

## Report of Test

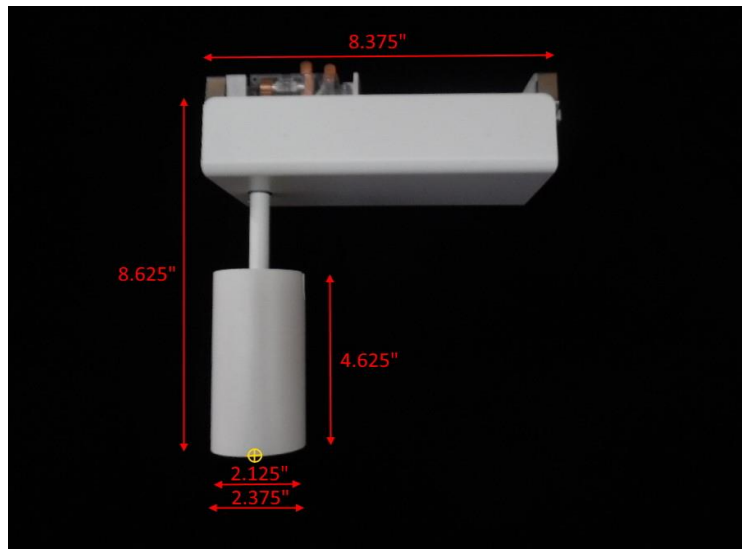
LLIA001532-002

Indoor Distribution Photometry Test Report

Catalog Number: C20-L0690TH-9HCE0PA-P3, 35 degree optic  
Track mounted steel driver housing with cylindrical aluminum luminaire housing,  
clear multi-faceted clear conical lens below LED and black plastic baffle.

One white LED

One eldoLED SOLOdrive 361/S LED driver



Prepared For:  
LiteLab, Inc  
251 Elm Street  
Buffalo, NY 14203, USA

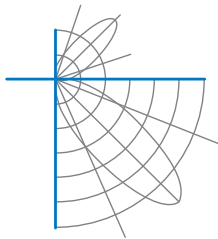
Performance Summary			
Input Voltage	120.0 V	Luminous Flux	244.6 Lumens
Input Current	0.0661 A	Total Efficacy	33.6 lm/W
Input Power	7.29 W	Downward Flux	244.6 Lumens
Frequency	60.00 Hz	Downward Flux	100.0 % of Total
Power Factor	0.919		
Current THD	15.9 %		

