

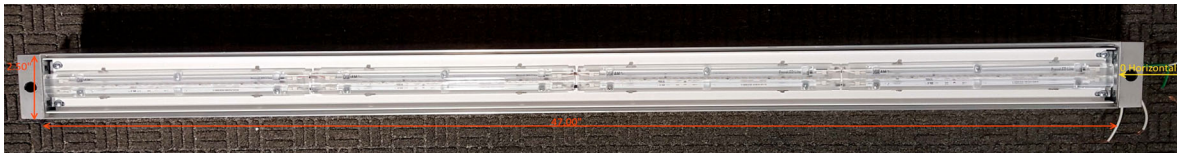


# Report of Test

## LLIA000762-002A-R01\*

\*This test report supersedes test report LLIA000762-002A

Catalog Number: MLS3-I-MO-K40-4-XX-WSOP-XXXX-120  
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, 0.1444A, 17.21W, 0.994PF, 5.2%THD(i)



### Performance Summary

Total Light Output	2408 lm
Luminaire Power	17.2 W
Luminous Efficacy	140.0 lm/W

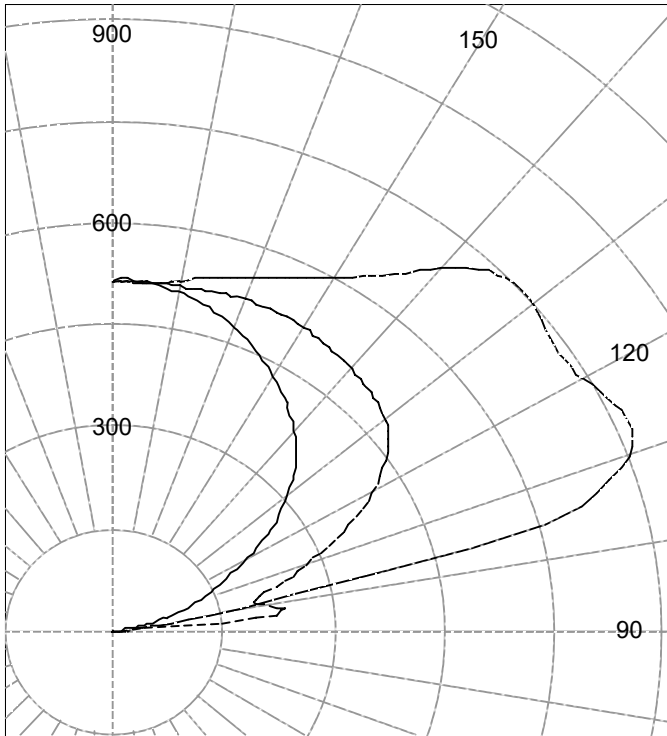
**PREPARED FOR : Precision Architectural Lighting, 4830 Timber Creek Drive, Houston, TX 77017**



**Test Report No. LLIA000762-002A-R01**

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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	0	0	0	0	0	
95.0	14	29	194	58	36	79
100.0	41	66	210	271	133	
105.0	76	105	215	689	608	327
110.0	117	151	280	679	750	
115.0	161	198	346	651	765	411
120.0	210	246	407	645	741	
125.0	262	294	456	665	735	428
130.0	311	339	484	683	747	
135.0	351	381	495	674	742	403
140.0	383	414	503	636	697	
145.0	409	438	510	599	641	326
150.0	434	455	516	575	600	
155.0	457	469	520	558	573	239
160.0	477	482	521	545	553	
165.0	494	494	518	535	539	146
170.0	506	504	515	522	523	
175.0	514	511	517	516	514	49
180.0	516	516	516	516	516	

**ZONAL FLUX AND PERCENTAGES**

Zone	Flux (lm)	% Lamp	% Luminaire
180-150	434	N / A	18.0
180-140	760	N / A	31.5
180-120	1591	N / A	66.1
180-90	2408	N / A	100.0
140-90	1648	N / A	68.5
120-90	817	N / A	33.9
90-0	0	N / A	0.0
180-0	2408	N / A	100.0

Total Light Output = 2,408 lm

Signed:

Michael L. Grather  
Authorized Signatory

Date of test  
Date of report

7-Apr-2017  
15-Dec-2017



**Test Report No. LLIA000762-002A-R01**

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120.0Vac, 60.00Hz, 0.1444A, 17.21W, 0.994PF, 5.2%THD(i)

