

Report of Test

LLIA000762-001A-R02*

*This test report supersedes test report LLIA000762-001A-R01

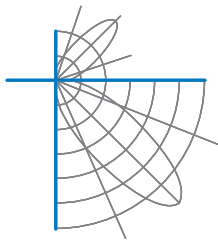
Catalog Number: MLS3-I-HO-K40-4-X-WSOP-X-XXX-X
Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, open top. 144 White LEDs, four PrevaLED Line boards with 36 LEDs each. Clear plastic optics over each board.
One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.
120.0Vac, 60.00Hz, 0.2358A, 28.21W, 0.997PF, 5.9%THD(i)



Performance Summary

Total Light Output	3817 lm
Luminaire Power	28.2 W
Luminous Efficacy	135.4 lm/W

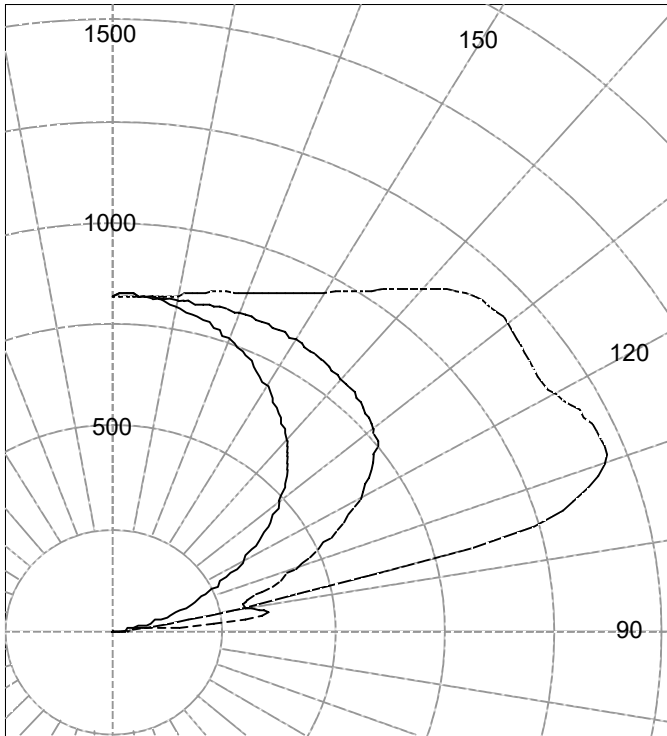
PREPARED FOR : Precision Architectural Lighting, 4830 Timber Creek Drive, Houston, TX



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Legend: C0-Solid, C45-Dashed, C90-Grey (cd)



(Two plane symmetry) C0-C90

INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
90.0	0	0	1	1	1	
95.0	21	46	300	96	60	125
100.0	65	104	315	459	222	
105.0	122	168	332	1085	991	519
110.0	186	241	438	1055	1187	
115.0	257	316	545	1014	1199	645
120.0	335	394	644	1007	1161	
125.0	416	469	723	1040	1152	675
130.0	494	541	770	1069	1170	
135.0	558	606	792	1061	1162	639
140.0	610	659	806	1010	1101	
145.0	653	698	817	957	1020	520
150.0	694	727	824	919	959	
155.0	730	751	830	891	916	381
160.0	763	771	831	870	883	
165.0	790	790	827	853	860	234
170.0	811	805	824	835	837	
175.0	823	816	825	825	822	78
180.0	824	824	824	824	824	

ZONAL FLUX AND PERCENTAGES

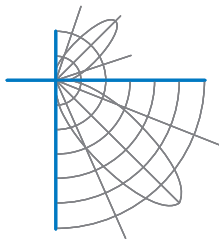
Zone	Flux (lm)	% Lamp	% Luminaire
180-150	693	N / A	18.2
180-140	1213	N / A	31.8
180-120	2527	N / A	66.2
180-90	3817	N / A	100.0
140-90	2604	N / A	68.2
120-90	1290	N / A	33.8
90-0	0	N / A	0.0
180-0	3817	N / A	100.0

