

Report of Test

LLIA002716-002

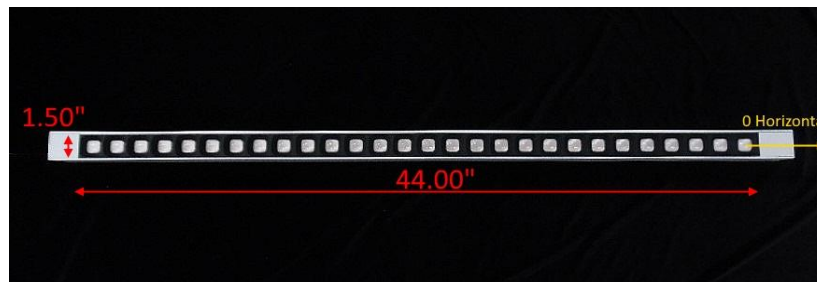
Indoor Distribution Photometry Test Report

Catalog Number: TV MINI-M-44-930-S-35K-60-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 1504mA



Prepared For:

Mercury Lighting Products Company, Inc.

20 Audrey Place

Fairfield, NJ 07004, USA

Performance Summary

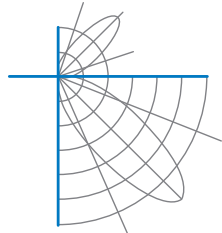
Input Voltage	120.0 Vac	Luminous Flux	3731.3 Lumens
Input Current	0.2954 A	Total Efficacy	107.8 lm/W
Input Power	34.62 W	Downward Flux	3731.3 Lumens
Frequency	60.00 Hz	Downward Flux	100.0 % of Total
Power Factor	0.977		
Current THD	12.1 %		