**Intensity data (cd)**

Gamma	C-Plane				
	C0	C22.5	C45	C67.5	C90
90.0	0	0	0	0	0
92.5	5	13	68	19	13
95.0	14	29	194	58	36
97.5	26	47	235	125	70
100.0	41	66	210	271	133
102.5	58	84	196	576	301
105.0	76	105	215	689	608
107.5	96	127	249	693	699
110.0	117	151	280	679	750
112.5	139	174	312	666	765
115.0	161	198	346	651	765
117.5	185	222	377	643	755
120.0	210	246	407	645	741
122.5	236	270	434	654	734
125.0	262	294	456	665	735
127.5	287	317	473	675	740
130.0	311	339	484	683	747
132.5	332	361	490	683	749
135.0	351	381	495	674	742
137.5	368	398	499	657	724
140.0	383	414	503	636	697
142.5	396	427	507	616	668
145.0	409	438	510	599	641
147.5	422	447	513	585	618
150.0	434	455	516	575	600
152.5	446	462	518	566	585
155.0	457	469	520	558	573
157.5	467	476	521	551	562
160.0	477	482	521	545	553
162.5	486	488	520	541	546
165.0	494	494	518	535	539
167.5	501	499	516	529	532
170.0	506	504	515	522	523
172.5	511	508	515	518	517
175.0	514	511	517	516	514
177.5	516	513	518	516	514
180.0	516	516	516	516	516



**Test Number: LLIA000762-002A-R01**

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

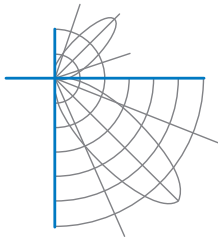
Pendant mounted, extruded aluminum housing, formed white aluminum reflector tray, open top. 144 White LEDs, four PrevaLED Line boards with 36 LEDs each. Clear plastic optics over each board.

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120.0Vac, 60.00Hz, 0.1444A, 17.21W, 0.994PF, 5.2%THD(i)

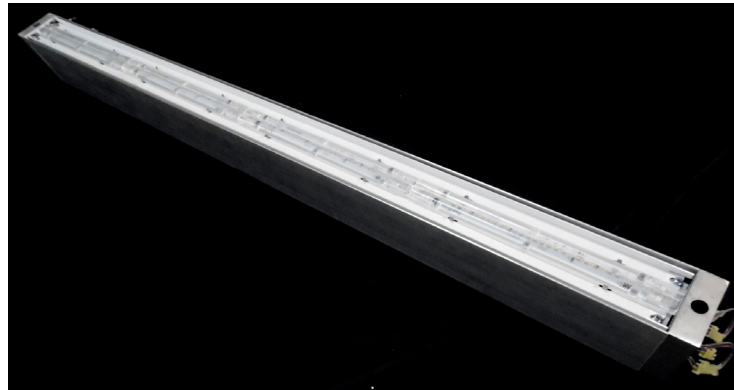
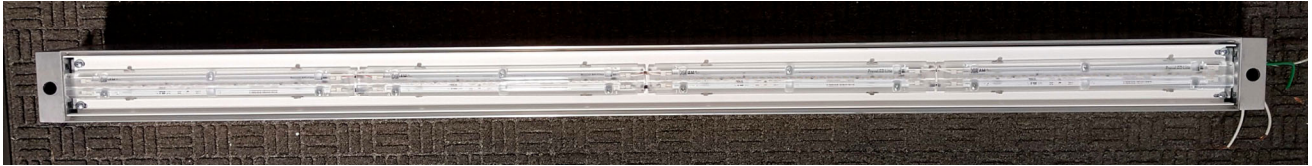
Coefficients Of Utilization - Zonal Cavity Method																		
Effective Floor Cavity Reflectance 0.20																		
RC	80				70				50			30			10			0
	RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
0	95	95	95	95	81	81	81	81	56	56	56	32	32	32	10	10	10	0
1	87	83	79	76	74	71	68	65	48	47	45	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

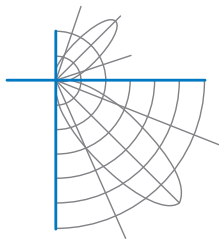
For absolute test reports, CUs are expressed as a percentage of total lumen output. Calculations were based on published IES procedures, and are based on the zonal cavity method. Basic assumptions: 1) Room surfaces are lambertian reflectors. 2) Incident flux on each surface is uniformly distributed. 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, 0.1444A, 17.21W, 0.994PF, 5.2%THD(i)





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One Osram Optotronic OTi 30/120-277/1A0 DIM L LED driver.  
120.0Vac, 60.00Hz, 0.1444A, 17.21W, 0.994PF, 5.2%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