Total Light Output = 3,817 lm

Signed:

Michael L. Grather
Authorized Signatory

Date of test 6-Apr-2017
Date of report 13-Apr-2017

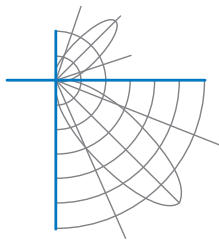


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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	0	0	1	1	1
92.5	7	21	108	32	23
95.0	21	46	300	96	60
97.5	41	74	352	206	115
100.0	65	104	315	459	222
102.5	92	133	301	944	512
105.0	122	168	332	1085	991
107.5	153	203	388	1081	1111
110.0	186	241	438	1055	1187
112.5	221	278	490	1034	1203
115.0	257	316	545	1014	1199
117.5	295	354	596	1004	1182
120.0	335	394	644	1007	1161
122.5	375	432	686	1022	1150
125.0	416	469	723	1040	1152
127.5	456	506	751	1057	1161
130.0	494	541	770	1069	1170
132.5	528	575	783	1071	1172
135.0	558	606	792	1061	1162
137.5	585	634	799	1038	1137
140.0	610	659	806	1010	1101
142.5	632	680	811	981	1059
145.0	653	698	817	957	1020
147.5	674	714	821	936	987
150.0	694	727	824	919	959
152.5	712	739	827	904	936
155.0	730	751	830	891	916
157.5	747	761	831	880	898
160.0	763	771	831	870	883
162.5	777	781	830	862	871
165.0	790	790	827	853	860
167.5	801	798	825	844	849
170.0	811	805	824	835	837
172.5	818	811	824	828	827
175.0	823	816	825	825	822
177.5	827	818	826	824	821
180.0	824	824	824	824	824



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Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, open top.

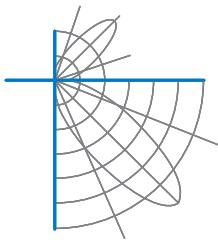
144 White LEDs, four PrevaLED Line boards with 36 LEDs each. Clear plastic optics over each board.

Two Osram Optotronic OTi 30/120-277/1A0 DIM L LED drivers.

120.0Vac, 60.00Hz, 0.2358A, 28.21W, 0.997PF, 5.9%THD(i)

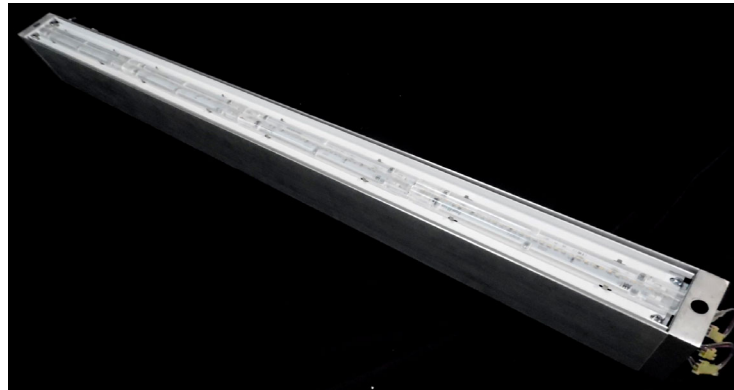
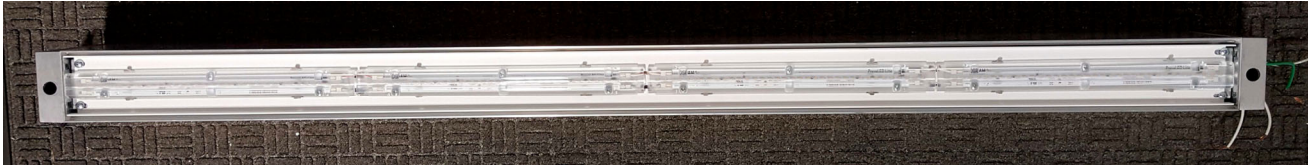
Coefficients Of Utilization - Zonal Cavity Method																		
Effective Floor Cavity Reflectance 0.20																		
RC	80				70				50			30			10			0
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	9	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	8	7	0
3	72	63	57	51	61	54	49	44	37	34	31	22	20	18	7	7	6	0
4	65	56	48	43	56	48	42	37	33	29	26	19	17	16	6	6	5	0
5	60	49	42	36	51	42	36	32	29	25	22	17	15	13	6	5	4	0
6	55	44	36	31	47	38	32	27	26	22	19	15	13	11	5	4	4	0
7	50	39	32	27	43	34	28	23	23	19	17	14	11	10	4	4	3	0
8	47	35	28	23	40	30	24	20	21	17	14	12	10	9	4	3	3	0
9	43	32	25	20	37	28	22	18	19	15	13	11	9	8	4	3	3	0
10	40	29	22	18	34	25	19	16	17	14	11	10	8	7	3	3	2	0

