LightLab INTERNATIONAL ALLENTOWN LLC

NVLAP TESTING Lab Code: 201079-0

Report of Test

LLIA003089-018

Indoor Distribution Photometry Test Report

Catalog Number: VN-75-R-34-D-B-M-4-515-R-H (Blue Setting)
Pendant/highbay mounted, spun black aluminum outer housing, extruded aluminum heatsink and formed aluminum frame, no enclosure.
7 RGBW LED clusters with clear prismatic plastic optics below each.
One MeanWell EPP-150-12 LED driver



Prepared For:
Aquarii
6805 Newbrook Avenue
East Syracuse, NY 13057, USA

Performance Summary			
Input Voltage	120.0 Vac	Luminous Flux	509.0 Lumens
Input Current	0.2717 A	Total Efficacy	16.4 Lm/W
Input Power	31.05 W	Downward Flux	509.0 Lumens
Frequency	60.00 Hz	Downward Flux	100.0 % of Total
Power Factor	0.952		
Current THD	9.4 %		

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

Test date: 09/22/2026
Report date: 09/23/2026

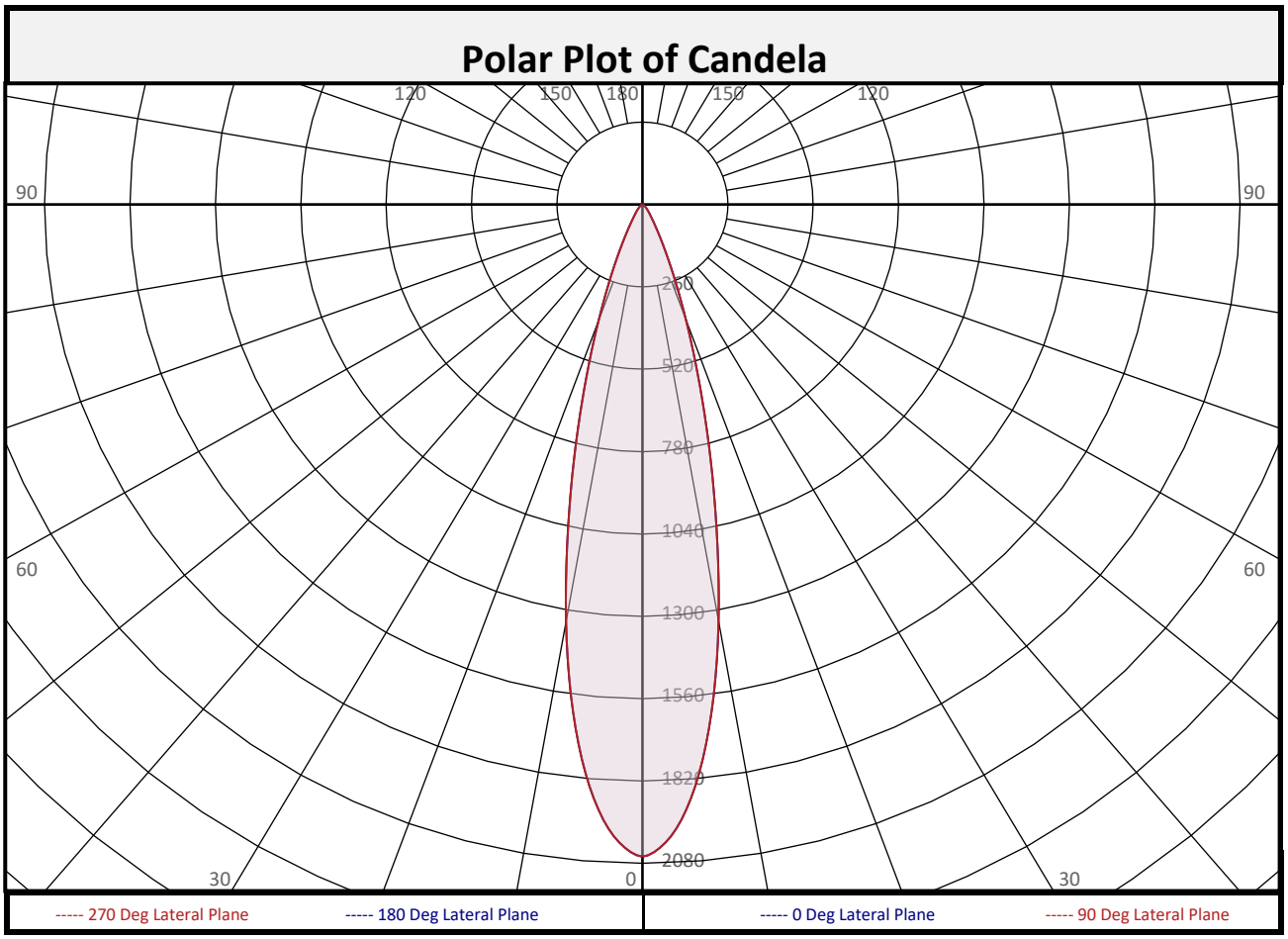
Signed: Michael L. Grather Digitally signed by Michael L. Grather Date: 2026.09.23 14:53:58 -04'00'

