

Report of Test

LLIA002729-006

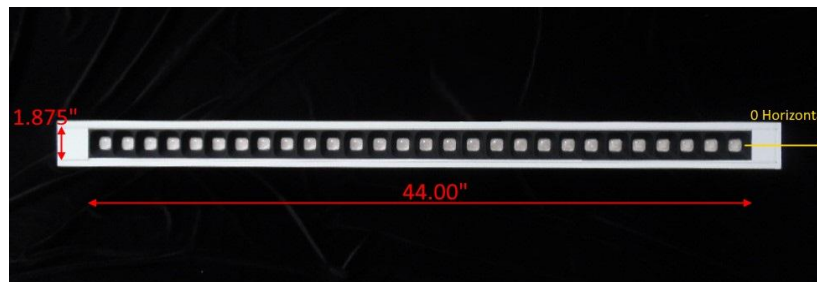
Indoor Distribution Photometry Test Report

Catalog Number: TV MINI-M-44-990-S-35K-80-W-B-1%-UNIV

Pendant/surface mounted, white painted extruded aluminum housing, white painted aluminum reflector, specular plastic optics with prismatic lens below each cluster of LEDs, black plastic louver.

112 white LEDs, 7 clusters of 4 LEDs on each of 4 LED boards

One Advance XI050C150V054BST5 LED driver measured at 1505mA



Prepared For:

Mercury Lighting Products Company, Inc.

20 Audrey Place

Fairfield, NJ 07004, USA

Performance Summary

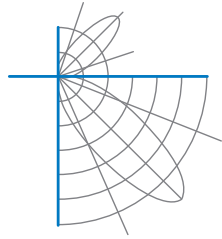
Input Voltage	120.0 Vac	Luminous Flux	3985.7 Lumens
Input Current	0.2957 A	Total Efficacy	115.0 lm/W
Input Power	34.66 W	Downward Flux	3985.7 Lumens
Frequency	60.00 Hz	Downward Flux	100.0 % of Total
Power Factor	0.977		
Current THD	12.1 %		