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

Test date: 07/17/2025

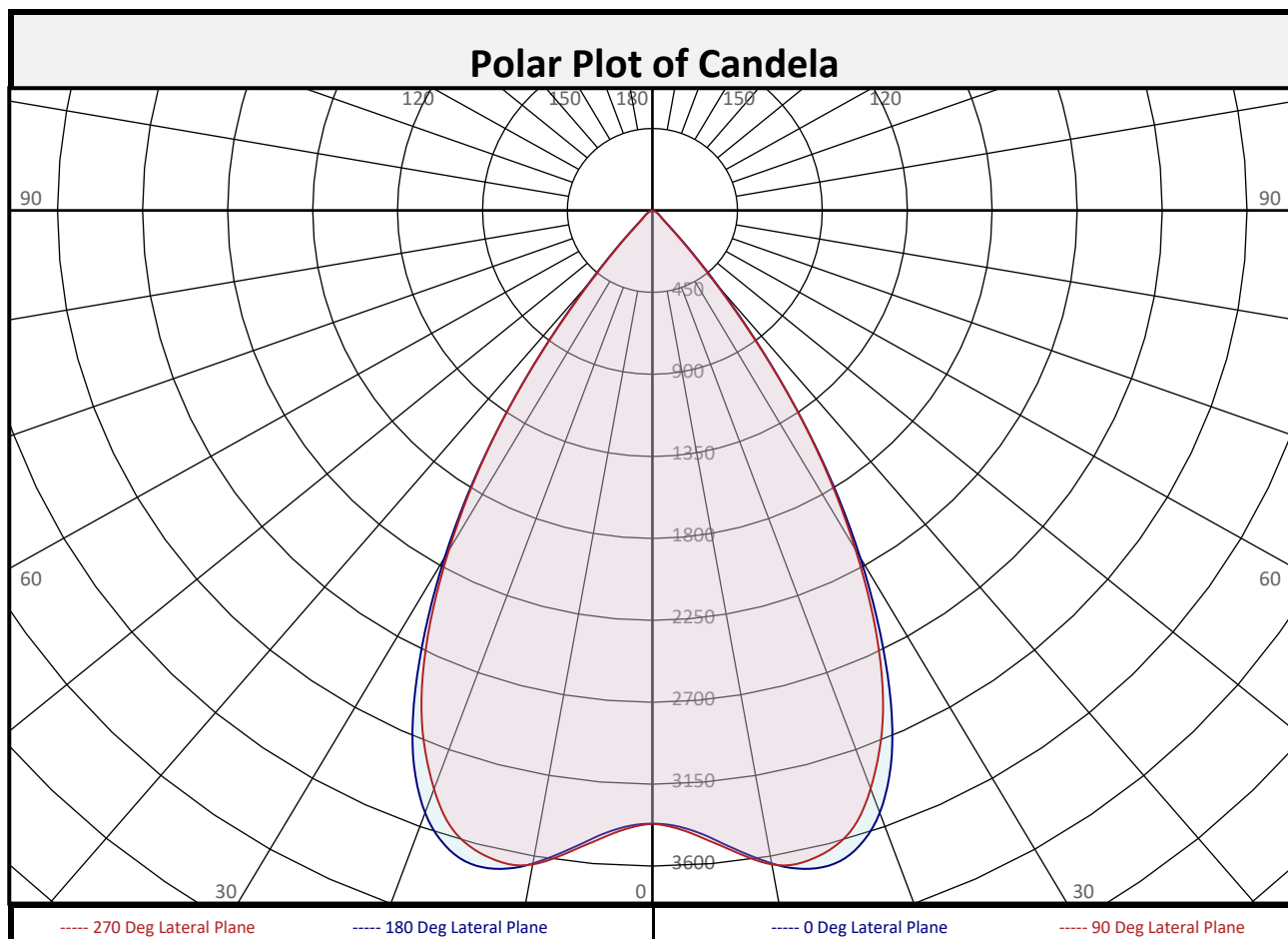
Report date: 07/17/2025

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	336.5	9.0%		90-100	0.0	0.0%		0-20	1364	36.5%
10-20	1027	27.5%		100-110	0.0	0.0%		0-30	2691	72.1%
20-30	1327	35.6%		110-120	0.0	0.0%		0-40	3511	94.1%
30-40	820.0	22.0%		120-130	0.0	0.0%		0-60	3708	99.4%
40-50	154.8	4.1%		130-140	0.0	0.0%		0-80	3731	100.0%
50-60	42.3	1.1%		140-150	0.0	0.0%		10-90	3395	91.0%
60-70	19.3	0.5%		150-160	0.0	0.0%		20-50	2302	61.7%
70-80	4.0	0.1%		160-170	0.0	0.0%		40-90	220.5	5.9%
80-90	0.1	0.0%		170-180	0.0	0.0%		60-90	23.4	0.6%
0-90	3731	100.0%		90-180	0.0	0.0%		0-180	3731	100.0%

North America (issuing laboratory)

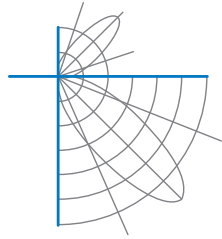
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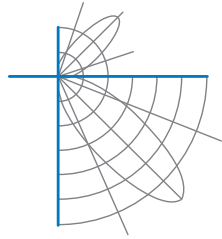
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Luminous Intensity (Candela) Table

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, 2.5° increments shown.	0	3367	3367	3367	3367	3367	3367	3367	3367	3367
	2.5	3388	3388	3393	3399	3402	3399	3393	3388	3388
	5	3454	3452	3457	3468	3475	3468	3457	3452	3454
	7.5	3549	3542	3542	3555	3564	3555	3542	3542	3549
	10	3641	3629	3628	3639	3646	3639	3628	3629	3641
	12.5	3703	3691	3684	3676	3667	3676	3684	3691	3703
	15	3714	3700	3682	3651	3634	3651	3682	3700	3714
	17.5	3654	3643	3604	3569	3549	3569	3604	3643	3654
	20	3519	3505	3461	3408	3380	3408	3461	3505	3519
	22.5	3299	3286	3253	3180	3161	3180	3253	3286	3299
	25	2989	2992	2966	2905	2887	2905	2966	2992	2989
	27.5	2610	2628	2610	2573	2546	2573	2610	2628	2610
	30	2200	2206	2204	2194	2155	2194	2204	2206	2200
	32.5	1769	1764	1772	1779	1750	1779	1772	1764	1769
	35	1325	1321	1337	1340	1324	1340	1337	1321	1325
	37.5	895	906	918	905	884	905	918	906	895
	40	534	554	558	528	507	528	558	554	534
	42.5	288	307	309	281	262	281	309	307	288
	45	150	166	169	147	132	147	169	166	150
	47.5	90	100	103	90	80	90	103	100	90
	50	66	71	75	68	61	68	75	71	66
	52.5	54	57	60	55	51	55	60	57	54
	55	46	47	47	46	44	46	47	47	46
	57.5	38	39	38	38	37	38	38	39	38
	60	31	31	30	31	30	31	30	31	31
	62.5	25	25	25	25	24	25	25	25	25
	65	19	19	20	19	19	19	20	19	19
	67.5	14	14	15	14	14	14	15	14	14
	70	10	10	11	10	10	10	11	10	10
	72.5	6	6	7	6	6	6	7	6	6
	75	3	3	4	3	3	3	4	3	3
	77.5	1	1	2	1	1	1	2	1	1
	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.