This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

Test date: 08/30/2021

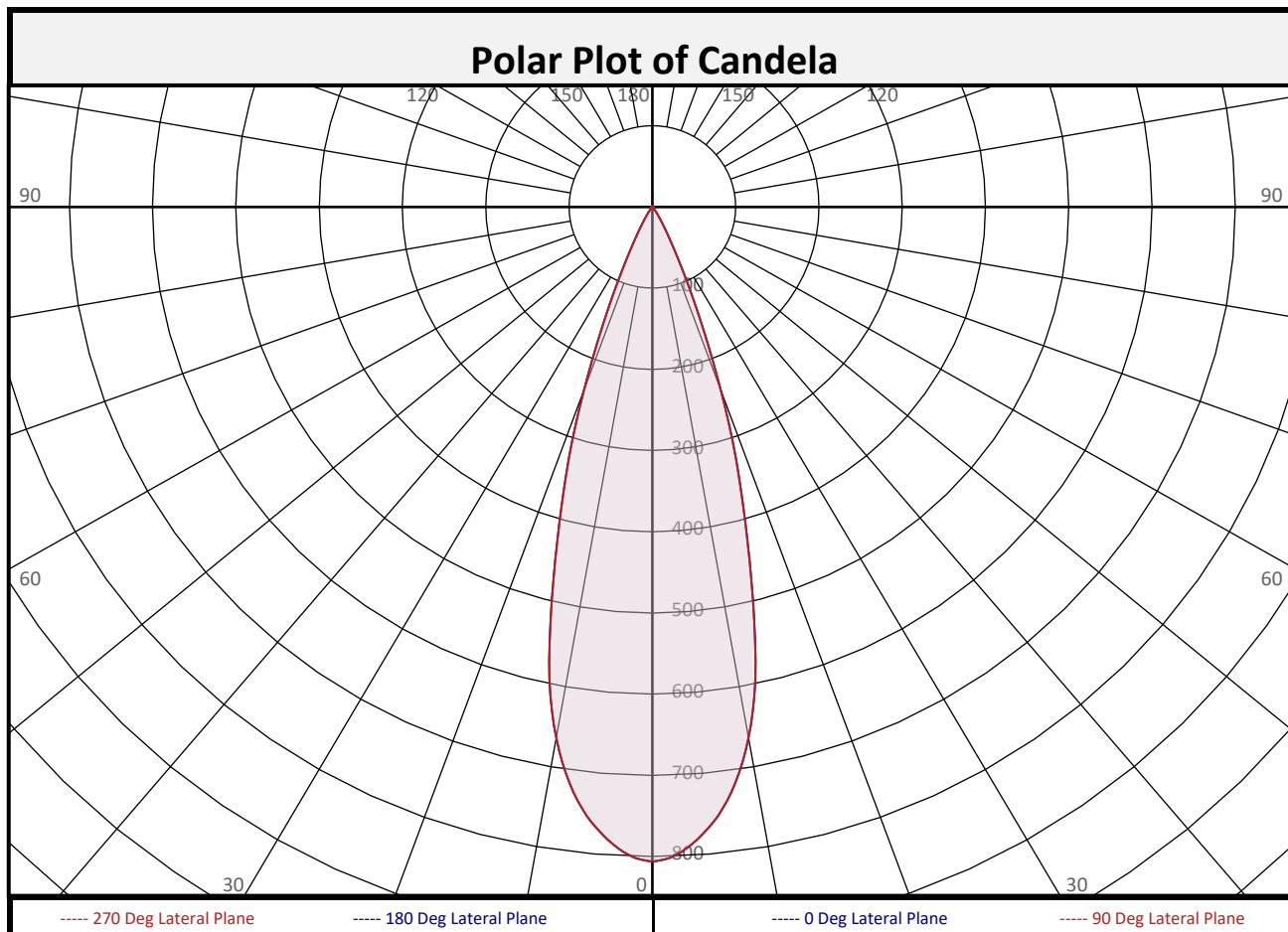
Report date: 09/01/2021

Signed: \_\_\_\_\_

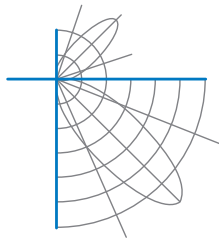


## Report of Test

### LLIA001532-002



Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	70.2	28.7%		90-100	0.0	0.0%		0-20	192.5	78.7%
10-20	122.3	50.0%		100-110	0.0	0.0%		0-30	236.9	96.8%
20-30	44.4	18.1%		110-120	0.0	0.0%		0-40	243.4	99.5%
30-40	6.5	2.7%		120-130	0.0	0.0%		0-60	244.5	99.9%
40-50	0.8	0.3%		130-140	0.0	0.0%		0-80	244.6	100.0%
50-60	0.3	0.1%		140-150	0.0	0.0%		10-90	174.5	71.3%
60-70	0.1	0.0%		150-160	0.0	0.0%		20-50	51.7	21.1%
70-80	0.0	0.0%		160-170	0.0	0.0%		40-90	1.3	0.5%
80-90	0.0	0.0%		170-180	0.0	0.0%		60-90	0.2	0.1%
0-90	244.6	100.0%		90-180	0.0	0.0%		0-180	244.6	100.0%