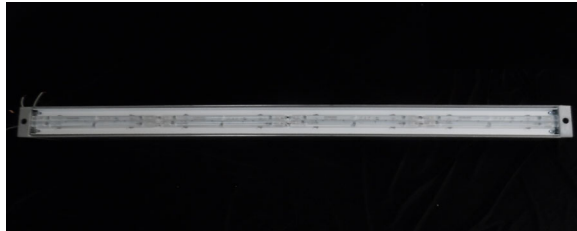
**LLIA000762-002B-R01\***

Integrating Sphere Report

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

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	0.1442 A
Power	17.20 W
Frequency	60.00 Hz
Power Factor	0.994
Current THD	5.2 %

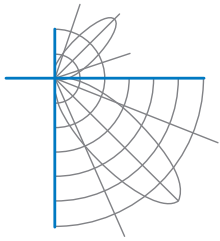
Total Luminous Flux	2502.7 lm
Efficacy	145.5 lm/W
Chromaticity (x,y)	(0.3813, 0.3789)
(u',v')	(0.2248, 0.5026)
Duv	0.0007
CCT	3993 K
CRI (Ra)	83
R9	13

Prepared For:

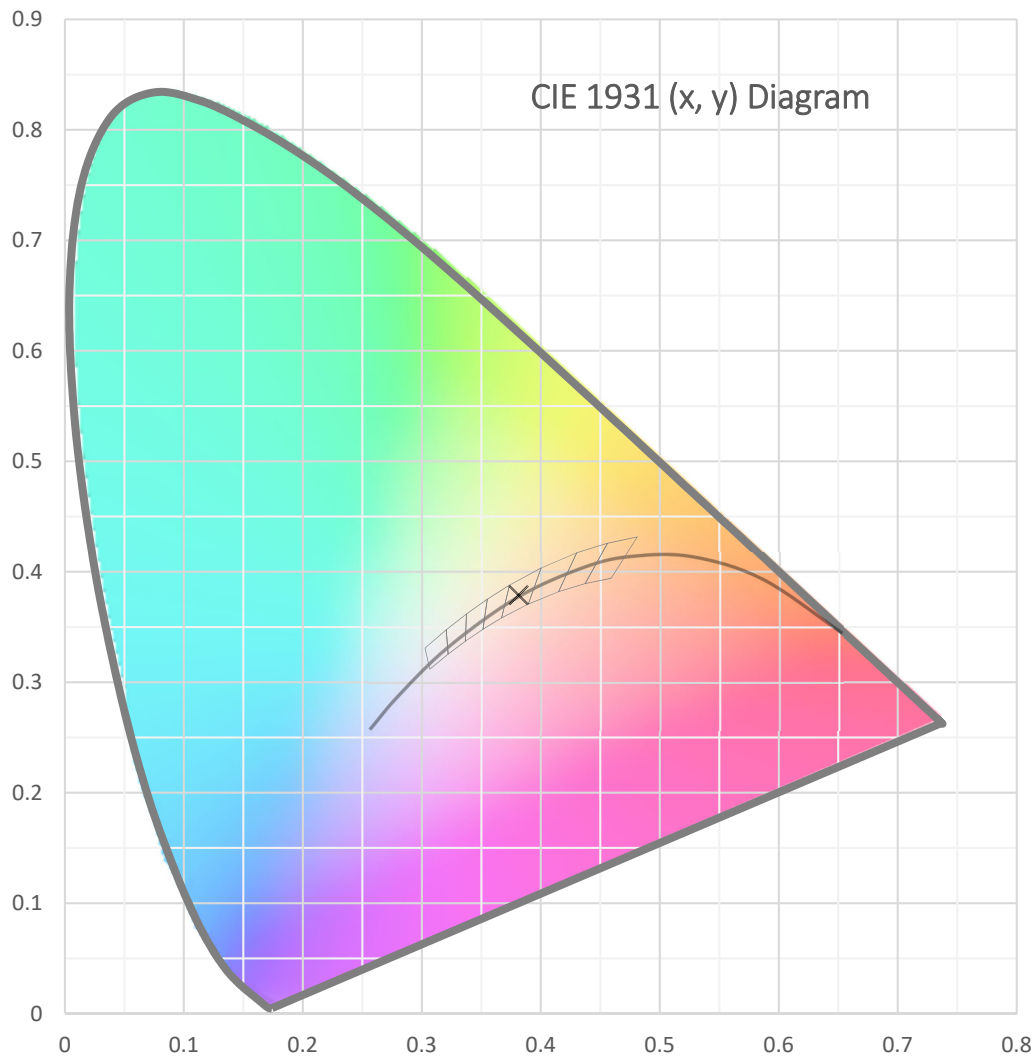
Precision Architectural Lighting  
4830 Timber Creek Drive  
Houston, TX 77017, USA

