LightLab INTERNATIONAL ALLENTOWN LLC

NVLAP TESTING Lab Code: 201079-0

Report of Test

LLIA003089-013

Indoor Distribution Photometry Test Report

Catalog Number: VN-75-R-60-D-B-M-4-515-R-H (Blue Setting)
Pendant/highbay mounted, spun black aluminum outer housing, extruded aluminum heatsink and formed aluminum frame, frosted plastic enclosure below LEDs
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	299.3	Lumens
Input Current	0.2717	A	Total Efficacy	9.6	Lm/W
Input Power	31.05	W	Downward Flux	299.3	Lumens
Frequency	60.00	Hz	Downward Flux	100.0	% of Total
Power Factor	0.952				
Current THD	9.5	%			

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

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

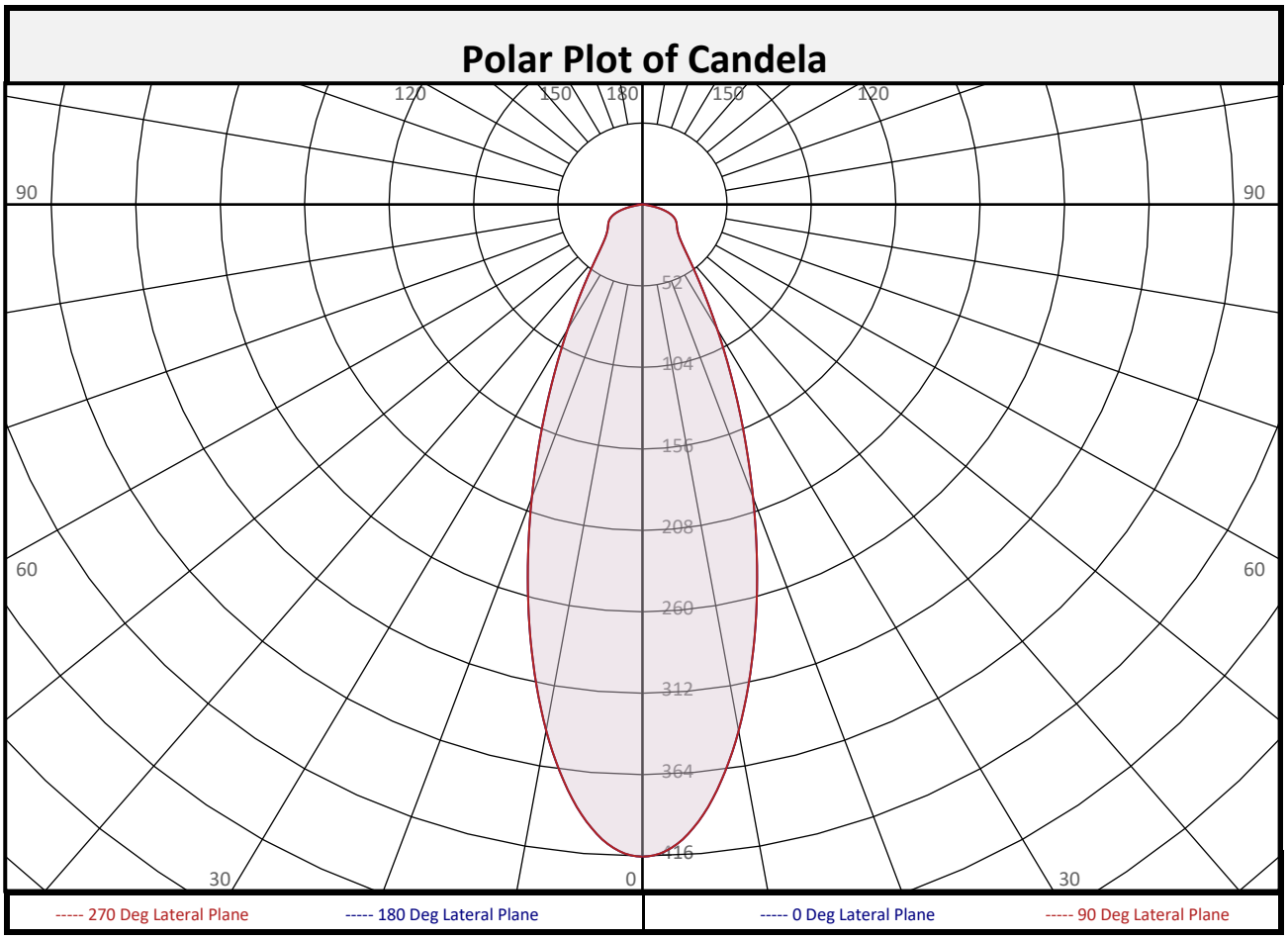
Signed: Michael L. Grather Digitally signed by Michael L. Grather Date: 2026.09.23 14:51:10 -04'00'