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

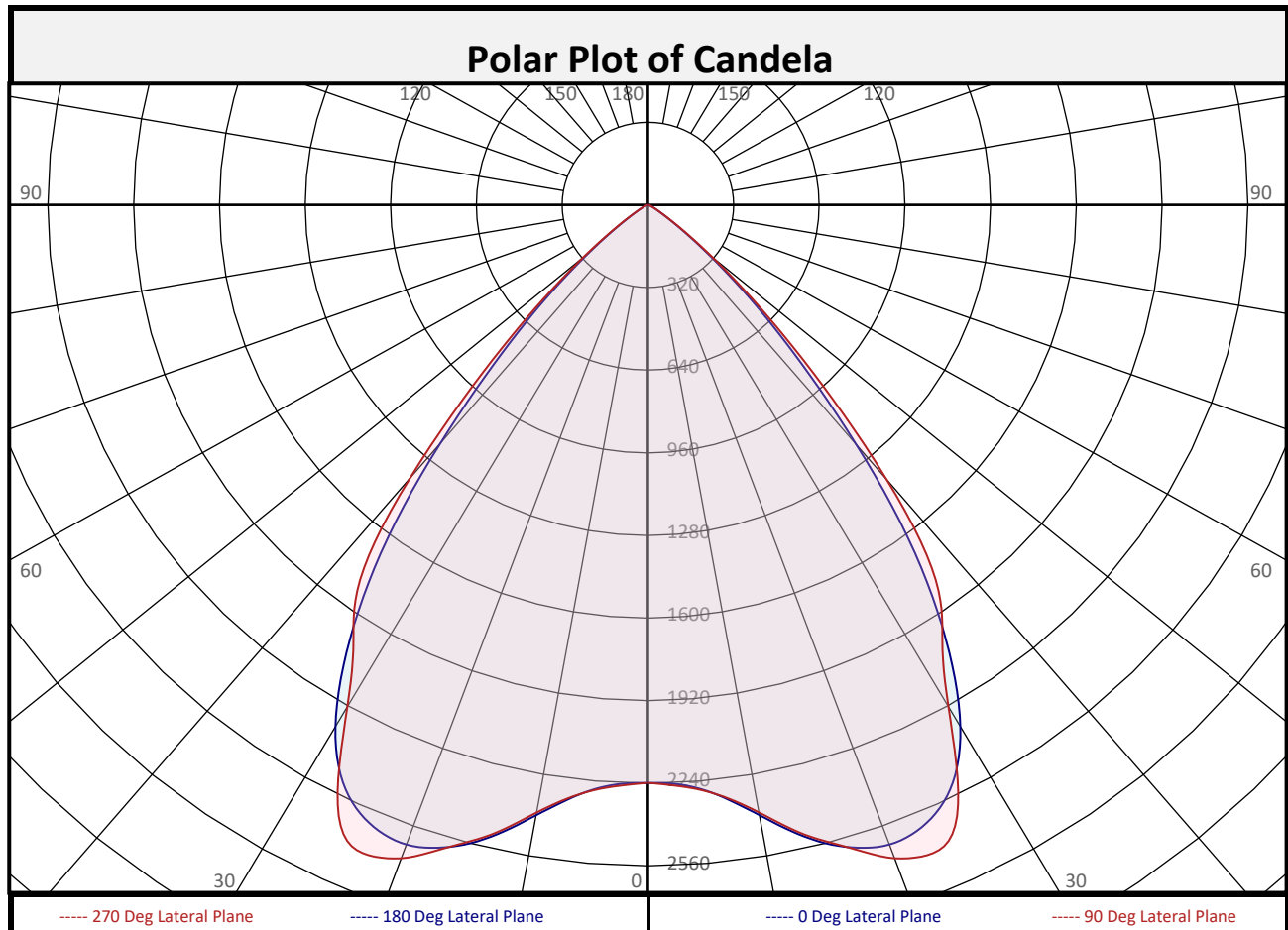
Test date: 08/06/2025

Report date: 08/07/2025

Signed: _____



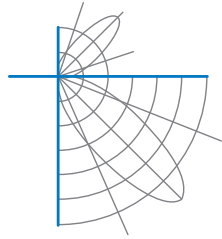
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Zonal Flux Summary										
Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total		Zone (Deg Vert)	Flux (Lumens)	Percent of Total
0-10	220.8	5.5%		90-100	0.0	0.0%		0-20	948.3	23.8%
10-20	727.5	18.3%		100-110	0.0	0.0%		0-30	2142	53.7%
20-30	1194	30.0%		110-120	0.0	0.0%		0-40	3305	82.9%
30-40	1162	29.2%		120-130	0.0	0.0%		0-60	3965	99.5%
40-50	559.0	14.0%		130-140	0.0	0.0%		0-80	3986	100.0%
50-60	101.6	2.5%		140-150	0.0	0.0%		10-90	3765	94.5%
60-70	18.7	0.5%		150-160	0.0	0.0%		20-50	2915	73.1%
70-80	1.8	0.0%		160-170	0.0	0.0%		40-90	681.1	17.1%
80-90	0.1	0.0%		170-180	0.0	0.0%		60-90	20.6	0.5%
0-90	3986	100.0%		90-180	0.0	0.0%		0-180	3986	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	2239	2239	2239	2239	2239	2239	2239	2239	2239
	2.5	2244	2243	2246	2249	2251	2249	2246	2243	2244
	5	2271	2268	2269	2273	2275	2273	2269	2268	2271
	7.5	2325	2320	2316	2320	2320	2320	2316	2320	2325
	10	2400	2394	2388	2390	2390	2390	2388	2394	2400
	12.5	2485	2480	2475	2479	2476	2479	2475	2480	2485
	15	2559	2561	2566	2566	2550	2566	2566	2561	2559
	17.5	2610	2621	2639	2634	2622	2634	2639	2621	2610
	20	2636	2647	2677	2689	2693	2689	2677	2647	2636
	22.5	2624	2636	2671	2718	2726	2718	2671	2636	2624
	25	2578	2591	2621	2689	2689	2689	2621	2591	2578
	27.5	2486	2501	2533	2563	2504	2563	2533	2501	2486
	30	2333	2356	2393	2335	2244	2335	2393	2356	2333
	32.5	2116	2152	2186	2078	2047	2078	2186	2152	2116
	35	1853	1897	1921	1860	1911	1860	1921	1897	1853
	37.5	1549	1598	1623	1667	1711	1667	1623	1598	1549
	40	1207	1267	1311	1414	1382	1414	1311	1267	1207
	42.5	898	935	1014	1076	1023	1076	1014	935	898
	45	650	652	739	733	723	733	739	652	650
	47.5	446	434	484	464	489	464	484	434	446
	50	283	273	281	278	310	278	281	273	283
	52.5	167	161	154	160	185	160	154	161	167
	55	95	93	88	92	106	92	88	93	95
	57.5	56	57	55	57	61	57	55	57	56
	60	36	38	37	39	38	39	37	38	36
	62.5	25	26	26	27	26	27	26	26	25
	65	17	18	18	18	17	18	18	18	17
	67.5	11	11	12	12	11	12	12	11	11
	70	6	6	7	7	6	7	7	6	6
	72.5	2	3	3	3	3	3	3	3	2
	75	0	1	1	1	1	1	1	1	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	
16 lateral half-planes of data were acquired, 22.5 degree increments shown.										