Test date: 04/13/2017

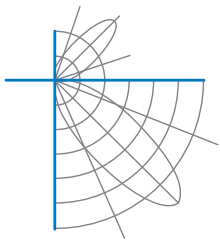
Report date: 12/15/2017



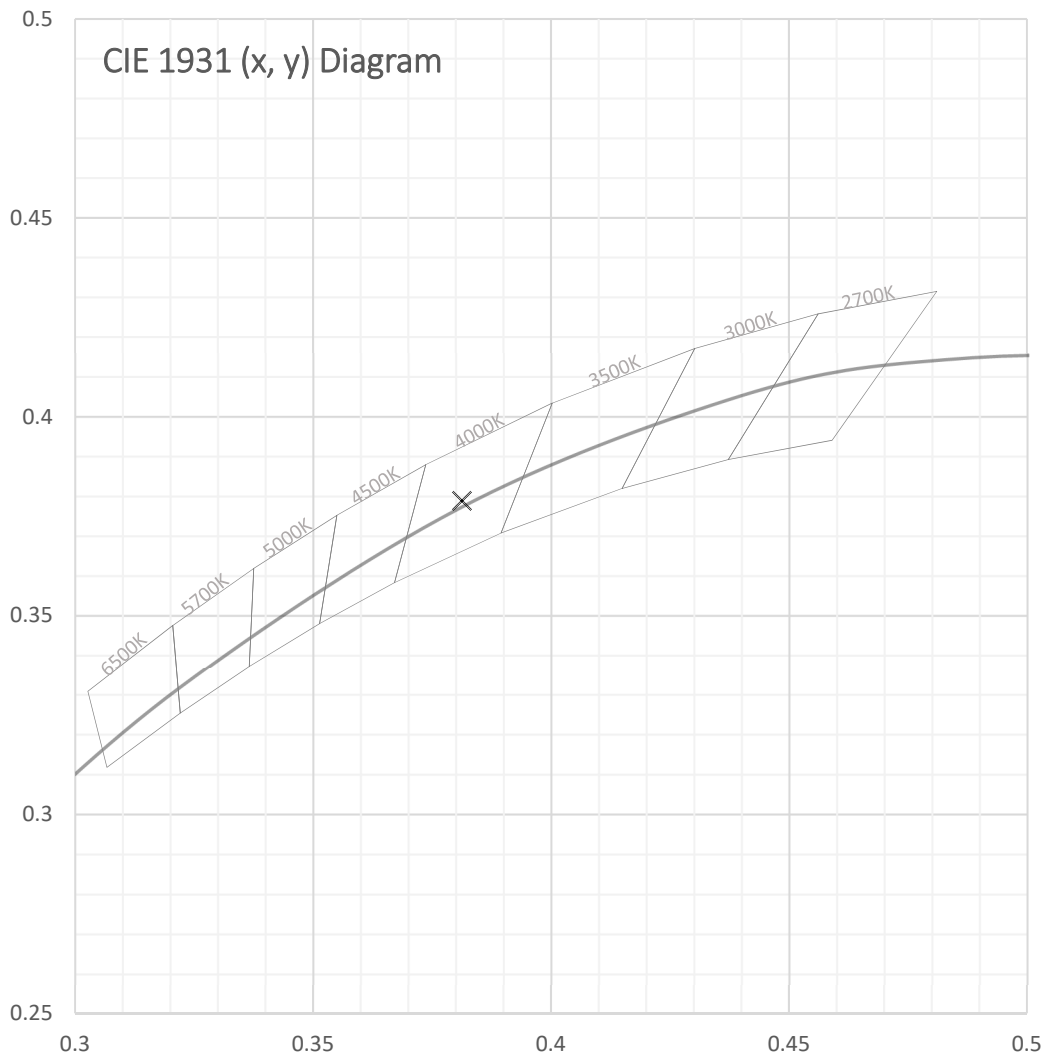
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**Spectral Data**

Total Radiant Flux	7.727 W
Total Luminous Flux	2502.7 Lm
Chromaticity CIE 1931 (x, y)	(0.3813, 0.3789)
Chromaticity CIE 1976 (u', v')	(0.2248, 0.5026)
Correlated Color Temperature (CCT)	3993 K
Color Rendering Index (Ra)	83
R1	81
R2	89
R3	94
R4	81
R5	80
R6	84
R7	87
R8	66
R9	13
R10	73
R11	78
R12	56
R13	83
R14	97
Distance from Planckian Locus (Duv)	0.0007
Scotopic/Photopic Ratio *	1.675

