



Report of Test

LLIA000849-002A-R01*

*This test report supersedes test report LLIA000849-002A

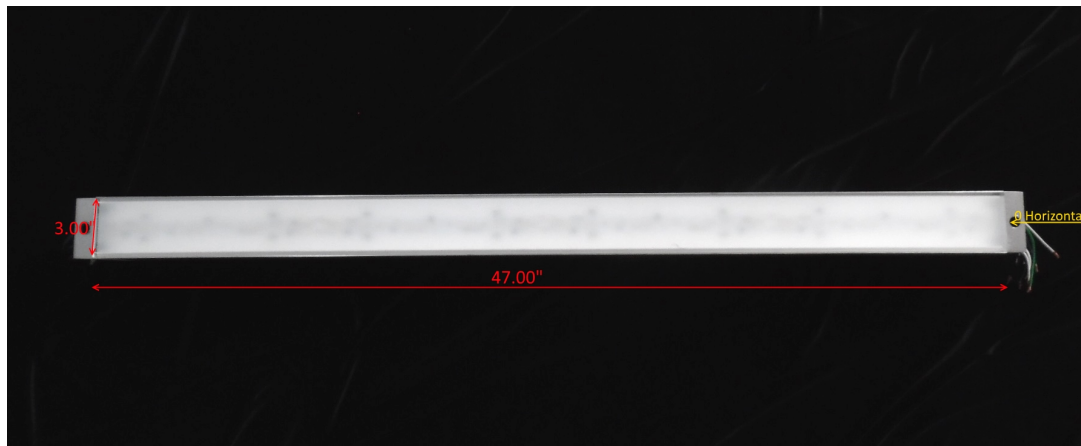
Catalog Number: MLS3-I-MO-K40-4-XX-FDC-XXXX-120

Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, frosted plastic top enclosure.

144 White LEDs, four PrevaLED Line boards with 36 LEDs each.

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

120.0Vac, 60.00Hz, 0.1442A, 17.20W, 0.994PF, 5.1%THD(i)



Performance Summary

Total Light Output	2277 lm
Luminaire Power	17.2 W
Luminous Efficacy	132.4 lm/W

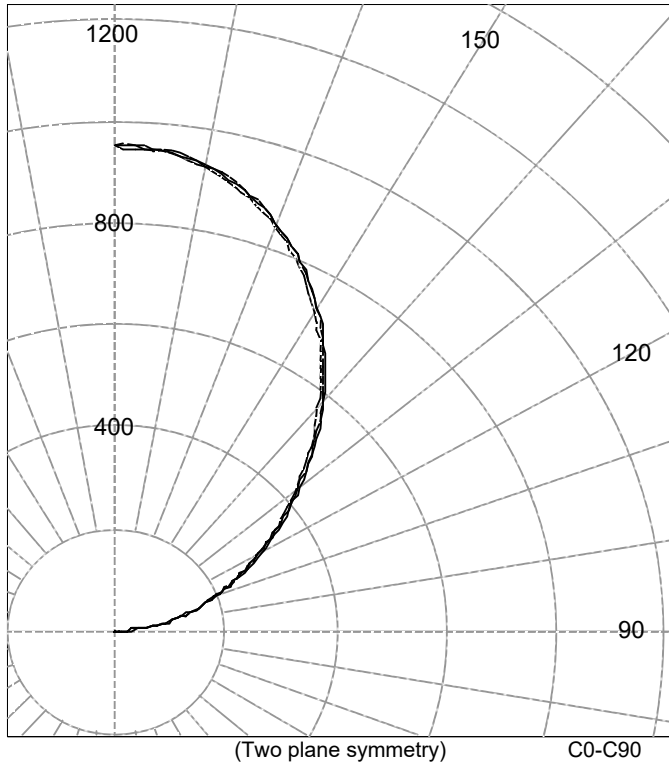
PREPARED FOR : Precision Architectural Lighting, 4830 Timber Creek Drive, Houston, TX 77017



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



INTENSITY SUMMARY (cd)

Gamma	C-Plane					Flux (lm)
	C0	C22.5	C45	C67.5	C90	
90.0	1	2	3	5	5	
95.0	48	48	48	48	48	52
100.0	95	95	94	94	93	
105.0	143	143	142	140	139	150
110.0	194	195	191	188	187	
115.0	247	248	245	240	239	242
120.0	306	306	302	296	295	
125.0	370	367	365	358	357	326
130.0	438	434	434	427	425	
135.0	511	506	507	500	498	389
140.0	587	581	583	577	573	
145.0	663	656	659	654	649	410
150.0	734	727	731	727	722	
155.0	798	791	797	793	789	365
160.0	852	846	854	850	846	
165.0	896	890	899	895	891	252
170.0	927	922	931	928	924	
175.0	946	942	950	948	944	90
180.0	953	953	953	953	953	