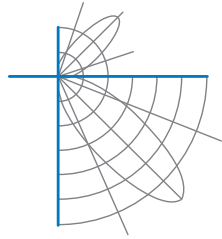
16 lateral half-planes of data were acquired, 22.5 degree increments shown.

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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.

North America (issuing laboratory)

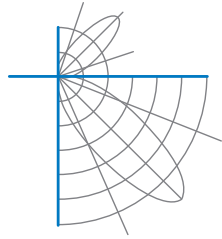
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Coefficients of Utilization/Room Utilization - Zonal Cavity Method

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	113	110	107	105		110	108	105	103		104	102	100		100	98	97		96	95	94	92			
2	106	101	96	93		104	99	95	91		96	92	89		93	90	88		90	88	86	84			
3	100	93	87	83		98	91	86	82		89	84	81		86	82	79		84	81	78	76			
4	94	85	79	74		92	84	78	74		82	77	73		80	76	72		78	74	71	70			
5	88	79	72	67		86	78	72	67		76	70	66		74	69	66		72	68	65	63			
6	83	73	66	61		81	72	65	61		70	65	60		69	64	60		67	63	60	58			
7	78	67	61	56		76	67	60	56		65	59	55		64	59	55		63	58	55	53			
8	73	63	56	51		72	62	55	51		61	55	51		60	54	50		59	54	50	49			
9	69	58	51	47		68	58	51	47		57	51	47		56	50	47		55	50	46	45			
10	65	54	48	43		64	54	48	43		53	47	43		52	47	43		51	46	43	41			

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	62.2	8.09	8.10
8.0	35.0	10.79	10.80
10.0	22.4	13.49	13.50
12.0	15.5	16.18	16.20
14.0	11.4	18.88	18.89
16.0	8.7	21.58	21.59

Spacing Criterion

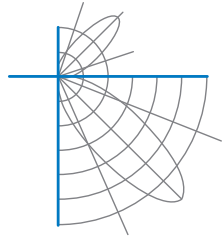
0 deg:	1.3
90 deg:	1.3
180 deg:	1.3
270 deg:	1.3

Average Luminance (cd/m²)

	0 deg Plane	45 deg Plane	90 deg Plane
0	52572	52572	52572
45	21595	24543	24014
55	3904	3598	4331
65	928	987	970
75	41	102	50
85	17	17	4

Beam and Field Angle

0-180 Degree Plane	
Beam Angle:	77.7°
Field Angle:	100.4°
90-270 Degree Plane	
Beam Angle:	80.2°
Field Angle:	101.3°



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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