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

Report of Test

LLIA003089-013



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	36.0	12.0%	90-100	0.0	0.0%	0-20	110.4	36.9%
10-20	74.4	24.9%	100-110	0.0	0.0%	0-30	173.8	58.1%
20-30	63.4	21.2%	110-120	0.0	0.0%	0-40	213.4	71.3%
30-40	39.6	13.2%	120-130	0.0	0.0%	0-60	263.5	88.0%
40-50	26.7	8.9%	130-140	0.0	0.0%	0-80	298.5	99.7%
50-60	23.4	7.8%	140-150	0.0	0.0%	10-90	263.3	88.0%
60-70	21.7	7.3%	150-160	0.0	0.0%	20-50	129.7	43.3%
70-80	13.3	4.4%	160-170	0.0	0.0%	40-90	85.9	28.7%
80-90	0.8	0.3%	170-180	0.0	0.0%	60-90	35.8	12.0%
0-90	299.3	100.0%	90-180	0.0	0.0%	0-180	299.3	100.0%

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

Report of Test

LLIA003089-013

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	416	416	416	416	416	416	416	416	416
	2.5	411	411	411	411	411	411	411	411	411
	5	395	395	395	395	395	395	395	395	395
	7.5	371	371	371	371	371	371	371	371	371
	10	341	341	341	341	341	341	341	341	341
	12.5	307	307	307	307	307	307	307	307	307
	15	271	271	271	271	271	271	271	271	271
	17.5	234	234	234	234	234	234	234	234	234
	20	199	199	199	199	199	199	199	199	199
	22.5	167	167	167	167	167	167	167	167	167
	25	138	138	138	138	138	138	138	138	138
	27.5	113	113	113	113	113	113	113	113	113
	30	92	92	92	92	92	92	92	92	92
	32.5	75	75	75	75	75	75	75	75	75
	35	62	62	62	62	62	62	62	62	62
	37.5	52	52	52	52	52	52	52	52	52
	40	44	44	44	44	44	44	44	44	44
	42.5	38	38	38	38	38	38	38	38	38
	45	34	34	34	34	34	34	34	34	34
	47.5	31	31	31	31	31	31	31	31	31
	50	29	29	29	29	29	29	29	29	29
	52.5	27	27	27	27	27	27	27	27	27
	55	26	26	26	26	26	26	26	26	26
	57.5	25	25	25	25	25	25	25	25	25
	60	24	24	24	24	24	24	24	24	24
	62.5	23	23	23	23	23	23	23	23	23
	65	22	22	22	22	22	22	22	22	22
	67.5	21	21	21	21	21	21	21	21	21
	70	19	19	19	19	19	19	19	19	19
	72.5	16	16	16	16	16	16	16	16	16
	75	13	13	13	13	13	13	13	13	13
	77.5	9	9	9	9	9	9	9	9	9
	80	5	5	5	5	5	5	5	5	5
	82.5	1	1	1	1	1	1	1	1	1
	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.

Report of Test

LLIA003089-013

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.