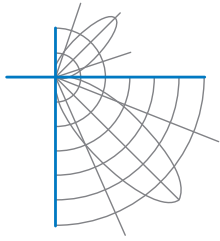


## Report of Test

LLIA001532-002

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles								
		0	22.5	45	67.5	90	112.5	135	157.5	180
Vertical (Gamma) Angles	0	806	806	806	806	806	806	806	806	806
	2.5	795	795	795	795	795	795	795	795	795
	5	768	768	768	768	768	768	768	768	768
	7.5	727	727	727	727	727	727	727	727	727
	10	664	664	664	664	664	664	664	664	664
	12.5	573	573	573	573	573	573	573	573	573
	15	452	452	452	452	452	452	452	452	452
	17.5	343	343	343	343	343	343	343	343	343
	20	241	241	241	241	241	241	241	241	241
	22.5	150	150	150	150	150	150	150	150	150
	25	86	86	86	86	86	86	86	86	86
	27.5	47	47	47	47	47	47	47	47	47
	30	27	27	27	27	27	27	27	27	27
	32.5	16	16	16	16	16	16	16	16	16
	35	9	9	9	9	9	9	9	9	9
	37.5	5	5	5	5	5	5	5	5	5
	40	2	2	2	2	2	2	2	2	2
	42.5	1	1	1	1	1	1	1	1	1
	45	1	1	1	1	1	1	1	1	1
	47.5	1	1	1	1	1	1	1	1	1
50	1	1	1	1	1	1	1	1	1	
52.5	0	0	0	0	0	0	0	0	0	
55	0	0	0	0	0	0	0	0	0	
57.5	0	0	0	0	0	0	0	0	0	
60	0	0	0	0	0	0	0	0	0	
62.5	0	0	0	0	0	0	0	0	0	
65	0	0	0	0	0	0	0	0	0	
67.5	0	0	0	0	0	0	0	0	0	
70	0	0	0	0	0	0	0	0	0	
72.5	0	0	0	0	0	0	0	0	0	
75	0	0	0	0	0	0	0	0	0	
77.5	0	0	0	0	0	0	0	0	0	
80	0	0	0	0	0	0	0	0	0	
82.5	0	0	0	0	0	0	0	0	0	
85	0	0	0	0	0	0	0	0	0	
87.5	0	0	0	0	0	0	0	0	0	
90	0	0	0	0	0	0	0	0	0	



## Report of Test

LLIA001532-002

Luminous Intensity (Candela) Table

		Lateral (C-Plane) Angles								
		0	22.5	45	67.5	90	112.5	135	157.5	180
Vertical (Gamma) Angles	90	0	0	0	0	0	0	0	0	0
	92.5	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0
	97.5	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0
	102.5	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0
	107.5	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0
	112.5	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0
	117.5	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0
	122.5	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0
	127.5	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0
	132.5	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0
	137.5	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0
	142.5	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0
	147.5	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0
	152.5	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0
157.5	0	0	0	0	0	0	0	0	0	
160	0	0	0	0	0	0	0	0	0	
162.5	0	0	0	0	0	0	0	0	0	
165	0	0	0	0	0	0	0	0	0	
167.5	0	0	0	0	0	0	0	0	0	
170	0	0	0	0	0	0	0	0	0	
172.5	0	0	0	0	0	0	0	0	0	
175	0	0	0	0	0	0	0	0	0	
177.5	0	0	0	0	0	0	0	0	0	
180	0	0	0	0	0	0	0	0	0	



## Report of Test LLIA001532-002

Coefficients of Utilization/Room 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
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	115	113	111	109	113	111	109	107	107	105	104	103	102	101	100	99	98	96
2	111	107	104	102	109	106	103	101	103	100	98	100	98	96	97	96	94	93
3	107	103	99	96	106	101	98	95	99	96	94	97	94	92	94	93	91	90
4	104	98	94	91	102	97	94	91	95	92	90	94	91	89	92	90	88	87
5	101	95	90	87	99	94	90	87	92	89	86	91	88	86	89	87	85	84
6	98	91	87	84	96	91	87	84	89	86	83	88	85	83	87	84	82	81
7	95	88	84	81	94	87	83	81	86	83	80	85	82	80	84	82	79	78
8	92	85	81	78	91	85	81	78	84	80	78	83	80	77	82	79	77	76
9	89	82	78	75	88	82	78	75	81	78	75	80	77	75	80	77	75	74
10	87	80	76	73	86	80	76	73	79	75	73	78	75	73	78	75	72	72