North America (issuing laboratory)
LightLab International Allentown, LLC
905 Harrison Street, Suite 135
Allentown, PA 18103 USA
Ph: +1 484-273-0705
Fx: +1 484-209-5779
www.lightlaballentown.com

Australasia & S.E. Asia
LightLab International
50 Redcliffe Gardens Drive
Clontarf - Queensland, 4019, Australia
Ph : +61 7 3283 7862
Fx : +61 7 3283 8751
www.lightlabint.com

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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	159.5	31.3%	90-100	0.0	0.0%	0-20	373.9	73.5%
10-20	214.4	42.1%	100-110	0.0	0.0%	0-30	459.2	90.2%
20-30	85.3	16.7%	110-120	0.0	0.0%	0-40	487.1	95.7%
30-40	27.9	5.5%	120-130	0.0	0.0%	0-60	506.8	99.6%
40-50	13.4	2.6%	130-140	0.0	0.0%	0-80	509.0	100.0%
50-60	6.3	1.2%	140-150	0.0	0.0%	10-90	349.5	68.7%
60-70	2.1	0.4%	150-160	0.0	0.0%	20-50	126.5	24.9%
70-80	0.2	0.0%	160-170	0.0	0.0%	40-90	21.9	4.3%
80-90	0.0	0.0%	170-180	0.0	0.0%	60-90	2.3	0.4%
0-90	509.0	100.0%	90-180	0.0	0.0%	0-180	509.0	100.0%

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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	2059	2059	2059	2059	2059	2059	2059	2059	2059
	2.5	1996	1996	1996	1996	1996	1996	1996	1996	1996
	5	1844	1844	1844	1844	1844	1844	1844	1844	1844
	7.5	1615	1615	1615	1615	1615	1615	1615	1615	1615
	10	1337	1337	1337	1337	1337	1337	1337	1337	1337
	12.5	1044	1044	1044	1044	1044	1044	1044	1044	1044
	15	781	781	781	781	781	781	781	781	781
	17.5	559	559	559	559	559	559	559	559	559
	20	388	388	388	388	388	388	388	388	388
	22.5	262	262	262	262	262	262	262	262	262
	25	174	174	174	174	174	174	174	174	174
	27.5	115	115	115	115	115	115	115	115	115
	30	79	79	79	79	79	79	79	79	79
	32.5	56	56	56	56	56	56	56	56	56
	35	42	42	42	42	42	42	42	42	42
	37.5	33	33	33	33	33	33	33	33	33
	40	26	26	26	26	26	26	26	26	26
	42.5	21	21	21	21	21	21	21	21	21
	45	17	17	17	17	17	17	17	17	17
	47.5	14	14	14	14	14	14	14	14	14
	50	11	11	11	11	11	11	11	11	11
	52.5	9	9	9	9	9	9	9	9	9
	55	7	7	7	7	7	7	7	7	7
	57.5	5	5	5	5	5	5	5	5	5
	60	4	4	4	4	4	4	4	4	4
	62.5	3	3	3	3	3	3	3	3	3
	65	2	2	2	2	2	2	2	2	2
	67.5	1	1	1	1	1	1	1	1	1
	70	1	1	1	1	1	1	1	1	1
	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

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

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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
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	115	112	110	109		112	110	109	107		106	105	104		103	102	101		99	98	98	96
2	111	107	103	101		108	105	102	100		102	100	98		99	97	95		96	95	94	92
3	107	102	98	95		105	100	97	94		98	95	92		95	93	91		93	91	90	88
4	103	97	93	90		101	96	92	89		94	91	88		92	89	87		90	88	86	85
5	99	93	89	85		98	92	88	85		91	87	84		89	86	84		88	85	83	82
6	96	90	85	82		95	89	85	82		87	84	81		86	83	80		85	82	80	79
7	93	86	82	79		92	86	81	78		85	81	78		83	80	78		82	80	77	76
8	90	83	79	76		89	83	79	76		82	78	75		81	78	75		80	77	75	74
9	88	81	76	73		87	80	76	73		79	76	73		79	75	73		78	75	72	71
10	85	78	74	71		84	78	74	71		77	73	71		76	73	70		76	73	70	69

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	57.2	2.55	2.55
8.0	32.2	3.40	3.40
10.0	20.6	4.25	4.25
12.0	14.3	5.10	5.10
14.0	10.5	5.95	5.95
16.0	8.0	6.81	6.81

Spacing Criterion

SC: 0.4

Average Luminance (cd/m^2)

	0 deg Plane	45 deg Plane	90 deg Plane
0	96179	96179	96179
45	1111	1111	1111
55	563	563	563
65	217	217	217
75	10	10	10
85	20	20	20

