

Report of Test

LLIA003031-001

Indoor Distribution Photometry Test Report

Catalog Number: MLS3-M-48-530-940K-WLV-1-U

Recessed mounted, white painted extruded aluminum housing, white painted aluminum reflector, white plastic louver with translucent white plastic enclosure above.
112 white LEDs, one Advance FO Strip PR22in 2200lm 940 LV6 and one FO Strip PR23.7in 2200lm 940 LV6 LED board, each with 56 LEDs. One Advance XI050C150V054BST5 LED driver measured at 501mA



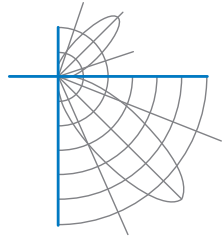
Prepared For:
Mercury Lighting Products Company, Inc.
20 Audrey Place
Fairfield, NJ 07004, USA

Performance Summary			
Input Voltage	120.0 Vac	Luminous Flux	2121.4 Lumens
Input Current	0.1846 A	Total Efficacy	98.6 Lm/W
Input Power	21.51 W	Downward Flux	2121.4 Lumens
Frequency	60.01 Hz	Downward Flux	100.0 % of Total
Power Factor	0.971		
Current THD	9.6 %		

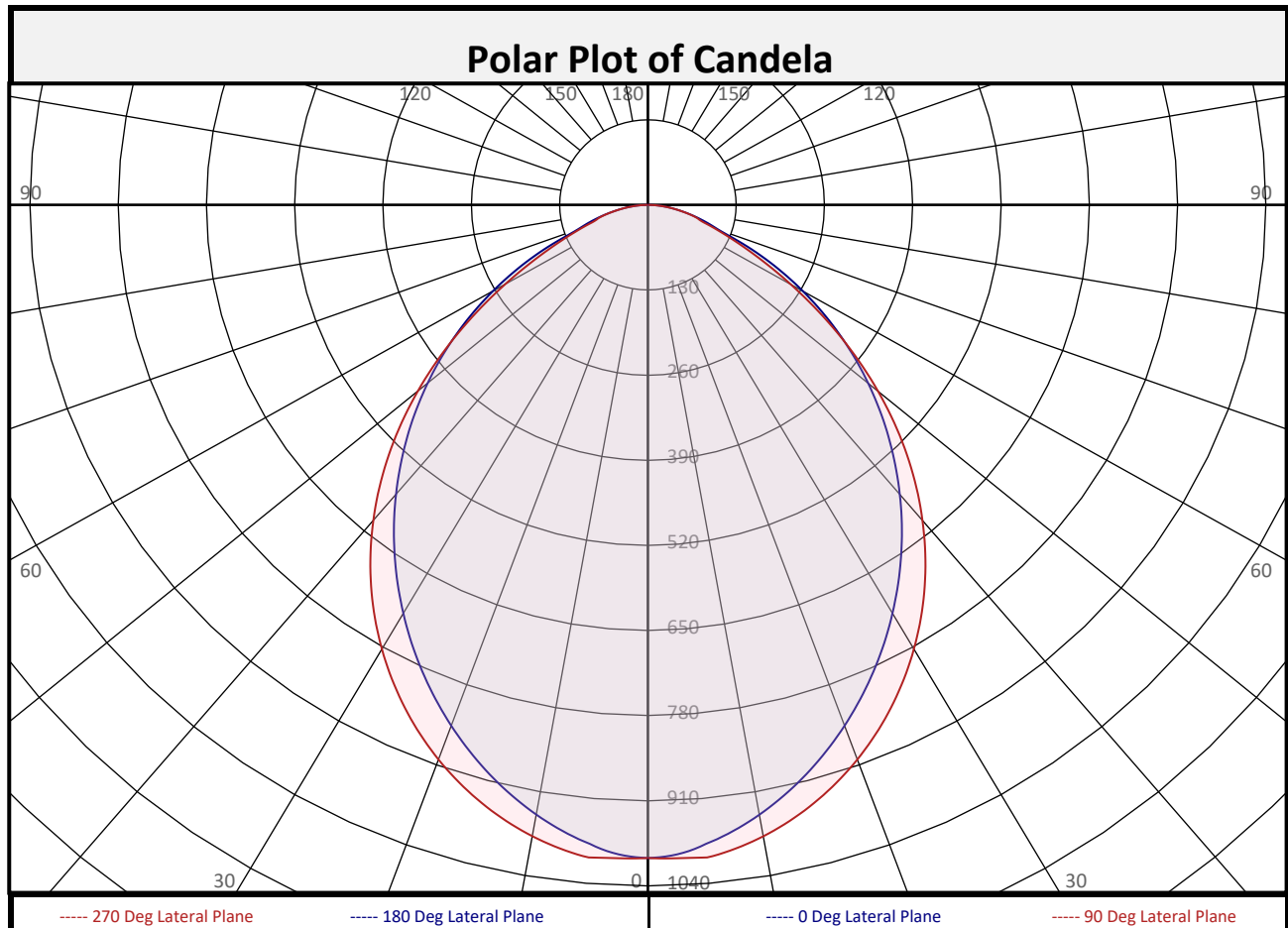
This test report was issued by LightLab International Allentown, LLC without alterations or erasures.

