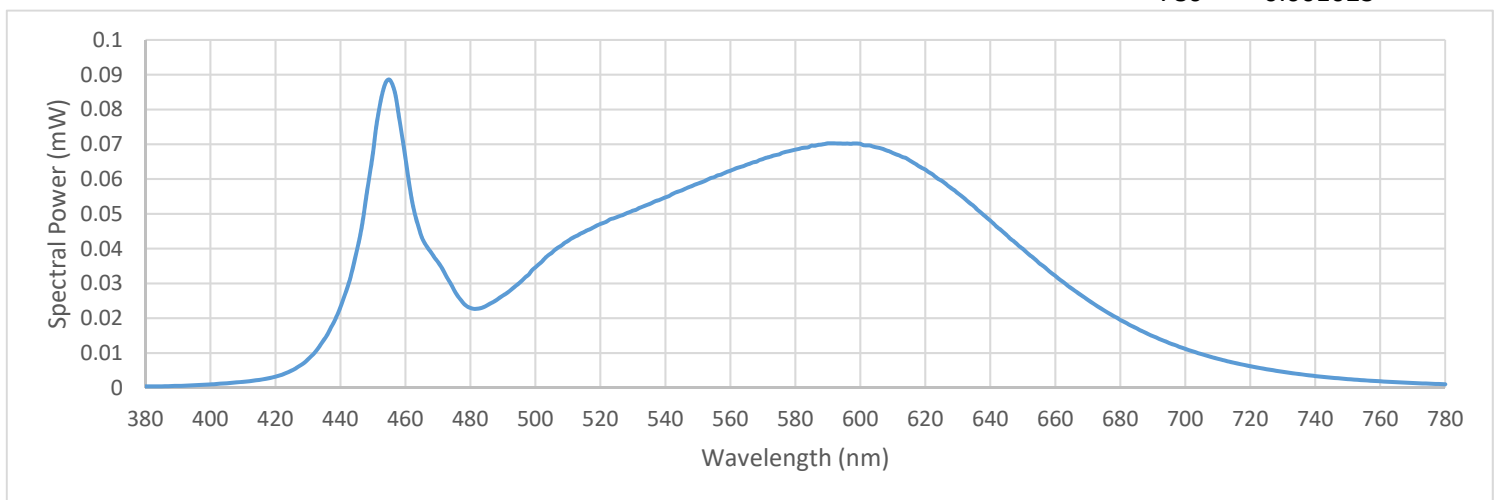
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Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000396	480	0.022950	580	0.068465	680	0.019518
385	0.000430	485	0.023619	585	0.069601	685	0.017121
390	0.000545	490	0.026518	590	0.070269	690	0.014857
395	0.000716	495	0.030067	595	0.070183	695	0.012880
400	0.000975	500	0.034622	600	0.070145	700	0.011189
405	0.001304	505	0.038773	605	0.069096	705	0.009672
410	0.001713	510	0.042196	610	0.067500	710	0.008337
415	0.002263	515	0.044784	615	0.065473	715	0.007195
420	0.003195	520	0.047083	620	0.062710	720	0.006204
425	0.004953	525	0.049023	625	0.059525	725	0.005343
430	0.008171	530	0.050912	630	0.055914	730	0.004593
435	0.013889	535	0.052783	635	0.052168	735	0.003951
440	0.023206	540	0.054748	640	0.048051	740	0.003371
445	0.039283	545	0.056737	645	0.043927	745	0.002908
450	0.067419	550	0.058688	650	0.039928	750	0.002498
455	0.088601	555	0.060539	655	0.035859	755	0.002152
460	0.066072	560	0.062399	660	0.032172	760	0.001863
465	0.043366	565	0.064124	665	0.028574	765	0.001601
470	0.036170	570	0.065767	670	0.025279	770	0.001378
475	0.028059	575	0.067099	675	0.022246	775	0.001187
						780	0.001023





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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver programmed to 720mA

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:	25.4 °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
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.