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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2019, ANSI C82.77-10-2014

Prepared For
Amerlux LLC
178 BAUER DR
OAKLAND, New Jersey 07436-3105
United States

Catalog Number
HSE-RA.T.MWW.VWF.309/HSE-R-NC.T.20.120/277.0-10V

Order Number
15432052
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2024-08-08

Prepared By

Dylan Fonner, Laboratory Technician

Approved By

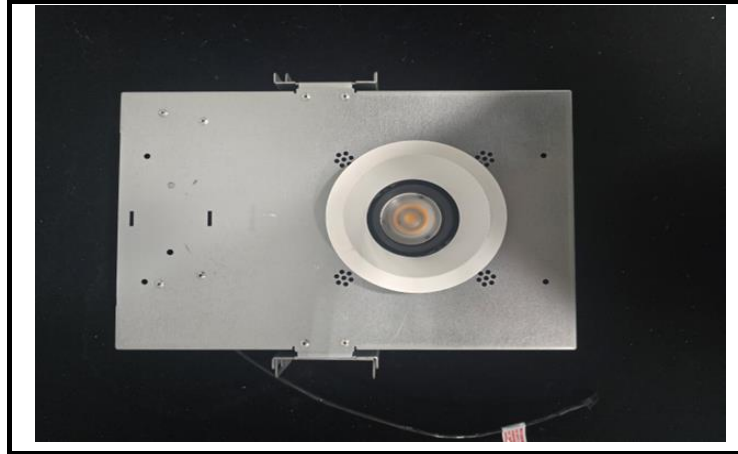
Jesse Litchfield, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Recessed fixture with white trim and black heatsink
Lamp: 1 LED
Mounting: Recessed
Ballast/Driver: Osram OTi25W/120-277/1A2/DIM-1/J AUX

Luminaire



Luminaire Characteristics

Luminous Diameter: 3.50 in.

Summary of Results

Total Luminaire Output:	1926 Lumens
Luminaire Efficacy:	92.4 lm/w
Maximum Candela:	2692 Candela

Test Conditions

Test Temperature:	24.8 °C
Voltage:	120.0 VAC
Current:	0.1761 A
Power:	20.83 W
Power Factor:	0.985
Frequency:	60 Hz
Current THD:	7.01 %

The device under test emits no detectable uplight, as defined by ANSI/IES LM-75-19.
For the purpose of this report, certain non-zero uplight readings have been assigned a zero value, in accordance with the requirements of
ANSI/IES LM-75-19

Laboratory results may not be representative of field performance
Ballast factors have not been applied

Distribution - Goniophotometer

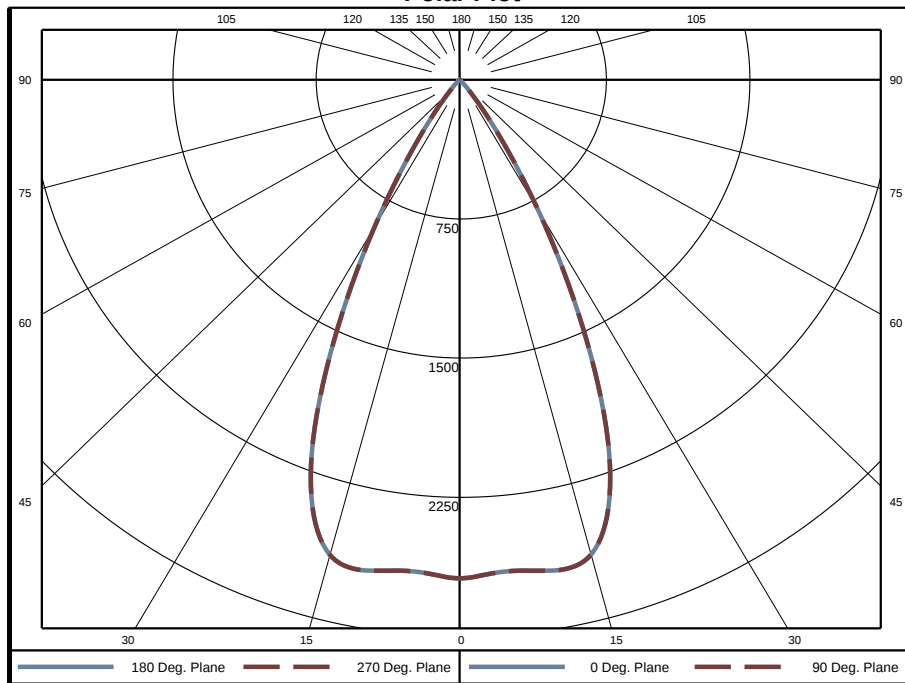
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.0 VAC	0.1761 A	20.83 W	0.985	60 Hz	7.01 %

Summary of Results

Spacing Criteria	Total Lumen Output:	1926 Lumens
0-180: 0.88	Luminaire Efficacy:	92.4 lm/w
90-270: 0.88	Maximum Candela:	2692 Candela
Corrected UGR (Room Dimension: X=4H, Y=8H, Reflectances: 70/50/20%, S/H: 1)		
Crosswise: 5.2	Endwise: 5.2	