Test date: 08/11/2026
Report date: 08/11/2026

Signed: _____



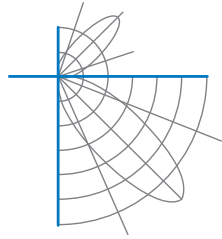
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Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	93.6	4.4%		90-100	0.0	0.0%		0-20	352.6	16.6%
10-20	259.1	12.2%		100-110	0.0	0.0%		0-30	725.2	34.2%
20-30	372.6	17.6%		110-120	0.0	0.0%		0-40	1145	54.0%
30-40	419.3	19.8%		120-130	0.0	0.0%		0-60	1844	86.9%
40-50	394.9	18.6%		130-140	0.0	0.0%		0-80	2099	98.9%
50-60	304.5	14.4%		140-150	0.0	0.0%		10-90	2028	95.6%
60-70	176.4	8.3%		150-160	0.0	0.0%		20-50	1187	55.9%
70-80	78.7	3.7%		160-170	0.0	0.0%		40-90	976.9	46.0%
80-90	22.4	1.1%		170-180	0.0	0.0%		60-90	277.5	13.1%
0-90	2121	100.0%		90-180	0.0	0.0%		0-180	2121	100.0%

North America (issuing laboratory)

Australasia & S.E. Asia



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Luminous Intensity (Candela) Table

Vertical (Gamma) Angles - Data was acquired in 0.5° increments, 2.5° increments shown.	Lateral (C-Plane) Angles									
		0	22.5	45	67.5	90	112.5	135	157.5	180
	0	998	998	998	998	998	998	998	998	998
	2.5	993	993	995	997	999	997	995	993	993
	5	980	981	988	997	1001	997	988	981	980
	7.5	964	967	977	987	991	987	977	967	964
	10	946	950	961	973	979	973	961	950	946
	12.5	924	930	940	955	964	955	940	930	924
	15	900	907	918	935	946	935	918	907	900
	17.5	874	881	892	912	925	912	892	881	874
	20	847	853	865	886	902	886	865	853	847
	22.5	817	823	835	858	876	858	835	823	817
	25	786	792	804	828	847	828	804	792	786
	27.5	754	759	771	796	817	796	771	759	754
	30	720	725	737	761	783	761	737	725	720
	32.5	686	690	701	725	748	725	701	690	686
	35	650	654	664	688	711	688	664	654	650
	37.5	614	617	626	648	671	648	626	617	614
	40	577	580	587	607	629	607	587	580	577
	42.5	539	542	548	564	585	564	548	542	539
	45	501	503	508	520	540	520	508	503	501
	47.5	462	464	467	475	492	475	467	464	462
	50	423	425	426	429	442	429	426	425	423
	52.5	384	385	383	382	392	382	383	385	384
	55	344	345	342	334	341	334	342	345	344
	57.5	304	306	300	288	291	288	300	306	304
	60	264	267	258	243	243	243	258	267	264
	62.5	224	227	218	201	200	201	218	227	224
	65	184	189	180	164	162	164	180	189	184
	67.5	143	152	145	133	130	133	145	152	143
	70	110	116	116	107	104	107	116	116	110
	72.5	92	93	91	86	83	86	91	93	92
	75	75	76	72	71	73	71	72	76	75
	77.5	60	60	58	59	59	59	58	60	60
	80	45	46	45	45	45	45	45	46	45
	82.5	32	32	32	32	32	32	32	32	32
	85	20	20	20	20	20	20	20	20	20
87.5	9	9	9	9	9	9	9	9	9	
90	0	0	0	0	0	0	0	0	0	
16 lateral half-planes of data were acquired, 22.5 degree increments shown.										