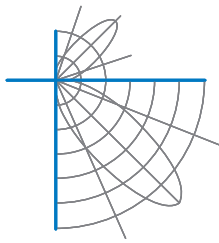
For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 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.



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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.
120.0Vac, 60.00Hz, 0.2358A, 28.21W, 0.997PF, 5.9%THD(i)





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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.
120.0Vac, 60.00Hz, 0.2358A, 28.21W, 0.997PF, 5.9%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.

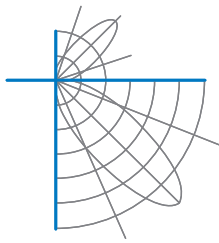
Prorating the performance of the sample for the use of other component combinations (such as lamp / LED / Ballast / driver), or for use in different environmental conditions than that tested, may produce erroneous results.

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

LLIA000762-001B-R01*

Integrating Sphere Report

Catalog Number: MLS3-I-HO-K40-4-X-WSOP-X-XXX-X

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, open top. 144 White LEDs, four PrevaLED Line boards with 36 LEDs each. Clear plastic optics over each board.
One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.



Performance Summary

Voltage	120.0 Vac
Current	0.2362 A
Power	28.25 W
Frequency	60.00 Hz
Power Factor	0.997
Current THD	5.9 %

Total Luminous Flux	3979.0 lm
Efficacy	140.8 lm/W
Chromaticity (x,y)	(0.3815, 0.3790)
(u',v')	(0.2249, 0.5027)
Duv	0.0007
CCT	3987 K
CRI (Ra)	83
R9	13

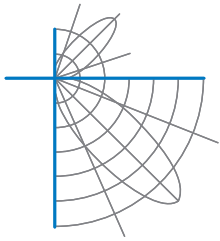
Prepared For:

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

*This test report supersedes test report LLIA000762-001B

Test date: 04/07/2017

Report date: 04/07/2017

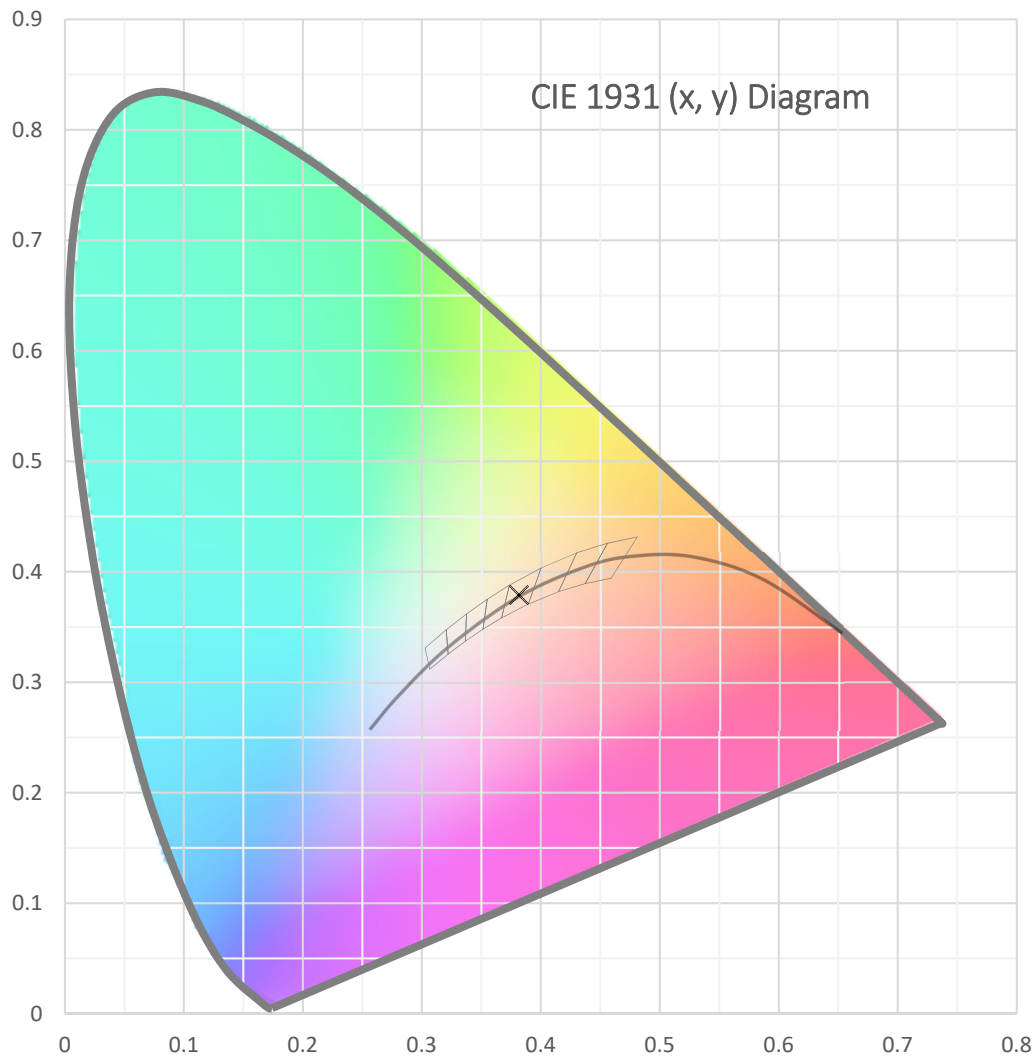


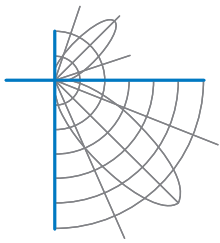
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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.