ZONAL FLUX AND PERCENTAGES

Zone	Flux (lm)	% Lamp	% Luminaire
180-150	706	N / A	31.0
180-140	1116	N / A	49.0
180-120	1831	N / A	80.4
180-90	2275	N / A	99.9
140-90	1159	N / A	50.9
120-90	444	N / A	19.5
90-0	2	N / A	0.1
180-0	2277	N / A	100.0

Total Light Output = 2,277 lm

Signed:

Authorized Signatory

Date of test 23-Aug-2017
Date of report 15-Dec-2017



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
0.0	0	0	0	0	0
2.5	0	0	0	0	0
5.0	0	0	0	0	0
7.5	0	0	0	0	0
10.0	0	0	0	0	0
12.5	0	0	0	0	0
15.0	0	0	0	0	0
17.5	0	0	0	0	0
20.0	0	0	0	0	0
22.5	0	0	0	0	0
25.0	0	0	0	0	0
27.5	0	0	0	0	0
30.0	0	0	0	0	0
32.5	0	0	0	0	0
35.0	0	0	0	0	0
37.5	0	0	0	0	0
40.0	0	0	0	0	0
42.5	0	0	0	0	0
45.0	0	0	0	0	0
47.5	0	0	0	0	0
50.0	0	0	0	0	0
52.5	0	0	0	0	0
55.0	0	0	0	0	0
57.5	0	0	0	0	0
60.0	0	0	0	0	0
62.5	0	0	0	0	0
65.0	0	0	0	0	0
67.5	0	0	0	0	0
70.0	0	0	0	0	0
72.5	0	0	0	0	1
75.0	0	0	0	1	1
77.5	0	0	1	1	1
80.0	0	0	1	1	2
82.5	0	0	1	2	2
85.0	0	0	1	2	2
87.5	0	1	2	2	2
90.0	1	2	3	5	5



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Intensity data (cd)

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	1	2	3	5	5
92.5	24	25	25	25	25
95.0	48	48	48	48	48
97.5	71	72	71	71	71
100.0	95	95	94	94	93
102.5	119	119	118	117	116
105.0	143	143	142	140	139
107.5	168	168	166	164	163
110.0	194	195	191	188	187
112.5	221	221	218	214	213
115.0	247	248	245	240	239
117.5	276	277	273	267	266
120.0	306	306	302	296	295
122.5	337	336	333	327	326
125.0	370	367	365	358	357
127.5	402	399	399	392	390
130.0	438	434	434	427	425
132.5	474	469	470	463	461
135.0	511	506	507	500	498
137.5	549	544	545	538	535
140.0	587	581	583	577	573
142.5	625	619	621	615	611
145.0	663	656	659	654	649
147.5	699	692	695	691	686
150.0	734	727	731	727	722
152.5	767	760	765	761	757
155.0	798	791	797	793	789
157.5	826	820	827	823	818
160.0	852	846	854	850	846
162.5	875	870	878	874	869
165.0	896	890	899	895	891
167.5	913	908	916	913	909
170.0	927	922	931	928	924
172.5	938	934	942	940	936
175.0	946	942	950	948	944
177.5	951	947	955	953	949
180.0	953	953	953	953	953

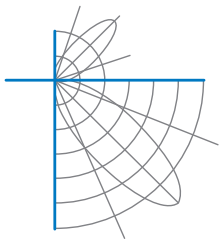


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Coefficients Of Utilization - Zonal Cavity Method																		
Effective Floor Cavity Reflectance 0.20																		
RC	80				70				50			30			10			0
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	28	27	26	9	9	8	0
2	79	72	66	62	67	62	57	53	42	40	37	24	23	22	8	7	7	0
3	72	63	56	51	61	54	49	44	37	34	31	21	20	18	7	6	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	5	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	27	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

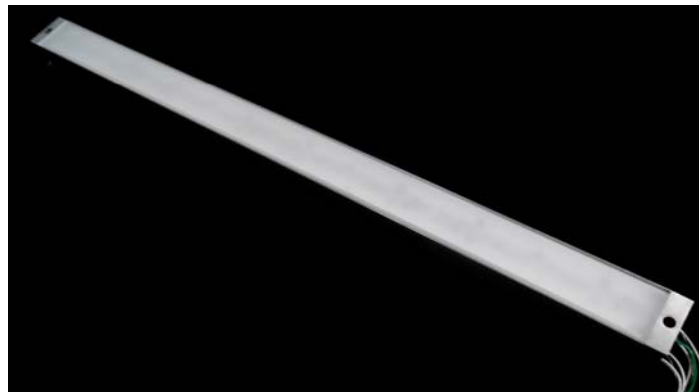
For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 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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Test Distance 9.5 m
Test Temperature 24.9 °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