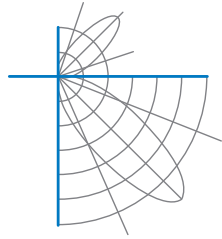
Room Size

UGR Viewed Crosswise

UGR Viewed Endwise

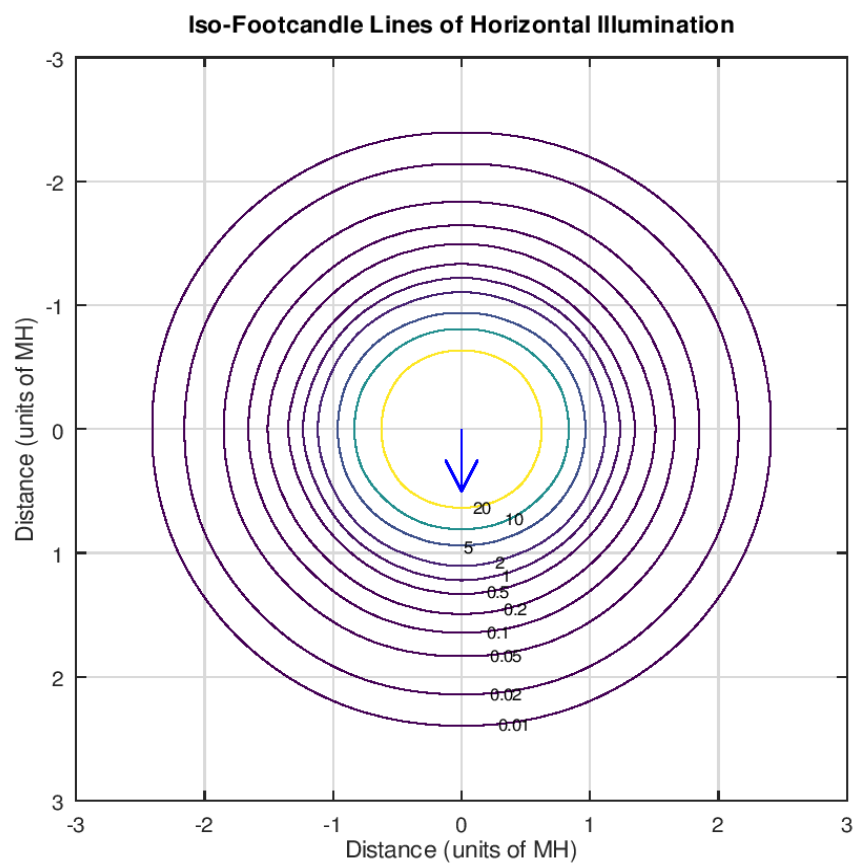
X=2H	Y=2H	7.3	8.4	7.6	8.7	9.0	7.4	8.5	7.7	8.8	9.1
	3H	7.3	8.2	7.7	8.6	8.9	7.4	8.3	7.8	8.7	9.0
	4H	7.2	8.1	7.6	8.4	8.8	7.3	8.2	7.7	8.5	8.9
	6H	7.1	7.9	7.5	8.3	8.7	7.2	8.0	7.6	8.4	8.8
	8H	7.0	7.8	7.5	8.2	8.6	7.1	7.9	7.6	8.3	8.7
	12H	7.0	7.7	7.4	8.1	8.5	7.1	7.8	7.5	8.2	8.6
4H	2H	7.2	8.1	7.6	8.4	8.8	7.3	8.2	7.7	8.5	8.9
	3H	7.2	7.9	7.6	8.3	8.7	7.3	8.0	7.7	8.4	8.8
	4H	7.1	7.7	7.5	8.2	8.6	7.2	7.8	7.6	8.3	8.7
	6H	7.0	7.5	7.4	8.0	8.5	7.1	7.6	7.5	8.1	8.6
	8H	6.9	7.4	7.4	7.9	8.4	7.0	7.5	7.5	8.0	8.5
	12H	6.8	7.3	7.3	7.8	8.3	6.9	7.4	7.4	7.9	8.4
8H	4H	6.9	7.4	7.4	7.9	8.4	7.0	7.5	7.5	8.0	8.5
	6H	6.8	7.2	7.3	7.7	8.2	6.9	7.3	7.4	7.8	8.3
	8H	6.7	7.1	7.3	7.6	8.1	6.8	7.2	7.4	7.7	8.2
	12H	6.7	7.0	7.2	7.5	8.1	6.8	7.1	7.3	7.6	8.2
12H	4H	6.9	7.3	7.3	7.8	8.3	7.0	7.4	7.4	7.9	8.4
	6H	6.7	7.1	7.3	7.6	8.1	6.8	7.2	7.4	7.7	8.2
	8H	6.7	7.0	7.2	7.5	8.1	6.8	7.1	7.3	7.6	8.2

Maximum UGR = 9.1

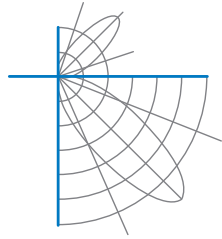


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Iso-Illuminance Plot



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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Test Distance 9.5 m
Ambient Temperature 24.7 °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.

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