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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)

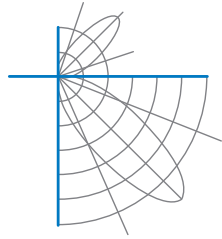
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Coefficients of Utilization/Room Utilization - Zonal Cavity Method

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	111	108	106		111	109	106	104		105	103	101		101	99	98		97	96	95	93			
2	108	103	99	96		106	101	98	94		98	95	92		95	93	90		92	90	89	87			
3	102	96	91	87		100	95	90	86		92	88	85		90	86	84		87	85	82	81			
4	97	90	84	80		95	88	83	79		86	82	78		84	81	78		82	79	77	75			
5	92	84	78	74		91	83	77	73		81	76	73		79	75	72		78	74	71	70			
6	88	79	73	68		86	78	72	68		76	71	68		75	71	67		74	70	67	65			
7	83	74	68	64		82	73	67	63		72	67	63		71	66	63		70	66	62	61			
8	79	70	63	59		78	69	63	59		68	63	59		67	62	59		66	62	58	57			
9	75	66	60	56		74	65	59	55		64	59	55		63	58	55		62	58	55	54			
10	72	62	56	52		71	61	56	52		61	55	52		60	55	52		59	55	52	50			

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	93.5	6.48	6.41
8.0	52.6	8.64	8.55
10.0	33.7	10.80	10.68
12.0	23.4	12.96	12.82
14.0	17.2	15.11	14.95
16.0	13.2	17.27	17.09

Spacing Criterion

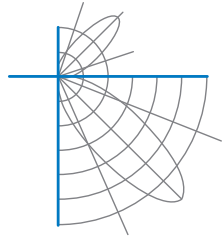
0 deg:	1.1
90 deg:	1.1
180 deg:	1.1
270 deg:	1.1

Average Luminance (cd/m²)

	0 deg Plane	45 deg Plane	90 deg Plane
0	79082	79082	79082
45	4982	5601	4387
55	1877	1940	1786
65	1061	1086	1047
75	259	327	279
85	1	11	0

Beam and Field Angle

0-180 Degree Plane	
Beam Angle:	64.0°
Field Angle:	83.0°
90-270 Degree Plane	
Beam Angle:	63.7°
Field Angle:	82.5°



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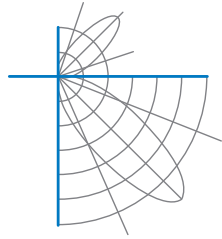
UGR Table - Corrected