For absolute test reports, RUs are expressed as a percentage of total lumen output. For relative test reports, CUs are expressed as a percentage of total lamp 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)	Ground-level distance to half-of-nadir illuminance (ft)	
		0-180 deg	90-270 deg
6.0	22.4	3.23	3.23
8.0	12.6	4.31	4.31
10.0	8.1	5.39	5.39
12.0	5.6	6.47	6.47
14.0	4.1	7.54	7.54
16.0	3.1	8.62	8.62

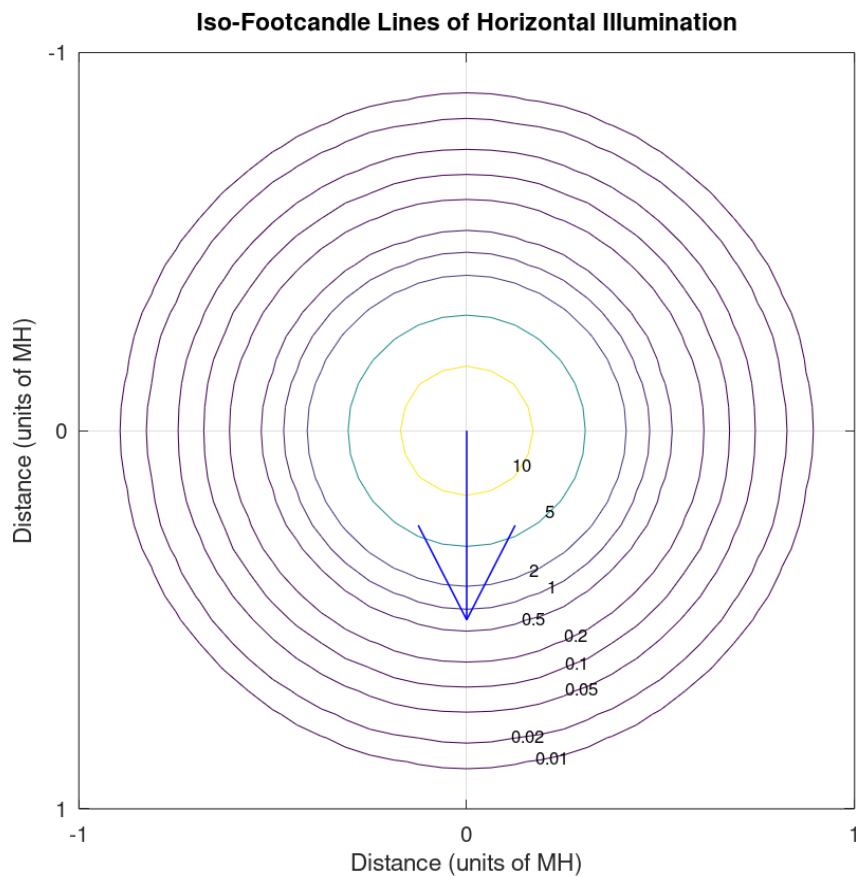
Average Luminance (cd/m <sup>2</sup> )			
	0 deg Plane	45 deg Plane	90 deg Plane
0	352304	352304	352304
45	564	564	564
55	179	179	179
65	71	71	71
75	110	110	110
85	47	47	47

Spacing Criterion	
Spacing Criterion:	0.5
Beam Angle:	32.2 °
Field Angle:	50.6 °

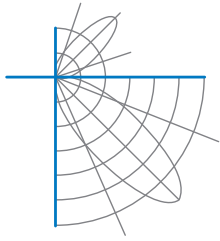


Report of Test  
LLIA001532-002

**Iso-Illuminance Plot**



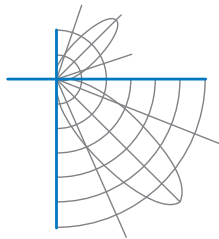
The isofootcandle values shown in the plot above are based on a mounting height of  $h = 8.0$  feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution of room reflections.



Report of Test  
LLIA001532-002

**Additional Pictures of Test Subject**





## Report of Test

### LLIA001532-002

Test Distance                    9.5 m  
Ambient 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 IES LM-79-19. Format of reports and angular increments based on IES LM-41-14 and LM-46-04.

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 C-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.