LLIA000849-002B-R01*

Integrating Sphere Report

Catalog Number: MLS3-I-MO-K40-4-XX-FDC-XXXX-120

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



Performance Summary

Voltage	120.0 Vac
Current	0.1442 A
Power	17.20 W
Frequency	59.97 Hz
Power Factor	0.994
Current THD	5.2 %

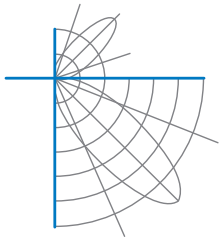
Total Luminous Flux	2360.1 lm
Efficacy	137.2 lm/W
Chromaticity (x,y)	(0.3836, 0.3809)
(u',v')	(0.2256, 0.5039)
Duv	0.0010
CCT	3945 K
CRI (Ra)	83
R9	14

Prepared For:

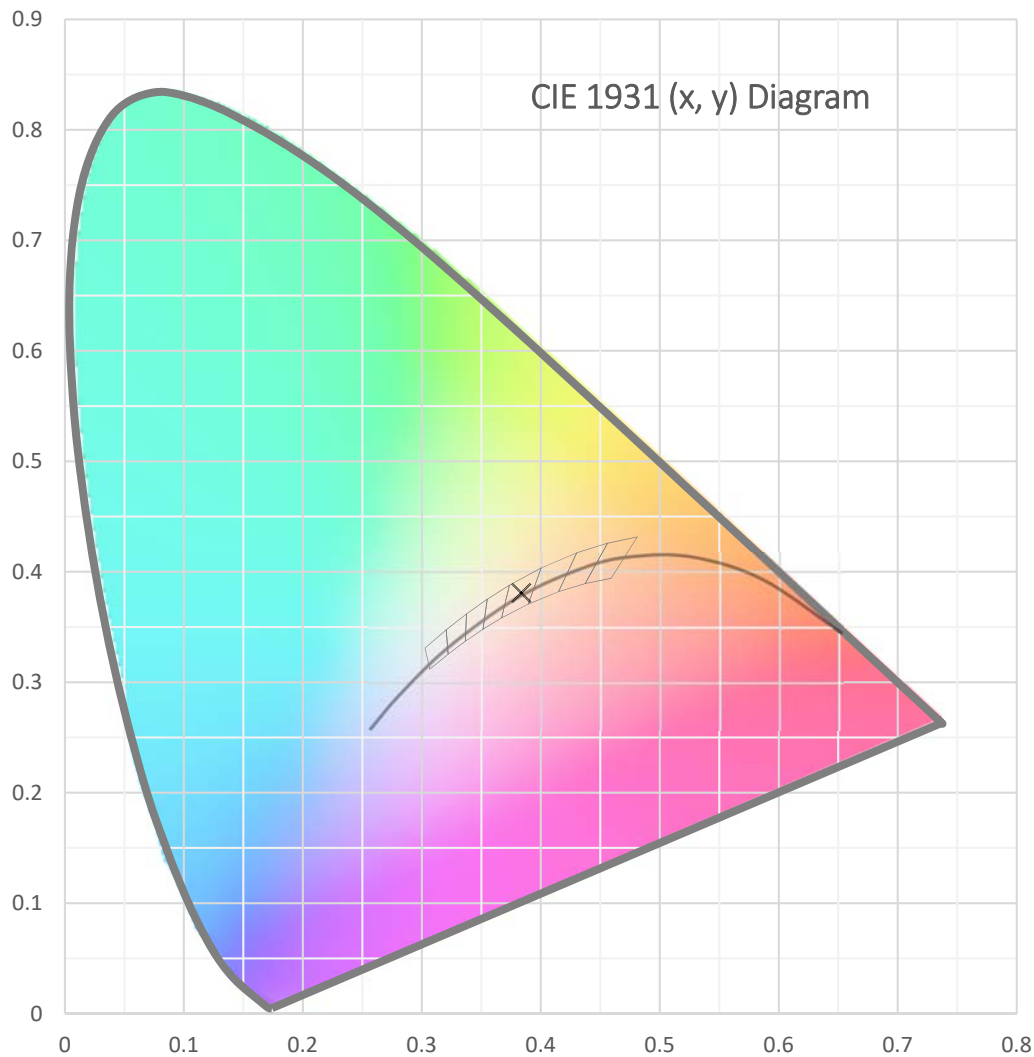
Precision Architectural Lighting
4830 Timber Creek Drive
Houston, TX 77017, USA