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

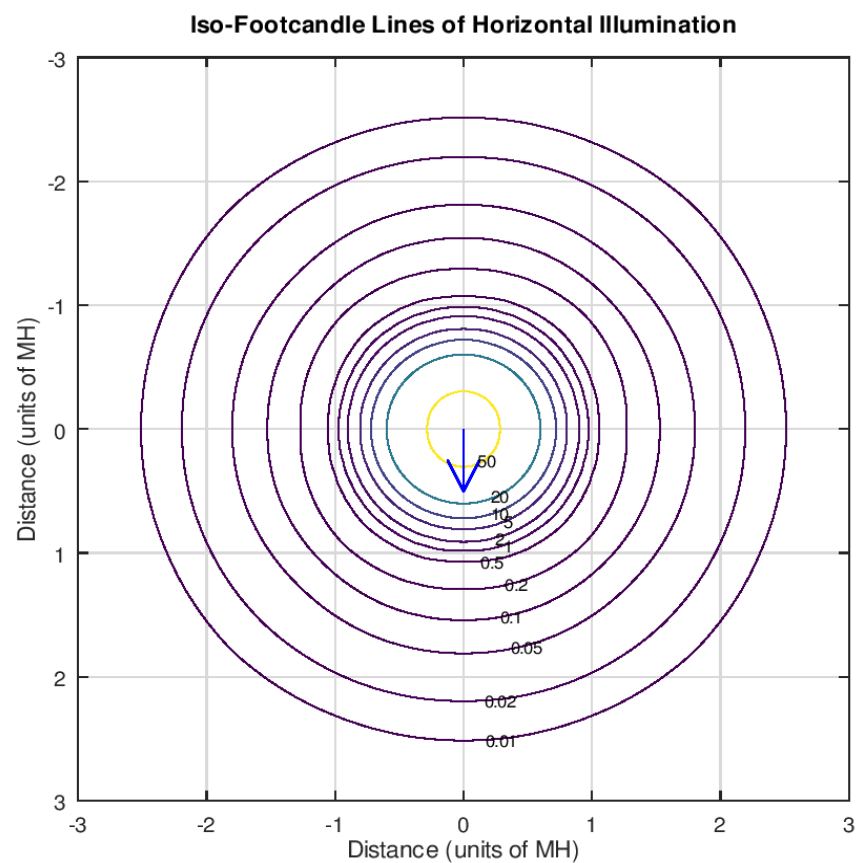
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	5.2	6.2	5.6	6.5	6.8	5.0	6.0	5.4	6.3	6.6
	3H	5.6	6.4	6.0	6.8	7.1	5.4	6.3	5.8	6.6	7.0
	4H	5.6	6.3	6.0	6.7	7.1	5.4	6.2	5.8	6.5	6.9
	6H	5.5	6.2	5.9	6.5	6.9	5.3	6.0	5.7	6.4	6.8
	8H	5.4	6.1	5.8	6.4	6.9	5.2	5.9	5.7	6.3	6.7
	12H	5.3	6.0	5.8	6.3	6.8	5.2	5.8	5.6	6.2	6.6
4H	2H	5.3	6.1	5.7	6.5	6.9	5.2	5.9	5.6	6.3	6.7
	3H	5.8	6.4	6.2	6.8	7.3	5.7	6.3	6.1	6.7	7.1
	4H	5.8	6.3	6.2	6.7	7.2	5.6	6.2	6.1	6.6	7.1
	6H	5.7	6.1	6.1	6.6	7.1	5.5	6.0	6.0	6.5	6.9
	8H	5.6	6.0	6.1	6.5	6.9	5.5	5.9	5.9	6.3	6.8
	12H	5.5	5.9	6.0	6.4	6.9	5.4	5.8	5.9	6.3	6.7
8H	4H	5.6	6.1	6.1	6.5	7.0	5.5	5.9	6.0	6.4	6.9
	6H	5.5	5.9	6.0	6.4	6.8	5.4	5.7	5.9	6.2	6.7
	8H	5.4	5.7	6.0	6.3	6.8	5.3	5.6	5.9	6.1	6.6
	12H	5.4	5.6	5.9	6.1	6.7	5.3	5.5	5.8	6.0	6.6
12H	4H	5.6	5.9	6.1	6.4	6.9	5.4	5.8	5.9	6.3	6.8
	6H	5.4	5.7	6.0	6.2	6.8	5.3	5.6	5.9	6.1	6.6
	8H	5.4	5.6	5.9	6.1	6.7	5.3	5.5	5.8	6.0	6.6

Maximum UGR = 7.3

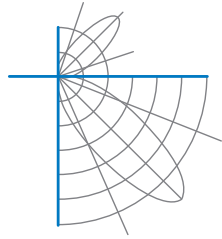


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Iso-Illuminance Plot

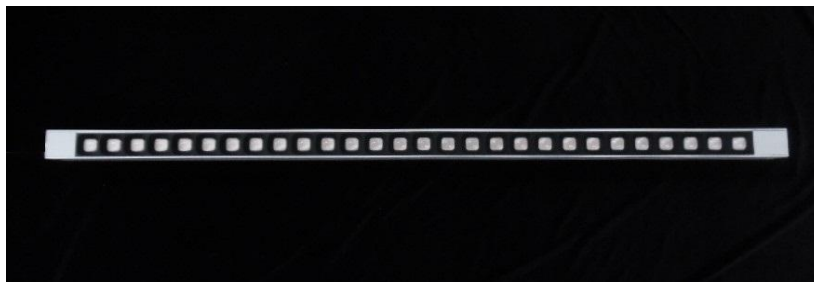


The isofootcandle values shown in the plot above are based on a mounting height of $h = 8.0$ feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution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



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Additional Pictures of Test Subject



North America (issuing laboratory)

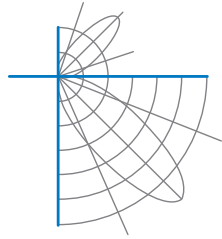
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Test Distance 9.5 m
Ambient Temperature 25.0 °C

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-79-24. 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.