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	63.8	3.3%	60-65	2.0	0.1%	120-125	0	0.0%
5-10	191.1	9.9%	65-70	1.9	0.1%	125-130	0	0.0%
10-15	318.0	16.5%	70-75	1.6	0.1%	130-135	0	0.0%
15-20	409.1	21.2%	75-80	1.2	0.1%	135-140	0	0.0%
20-25	403.9	21.0%	80-85	0.7	0.0%	140-145	0	0.0%
25-30	294.3	15.3%	85-90	0.2	0.0%	145-150	0	0.0%
30-35	155.2	8.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	57.9	3.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	16.8	0.9%	100-105	0	0.0%	160-165	0	0.0%
45-50	3.9	0.2%	105-110	0	0.0%	165-170	0	0.0%
50-55	2.3	0.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	2.1	0.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1893	98.3%
0-60	1918	99.6%
0-90	1926	100.0%
90-180	0	0.0%

Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5
	0	2686	2686	2686	2686	2686	2686	2686	2686	2686	2686	2686	2686	2686	2686	2686
	5	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660	2660
	10	2685	2685	2685	2685	2685	2685	2685	2685	2685	2685	2685	2685	2685	2685	2685
	15	2642	2642	2642	2642	2642	2642	2642	2642	2642	2642	2642	2642	2642	2642	2642
	20	2274	2274	2274	2274	2274	2274	2274	2274	2274	2274	2274	2274	2274	2274	2274
	25	1558	1558	1558	1558	1558	1558	1558	1558	1558	1558	1558	1558	1558	1558	1558
	30	813	813	813	813	813	813	813	813	813	813	813	813	813	813	813
	35	308	308	308	308	308	308	308	308	308	308	308	308	308	308	308
	40	80	80	80	80	80	80	80	80	80	80	80	80	80	80	80
	45	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	50	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	55	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	60	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	65	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	70	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	75	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	80	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	100	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	160	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	165	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	170	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	175	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

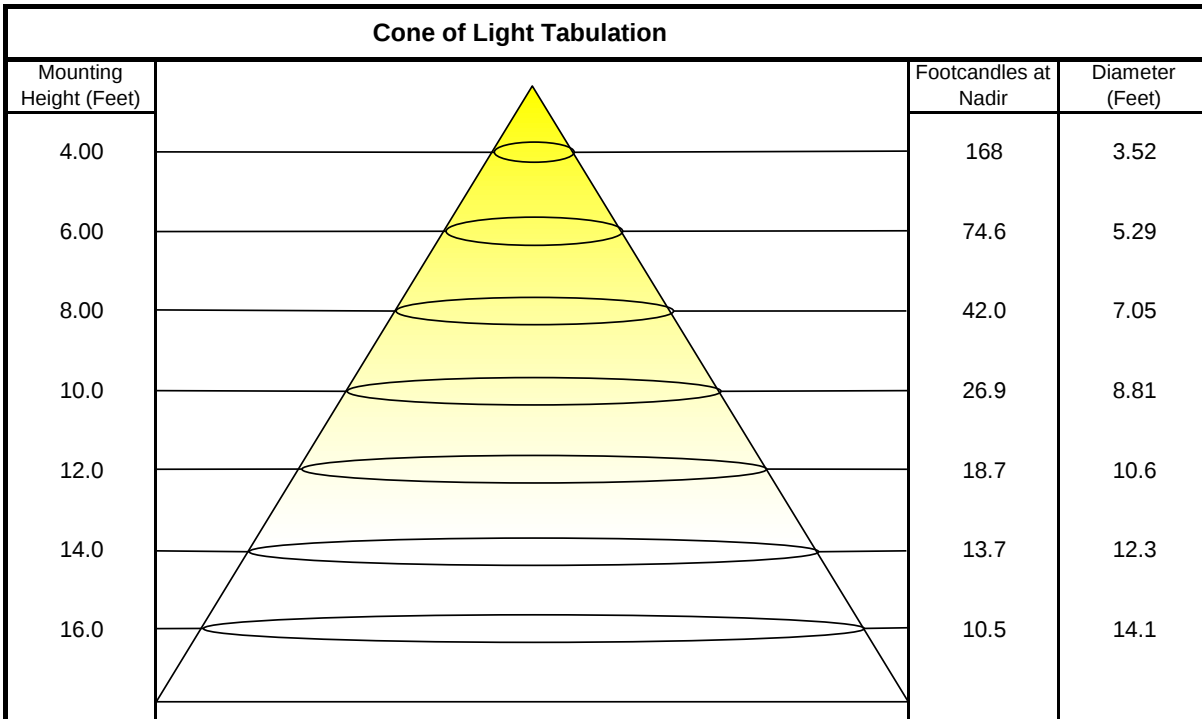
		Horizontal Angle (Degrees)		
		0	45	90
Vertical Angle (Degrees)	0	432700	432700	432700
	45	4493	4493	4493
	55	1354	1354	1354
	65	1493	1493	1493
	75	1643	1643	1643
	85	1520	1520	1520