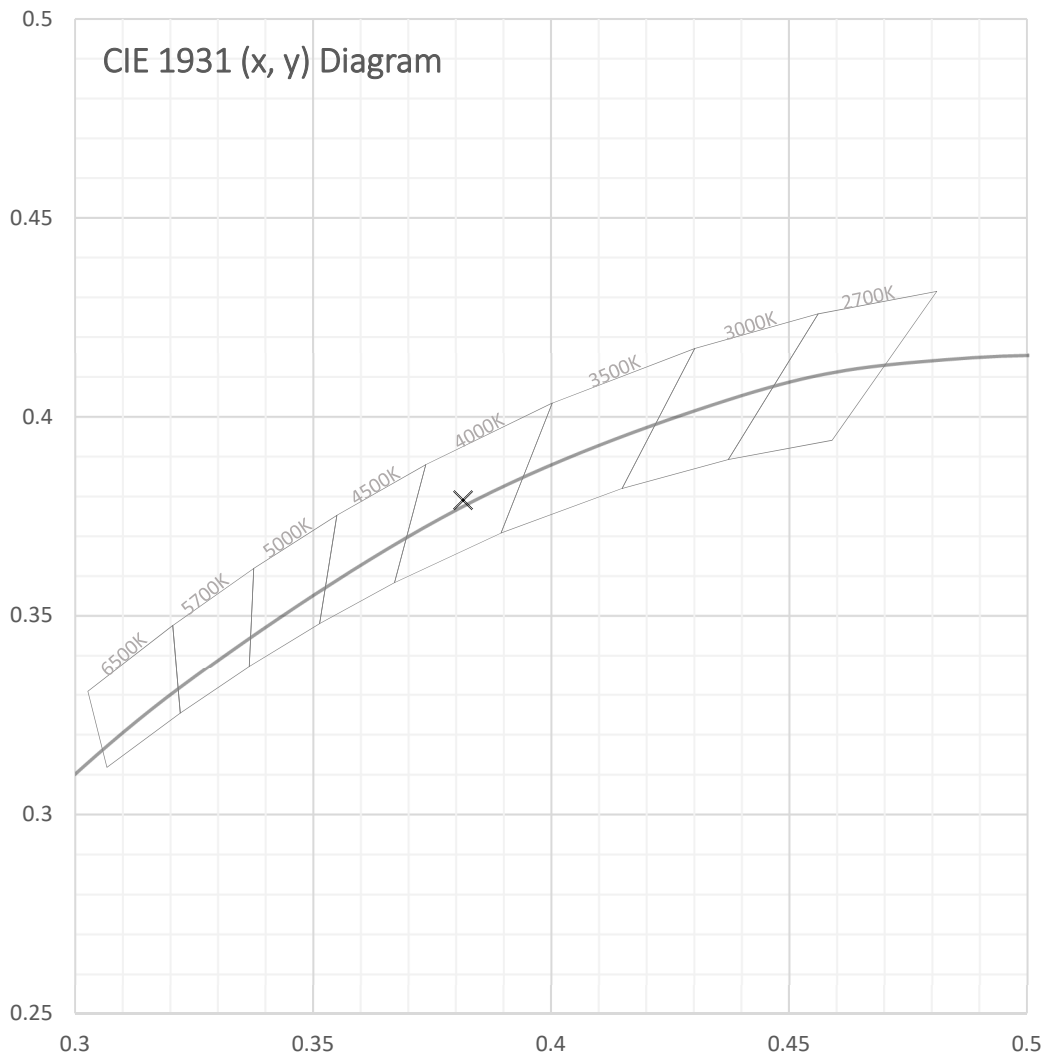


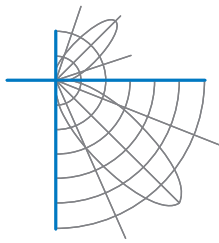
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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.





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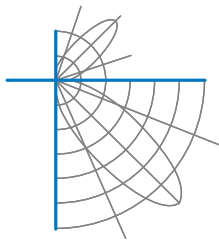
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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.

Spectral Data

Total Radiant Flux	12.29 W
Total Luminous Flux	3979.0 Lm
Chromaticity CIE 1931 (x, y)	(0.3815, 0.3790)
Chromaticity CIE 1976 (u', v')	(0.2249, 0.5027)
Correlated Color Temperature (CCT)	3987 K
Color Rendering Index (Ra)	83
R1	81
R2	89
R3	94
R4	80
R5	80
R6	83
R7	87
R8	66
R9	13
R10	72
R11	78
R12	56
R13	83
R14	97
Distance from Planckian Locus (Duv)	0.0007
Scotopic/Photopic Ratio *	1.670

Electrical Data

Voltage	120.0 Vac
Current	0.2362 A
Power	28.25 W
Frequency	60.00 Hz
Power Factor	0.997
Current THD	5.9 %