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North America (issuing laboratory)

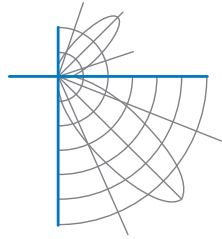
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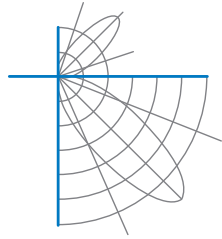
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Luminous Intensity (Candela) Table

Lateral (C-Plane) Angles										
	0	22.5	45	67.5	90	112.5	135	157.5	180	
Vertical (Gamma) Angles - Data was acquired in 0.5° increments shown.	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

16 lateral half-planes of data were acquired, 22.5 degree increments shown.



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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	110	106	102	99		108	104	100	97		100	97	94		96	93	91		92	90	89	87			
2	101	94	88	83		99	92	87	82		89	84	80		85	82	78		83	79	76	74			
3	93	84	76	70		91	82	75	70		79	73	69		77	72	67		74	70	66	64			
4	86	75	67	61		84	74	66	60		71	65	60		69	63	59		67	62	58	56			
5	79	68	59	53		77	66	59	53		64	58	52		63	56	52		61	55	51	49			
6	74	61	53	47		72	60	52	47		59	52	46		57	51	46		55	50	46	44			
7	69	56	48	42		67	55	47	42		54	47	41		52	46	41		51	45	41	39			
8	64	51	43	38		63	51	43	38		49	42	37		48	42	37		47	41	37	35			
9	60	47	39	34		59	47	39	34		46	39	34		45	38	34		44	38	34	32			
10	56	44	36	31		55	43	36	31		42	36	31		41	35	31		41	35	31	29			

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	27.7	6.56	7.05
8.0	15.6	8.75	9.39
10.0	10.0	10.93	11.74
12.0	6.9	13.12	14.09
14.0	5.1	15.31	16.44
16.0	3.9	17.50	18.79

Spacing Criterion

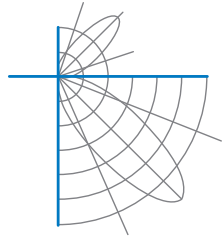
0 deg:	1.1
90 deg:	1.2
180 deg:	1.1
270 deg:	1.2

Average Luminance (cd/m²)

	0 deg Plane	45 deg Plane	90 deg Plane
0	13852	13852	13852
45	9841	9968	10595
55	8325	8268	8252
65	6032	5905	5321
75	4045	3882	3901
85	3168	3151	3204

Beam and Field Angle

0-180 Degree Plane	
Beam Angle:	90.1°
Field Angle:	142.6°
90-270 Degree Plane	
Beam Angle:	94.1°
Field Angle:	140.9°



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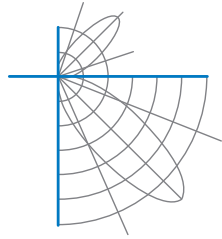
UGR Table - Corrected

Reflectances

Ceiling Cavity	70	70	50	50	30	70	70	50	50	30
Walls	50	30	50	30	30	50	30	50	30	30
Floor Cavity	20	20	20	20	20	20	20	20	20	20