LightLab INTERNATIONAL ALLENTOWN LLC

NVLAP TESTING Lab Code: 201079-0

Report of Test

LLIA003089-013

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	112	108	105	102		109	106	103	100		102	99	97		98	96	94		94	93	91	90
2	104	98	93	88		102	96	91	87		93	89	85		90	86	84		87	84	82	80
3	98	89	83	78		95	88	82	78		85	80	76		83	79	75		80	77	74	72
4	92	82	76	70		90	81	75	70		79	73	69		77	72	68		75	71	67	66
5	86	76	69	64		85	75	69	64		73	68	63		72	67	63		70	66	62	60
6	82	71	64	59		80	70	64	59		69	63	59		67	62	58		66	61	58	56
7	77	67	60	55		76	66	59	55		65	59	54		63	58	54		62	57	54	52
8	74	63	56	51		72	62	56	51		61	55	51		60	55	51		59	54	50	49
9	70	59	53	48		69	59	52	48		58	52	48		57	52	48		56	51	48	46
10	67	56	50	45		66	56	50	45		55	49	45		54	49	45		53	48	45	44

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	11.6	3.71	3.71
8.0	6.5	4.94	4.94
10.0	4.2	6.18	6.18
12.0	2.9	7.42	7.42
14.0	2.1	8.65	8.65
16.0	1.6	9.89	9.89

Spacing Criterion

SC: 0.6

Average Luminance (cd/m^2)

	0 deg Plane	45 deg Plane	90 deg Plane
0	19452	19452	19452
45	2237	2237	2237
55	2118	2118	2118
65	2450	2450	2450
75	2351	2351	2351
85	78	78	78

Beam and Field Angle

0-180 Degree Plane

Beam Angle: 38.7°

Field Angle: 81.7°

90-270 Degree Plane

Beam Angle: 38.7°

Field Angle: 81.7°

Report of Test

LLIA003089-013

UGR Table - Corrected

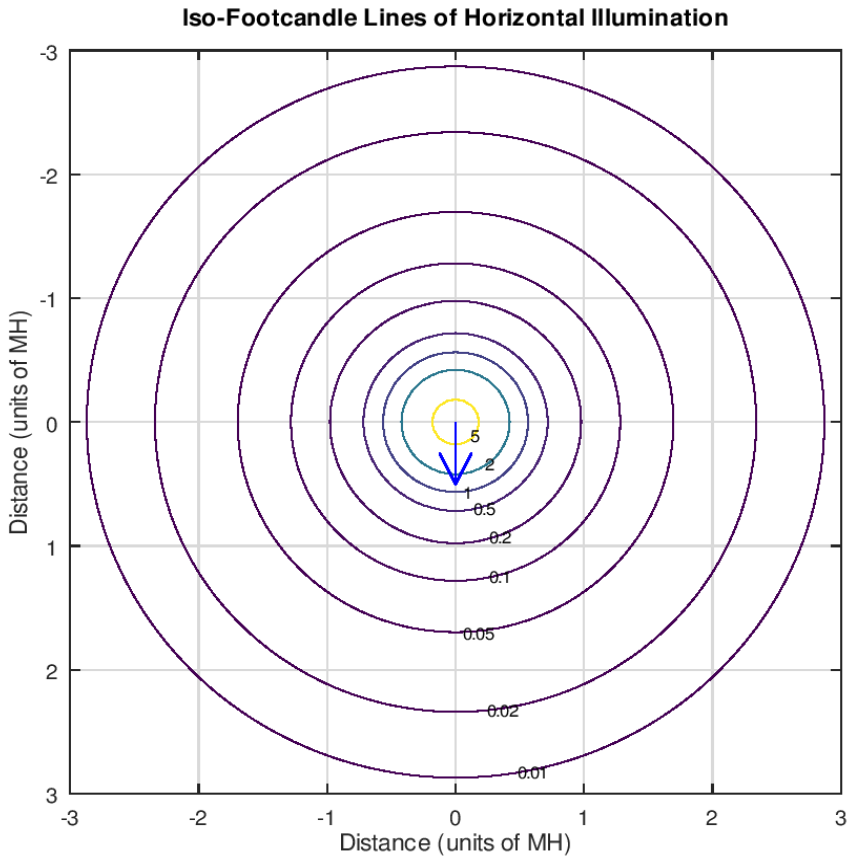
Reflectances											
Ceiling Cavity		70	70	50	50	30	70	70	50	50	30
Walls		50	30	50	30	30	50	30	50	30	30
Floor Cavity		20	20	20	20	20	20	20	20	20	20
Room Size		UGR Viewed Crosswise					UGR Viewed Endwise				
X=2H	Y=2H	12.1	13.4	12.4	13.7	14.0	12.1	13.4	12.4	13.7	14.0
	3H	14.7	15.9	15.1	16.2	16.6	14.7	15.9	15.1	16.2	16.6
	4H	15.6	16.7	16.0	17.0	17.4	15.6	16.7	16.0	17.0	17.4
	6H	16.0	17.0	16.4	17.3	17.7	16.0	17.0	16.4	17.3	17.7
	8H	15.9	16.9	16.4	17.3	17.7	15.9	16.9	16.4	17.3	17.7
	12H	15.9	16.8	16.3	17.2	17.6	15.9	16.8	16.3	17.2	17.6
4H	2H	12.9	14.0	13.3	14.4	14.8	12.9	14.0	13.3	14.4	14.8
	3H	15.7	16.6	16.1	17.0	17.4	15.7	16.6	16.1	17.0	17.4
	4H	16.7	17.5	17.1	17.9	18.4	16.7	17.5	17.1	17.9	18.4
	6H	17.1	17.8	17.6	18.3	18.7	17.1	17.8	17.6	18.3	18.7
	8H	17.1	17.7	17.5	18.2	18.7	17.1	17.7	17.5	18.2	18.7
	12H	17.0	17.6	17.5	18.1	18.6	17.0	17.6	17.5	18.1	18.6
8H	4H	17.0	17.6	17.4	18.1	18.5	17.0	17.6	17.4	18.1	18.5
	6H	17.4	18.0	17.9	18.5	18.9	17.4	18.0	17.9	18.5	18.9
	8H	17.4	17.9	17.9	18.4	18.9	17.4	17.9	17.9	18.4	18.9
	12H	17.4	17.8	17.9	18.3	18.9	17.4	17.8	17.9	18.3	18.9
12H	4H	17.0	17.5	17.5	18.0	18.5	17.0	17.5	17.5	18.0	18.5
	6H	17.4	17.9	18.0	18.4	18.9	17.4	17.9	18.0	18.4	18.9
	8H	17.4	17.8	17.9	18.3	18.9	17.4	17.8	17.9	18.3	18.9