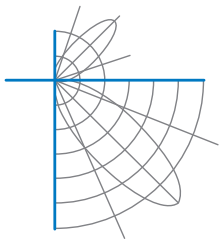
Test date: 08/23/2017

Report date: 12/15/2017

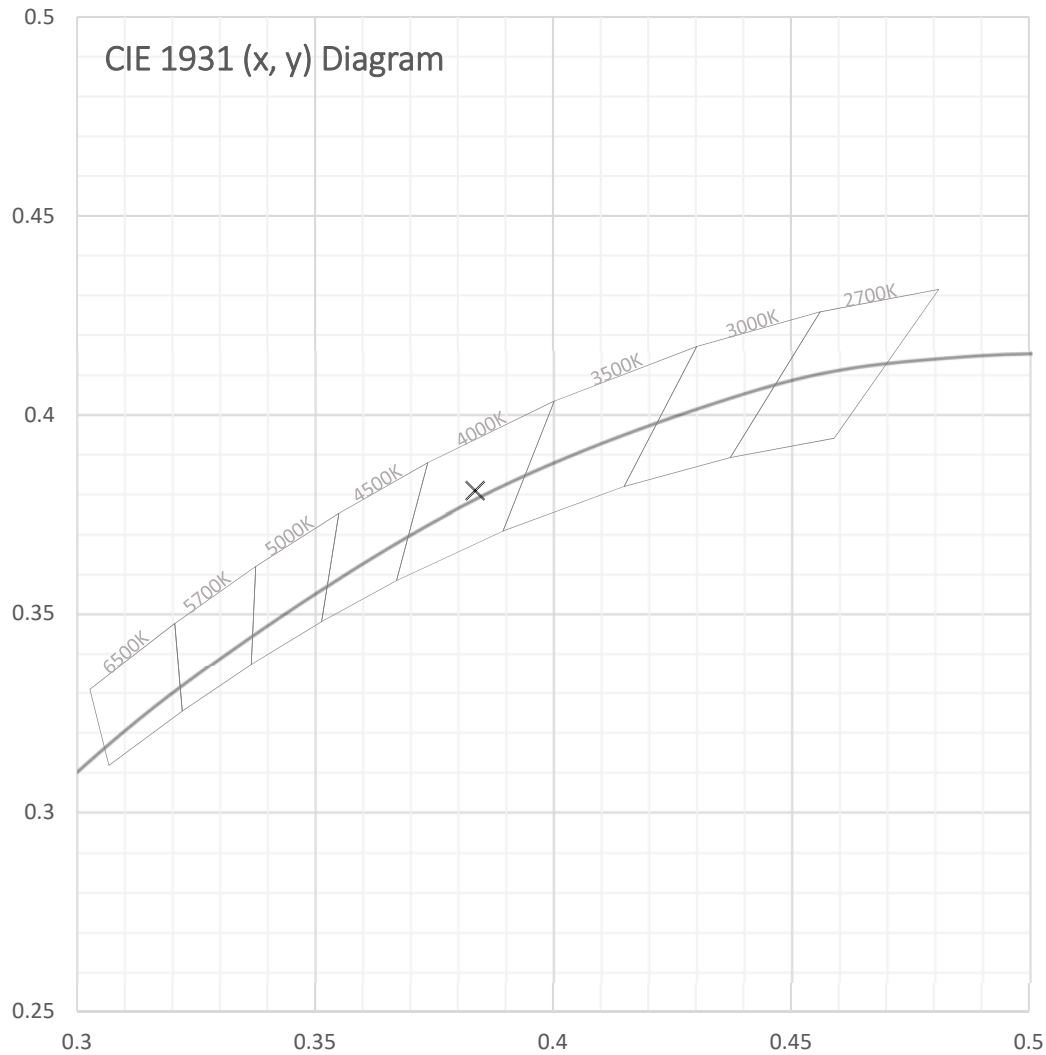


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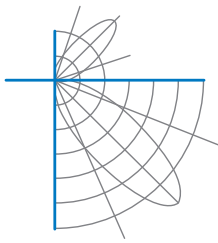
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Spectral Data