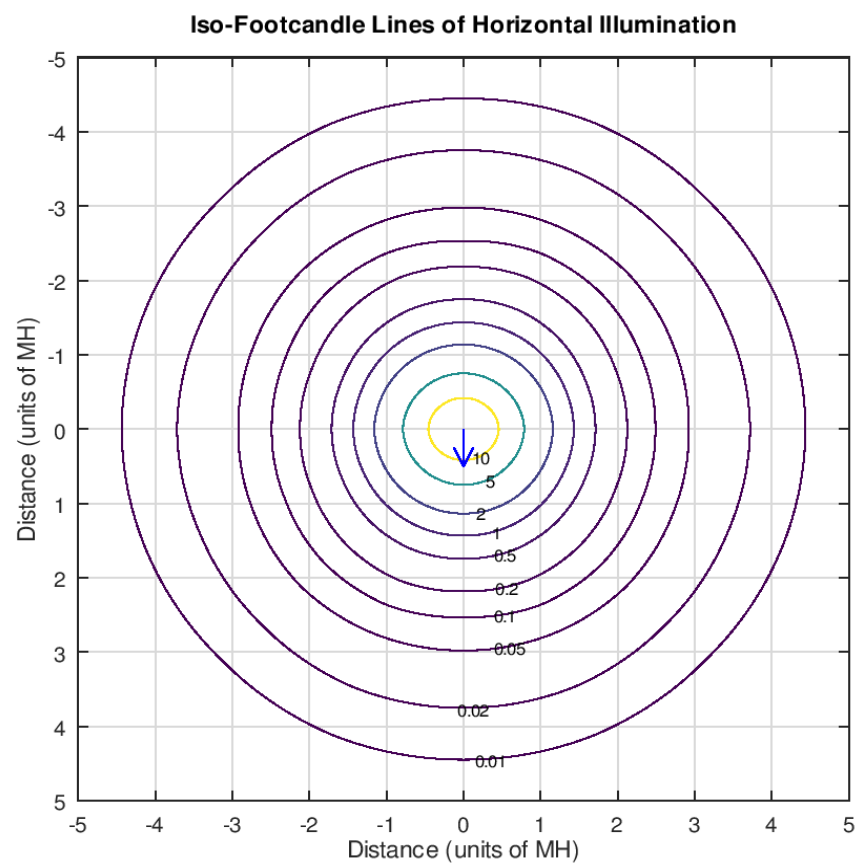
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	19.0	20.5	19.3	20.8	21.1	18.6	20.1	18.9	20.4	20.7
	3H	19.9	21.3	20.3	21.6	22.0	19.4	20.8	19.8	21.1	21.5
	4H	20.2	21.5	20.6	21.9	22.2	19.8	21.0	20.2	21.4	21.8
	6H	20.5	21.7	20.9	22.0	22.4	20.0	21.2	20.5	21.6	22.0
	8H	20.6	21.7	21.0	22.1	22.5	20.1	21.3	20.6	21.6	22.0
	12H	20.6	21.7	21.0	22.1	22.5	20.2	21.3	20.6	21.7	22.1
4H	2H	19.3	20.6	19.7	20.9	21.3	19.0	20.2	19.4	20.6	21.0
	3H	20.5	21.5	20.9	21.9	22.3	20.0	21.1	20.5	21.5	21.9
	4H	20.9	21.8	21.3	22.2	22.7	20.5	21.4	20.9	21.8	22.3
	6H	21.2	22.1	21.7	22.5	23.0	20.9	21.7	21.3	22.1	22.6
	8H	21.3	22.1	21.8	22.6	23.0	21.0	21.8	21.5	22.2	22.7
	12H	21.4	22.1	21.9	22.6	23.1	21.1	21.8	21.6	22.3	22.7
8H	4H	21.0	21.8	21.5	22.2	22.7	20.6	21.4	21.1	21.8	22.3
	6H	21.5	22.1	22.0	22.6	23.1	21.1	21.8	21.6	22.2	22.7
	8H	21.6	22.2	22.1	22.7	23.2	21.3	21.9	21.8	22.4	22.9
	12H	21.8	22.3	22.3	22.8	23.3	21.5	22.0	22.0	22.5	23.0
12H	4H	21.0	21.7	21.5	22.2	22.6	20.6	21.3	21.1	21.8	22.3
	6H	21.5	22.1	22.0	22.5	23.1	21.2	21.7	21.7	22.2	22.7
	8H	21.7	22.2	22.2	22.7	23.3	21.4	21.9	21.9	22.4	22.9

Maximum UGR = 23.3

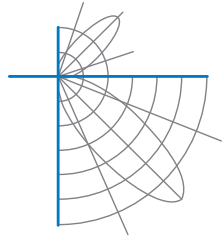


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Iso-Illuminance Plot

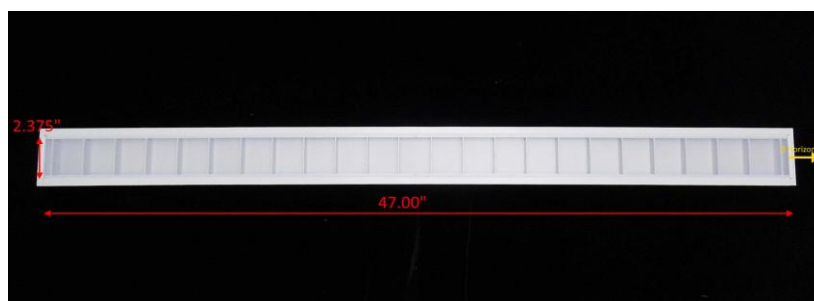


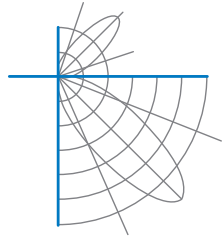
The isofootcandle values shown in the plot above are based on a mounting height of $h = 8.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution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



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Additional Pictures of Test Subject





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Test Distance 9.5 m
Ambient Temperature 25.4 °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-79-24. Format of reports and angular increments based on IES LM-41-20 and LM-46-20.

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.