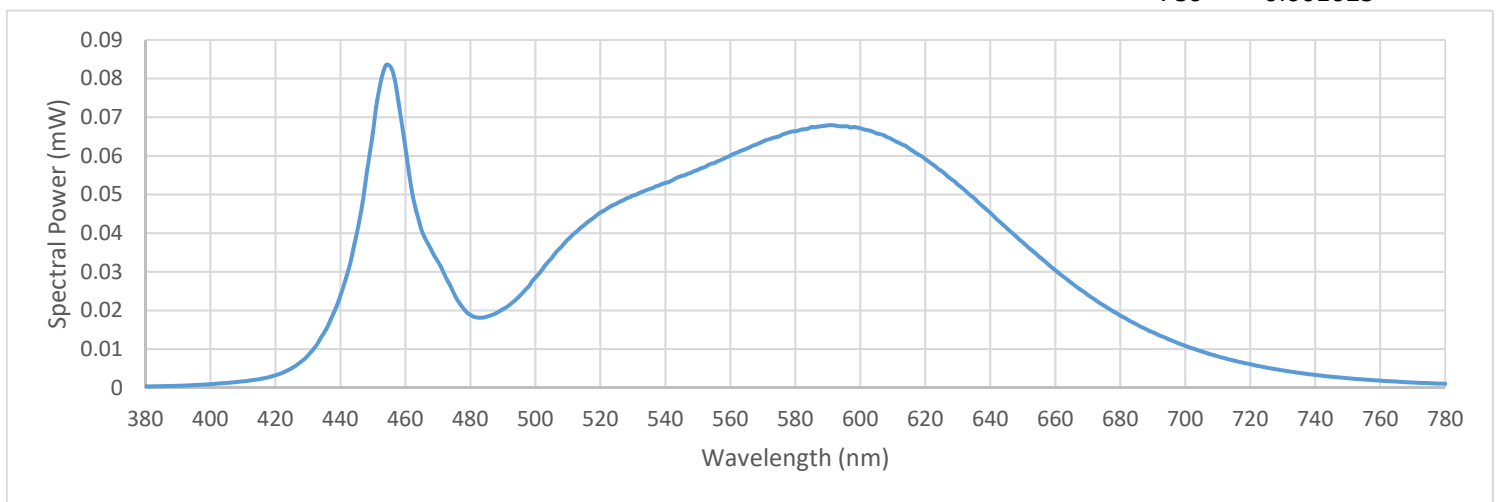
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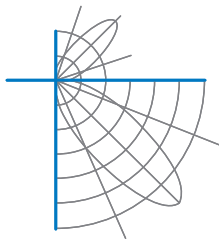
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Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000376	480	0.018847	580	0.066388	680	0.018673
385	0.000420	485	0.018392	585	0.067469	685	0.016431
390	0.000527	490	0.020338	590	0.067888	690	0.014350
395	0.000682	495	0.023635	595	0.067632	695	0.012497
400	0.000932	500	0.028501	600	0.067167	700	0.010874
405	0.001258	505	0.033553	605	0.065817	705	0.009409
410	0.001673	510	0.038380	610	0.064164	710	0.008139
415	0.002228	515	0.042078	615	0.061919	715	0.007039
420	0.003231	520	0.045360	620	0.059186	720	0.006076
425	0.005061	525	0.047679	625	0.056065	725	0.005224
430	0.008367	530	0.049741	630	0.052576	730	0.004511
435	0.014284	535	0.051416	635	0.049105	735	0.003865
440	0.023822	540	0.053001	640	0.045265	740	0.003317
445	0.039830	545	0.054789	645	0.041371	745	0.002867
450	0.066096	550	0.056383	650	0.037636	750	0.002473
455	0.083390	555	0.058133	655	0.033932	755	0.002135
460	0.062062	560	0.060063	660	0.030435	760	0.001856
465	0.040706	565	0.061862	665	0.027117	765	0.001593
470	0.032655	570	0.063705	670	0.024041	770	0.001371
475	0.024278	575	0.065045	675	0.021255	775	0.001181
						780	0.001025





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One Osram Optotronic OTi 30/120-277/1A0 DIM L 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: 25.3 °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.

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