Maximum UGR = 18.9

Report of Test

LLIA003089-013

Iso-Illuminance Plot

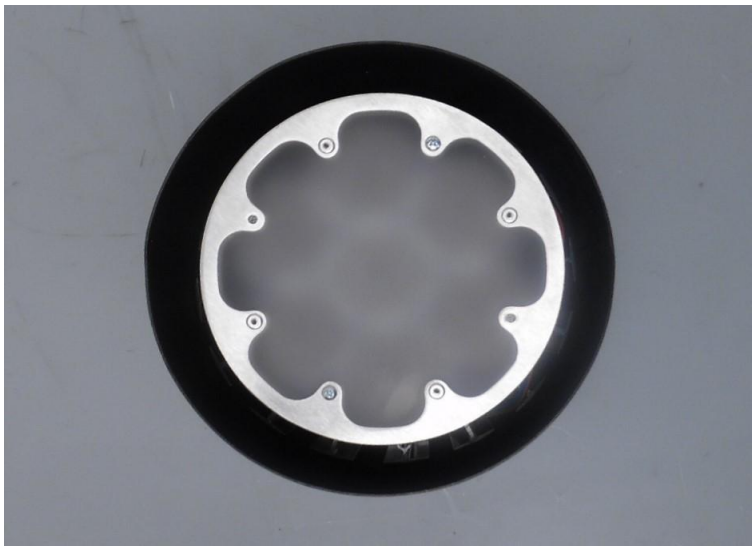


The isofootcandle values shown in the plot above are based on a mounting height of h = 8.0 feet. Grid values show multiples of mounting height. The isoilluminance contour lines are expressed in units of footcandles. The values expressed are based on the direct light from a single unit without the contribution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

Report of Test

LLIA003089-013

Additional Pictures of Test Subject





Report of Test

LLIA003089-013

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.