Coefficients of Utilization - Zonal Cavity Method

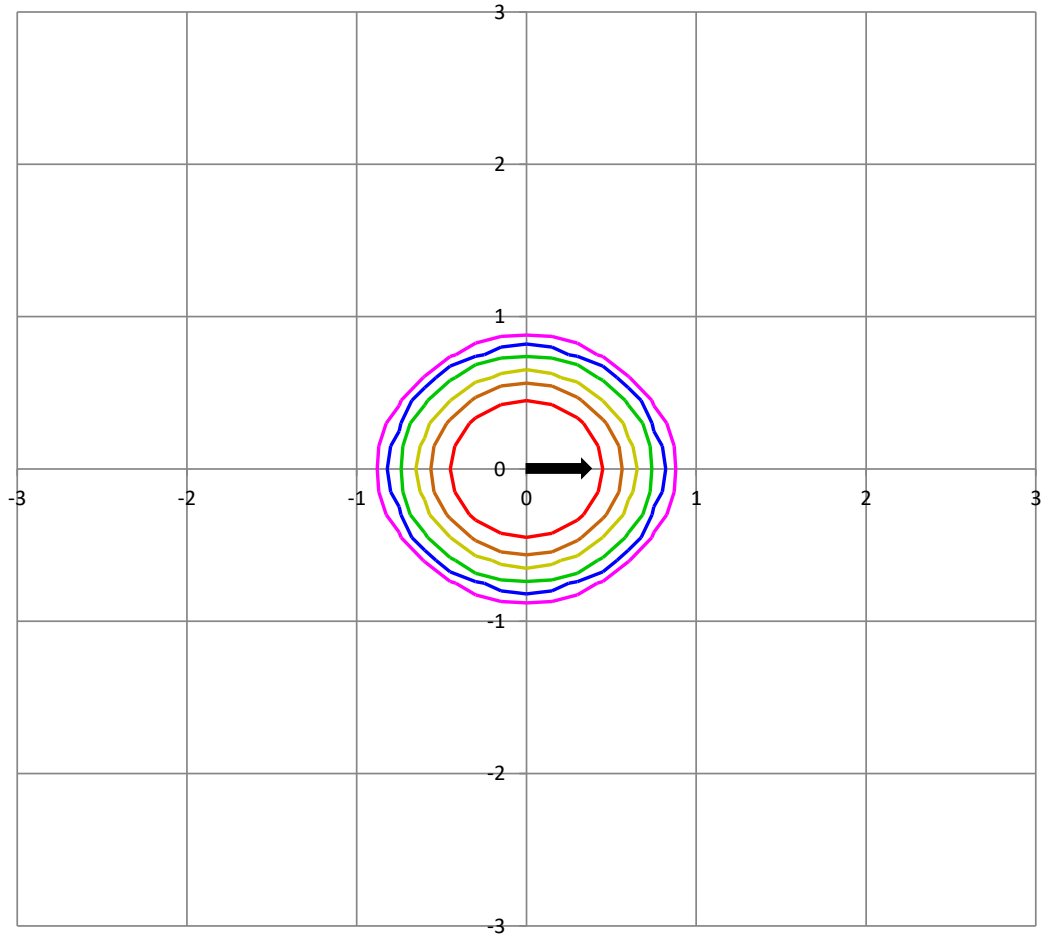
Effective Floor Cavity Reflectance 20%																		
Ceiling Cavity Reflectance	80				70				50			30			10			0
Wall Reflectance	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	0
Room Cavity Ratio (RCR)	** Values are expressed as percent of total lumen output delivered to the task surface **																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	114	112	109	107	112	109	107	106	105	104	102	102	100	99	98	97	96	95
2	109	105	101	98	107	103	100	97	100	97	95	97	95	93	94	93	91	89
3	104	99	94	91	103	97	93	90	95	91	89	92	90	87	90	88	86	84
4	100	93	88	85	98	92	88	84	90	86	83	88	85	82	86	84	81	80
5	96	88	83	79	94	87	83	79	86	81	78	84	80	78	83	79	77	76
6	92	84	78	75	90	83	78	74	82	77	74	80	76	73	79	76	73	72
7	88	80	74	70	87	79	74	70	78	73	70	77	73	70	75	72	69	68
8	84	76	70	67	83	75	70	67	74	70	66	73	69	66	72	68	66	64
9	81	72	67	63	80	72	67	63	71	66	63	70	66	63	69	65	63	61
10	77	69	64	60	76	68	63	60	68	63	60	67	63	60	66	62	60	58

Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2686 Candela
Central Cone Intensity:	2673 Candela
Beam Flux:	1478.3 Lumens
Beam Angle (0-180):	52.7 Degrees
Beam Angle (90-270):	52.7 Degrees
Field Angle (0-180):	71.2 Degrees
Field Angle (90-270):	71.2 Degrees



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