**Electrical Data**

Voltage	120.0 Vac
Current	0.1442 A
Power	17.20 W
Frequency	60.00 Hz
Power Factor	0.994
Current THD	5.2 %



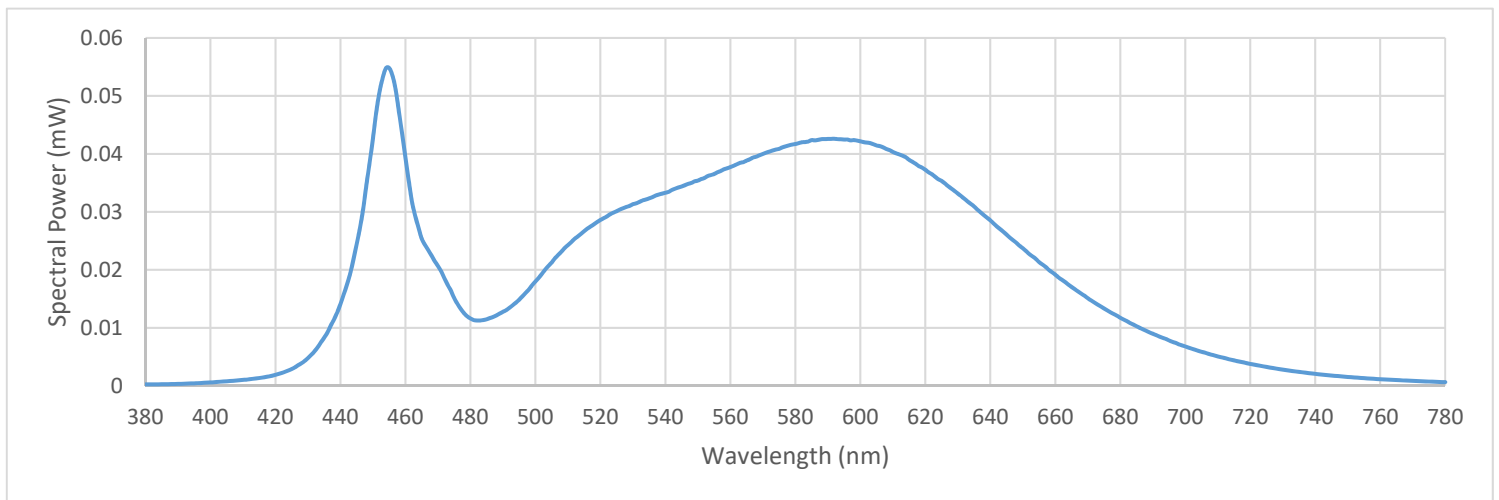
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**Summary Spectral Power Distribution (wavelength - nm, spectral power - mW)**

380	0.000243	480	0.011617	580	0.041707	680	0.011725
385	0.000262	485	0.011472	585	0.042374	685	0.010281
390	0.000320	490	0.012757	590	0.042583	690	0.008979
395	0.000420	495	0.014846	595	0.042465	695	0.007820
400	0.000581	500	0.017980	600	0.042169	700	0.006786
405	0.000781	505	0.021257	605	0.041451	705	0.005867
410	0.001019	510	0.024260	610	0.040336	710	0.005068
415	0.001335	515	0.026663	615	0.038974	715	0.004387
420	0.001883	520	0.028599	620	0.037261	720	0.003772
425	0.002890	525	0.030112	625	0.035330	725	0.003250
430	0.004788	530	0.031320	630	0.033161	730	0.002791
435	0.008291	535	0.032318	635	0.030935	735	0.002400
440	0.014096	540	0.033297	640	0.028538	740	0.002052
445	0.024455	545	0.034377	645	0.026079	745	0.001770
450	0.042631	550	0.035391	650	0.023723	750	0.001528
455	0.054812	555	0.036527	655	0.021341	755	0.001314
460	0.039362	560	0.037732	660	0.019162	760	0.001141
465	0.025411	565	0.038839	665	0.017059	765	0.000980
470	0.020670	570	0.039982	670	0.015097	770	0.000844
475	0.015153	575	0.040866	675	0.013340	775	0.000729
						780	0.000626





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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 $\pi$  geometry

**Test Temperature:** 24.3 °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.  
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**Notes:** The measurements and other derived quantities contained in this report are based on the absolute data as measured.

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