Total Radiant Flux	7.280 W
Total Luminous Flux	2360.1 Lm
Chromaticity CIE 1931 (x, y)	(0.3836, 0.3809)
Chromaticity CIE 1976 (u', v')	(0.2256, 0.5039)
Correlated Color Temperature (CCT)	3945 K
Color Rendering Index (Ra)	83
R1	81
R2	89
R3	94
R4	81
R5	80
R6	84
R7	87
R8	66
R9	14
R10	73
R11	78
R12	56
R13	83
R14	97
Distance from Planckian Locus (Duv)	0.0010
Scotopic/Photopic Ratio *	1.661

Electrical Data

Voltage	120.0 Vac
Current	0.1442 A
Power	17.20 W
Frequency	59.97 Hz
Power Factor	0.994
Current THD	5.2 %



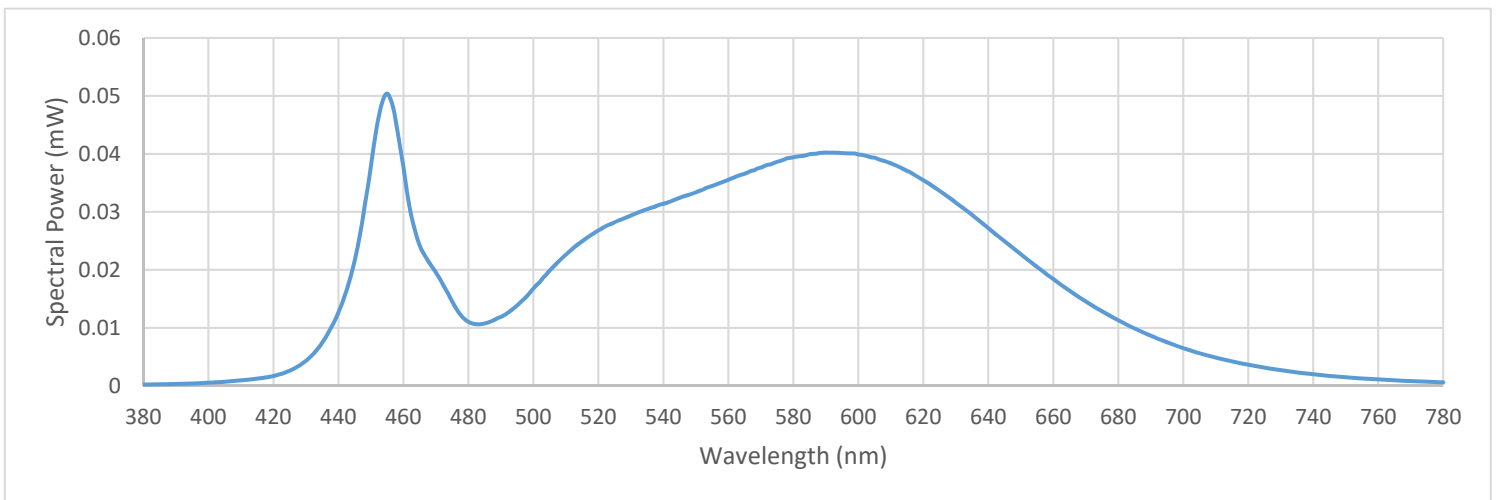
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Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)

380	0.000221	480	0.011027	580	0.039400	680	0.011296
385	0.000241	485	0.010775	585	0.039939	685	0.009906
390	0.000299	490	0.011898	590	0.040233	690	0.008628
395	0.000386	495	0.013845	595	0.040142	695	0.007517
400	0.000531	500	0.016754	600	0.039890	700	0.006503
405	0.000713	505	0.019823	605	0.039343	705	0.005621
410	0.000917	510	0.022613	610	0.038373	710	0.004833
415	0.001201	515	0.024967	615	0.037049	715	0.004194
420	0.001692	520	0.026794	620	0.035450	720	0.003626
425	0.002606	525	0.028214	625	0.033610	725	0.003125
430	0.004320	530	0.029331	630	0.031571	730	0.002696
435	0.007418	535	0.030425	635	0.029466	735	0.002306
440	0.012669	540	0.031378	640	0.027193	740	0.001973
445	0.021642	545	0.032417	645	0.024909	745	0.001701
450	0.037863	550	0.033357	650	0.022657	750	0.001463
455	0.050396	555	0.034494	655	0.020472	755	0.001259
460	0.037688	560	0.035503	660	0.018419	760	0.001093
465	0.024165	565	0.036550	665	0.016380	765	0.000941
470	0.019561	570	0.037632	670	0.014536	770	0.000807
475	0.014464	575	0.038629	675	0.012842	775	0.000696
						780	0.000600





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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: 24.8 °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.

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