Beam and Field Angle

0-180 Degree Plane

Beam Angle: 25.3°

Field Angle: 47.9°

90-270 Degree Plane

Beam Angle: 25.3°

Field Angle: 47.9°

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LightLab International Allentown, LLC
905 Harrison Street, Suite 135
Allentown, PA 18103 USA
Ph: +1 484-273-0705
Fx: +1 484-209-5779
www.lightlaballentown.com

Australasia & S.E. Asia
LightLab International
50 Redcliffe Gardens Drive
Clontarf - Queensland, 4019, Australia
Ph : +61 7 3283 7862
Fx : +61 7 3283 8751
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UGR Table - Corrected

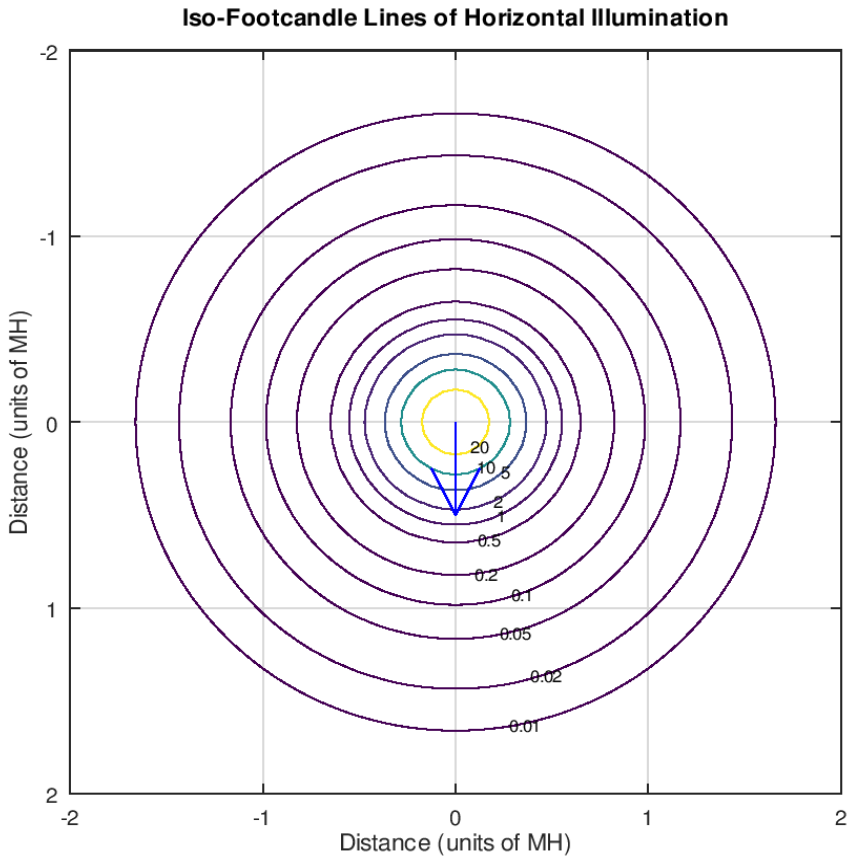
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	3H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	4H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	6H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	8H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	12H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
4H	2H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	3H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	4H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	6H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	8H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	12H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
8H	4H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	6H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	8H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	12H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
12H	4H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	6H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10
	8H	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10

Maximum UGR = <10

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Iso-Illuminance Plot

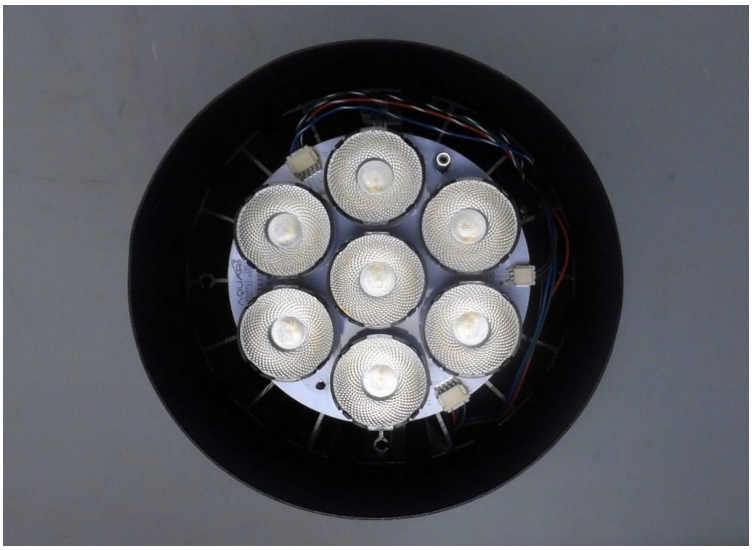


The isofootcandle values shown in the plot above are based on a mounting height of h = 8.0 feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution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

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Additional Pictures of Test Subject





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Test Distance	9.5 m
Ambient Temperature	24.6 °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.