



UL LLC  
1075 W Lambert Rd Suite B  
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## Indoor Distribution Test Report

Relevant Standards  
IES LM-79-2008, ANSI C82.77-10-2014

Prepared For  
**Lux Dynamics**

Andy Munter  
1350 Capital Blvd  
Reno, NV 89502

Catalog Number  
**360P-2-URDL-835-xxx-xx-CA**

Order Number  
13551818  
Test Number  
13551818.09

Test Date

2020-10-30

Prepared By

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Approved By

Eric Gaudreau, Engineering Leader

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Gray cylindrical metal housing with diffuse plastic lens  
**Lamp:** White 1224 LEDs  
**Mounting:** Pendant  
**Ballast/Driver:** One (1) OSRAM OPTOTRONIC OTi 85/120-277/2A3 DIM L HB

### Luminaire



### Luminaire Characteristics

Luminous Length: 23.00 in.  
Luminous Width: 4.500 in.  
Luminous Height: 4.50 in.

### Summary of Results

Total Luminaire Output:	8004 Lumens
Luminaire Efficacy:	160.8 lm/w
Maximum Candela:	968 Candela

### Test Conditions

Test Temperature:	25.1 °C
Voltage:	277.0 VAC
Current:	0.1900 A
Power:	49.78 W
Power Factor:	0.946
Frequency:	60 Hz
Current THD:	13.3 %

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



## Distribution - Goniophotometer

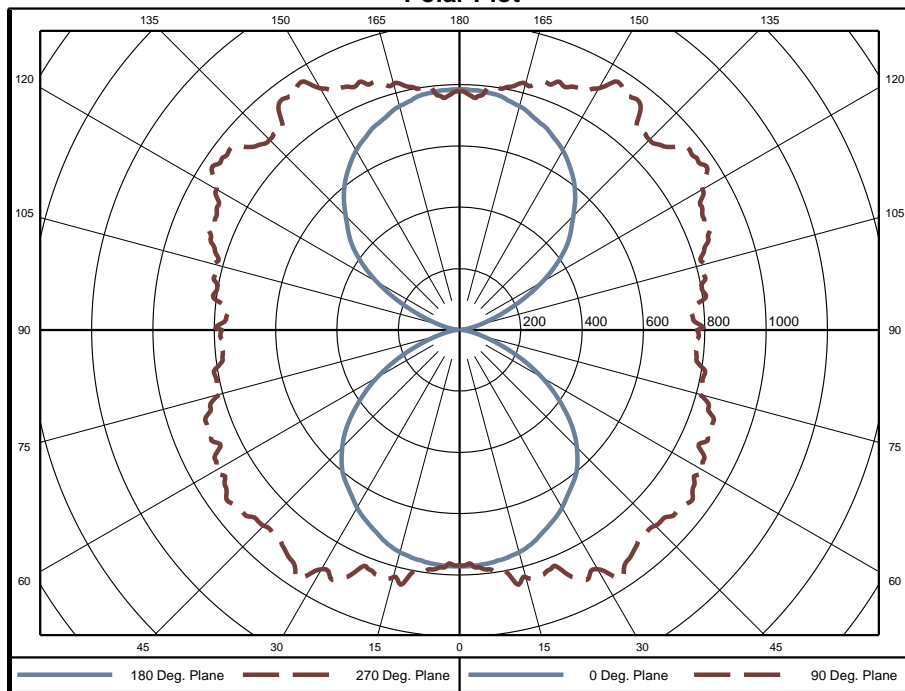
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	277.0 VAC	0.1900 A	49.78 W	0.946	60 Hz	13.3 %

### Summary of Results

<b>Spacing Criteria</b>	<b>Total Lumen Output:</b>	8004 Lumens
0-180: 1.29	<b>Luminaire Efficacy:</b>	160.8 lm/w
90-270: 1.75	<b>Maximum Candela:</b>	968 Candela
<b>Corrected UGR (Room Dimension: X=4H, Y=8H, Reflectances: 70/50/20%, S/H: 1)</b>		
<b>Crosswise: 16.5</b>	<b>Endwise: 17.8</b>	

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	18.4	0.2%	60-65	301.9	3.8%	120-125	308.0	3.8%
5-10	55.6	0.7%	65-70	293.7	3.7%	125-130	300.4	3.8%
10-15	94.1	1.2%	70-75	283.7	3.5%	130-135	287.6	3.6%
15-20	131.7	1.6%	75-80	269.9	3.4%	135-140	278.7	3.5%
20-25	166.0	2.1%	80-85	257.9	3.2%	140-145	264.1	3.3%
25-30	202.2	2.5%	85-90	250.9	3.1%	145-150	237.1	3.0%
30-35	235.2	2.9%	90-95	251.5	3.1%	150-155	201.3	2.5%
35-40	262.9	3.3%	95-100	259.4	3.2%	155-160	167.5	2.1%
40-45	280.6	3.5%	100-105	271.3	3.4%	160-165	131.2	1.6%
45-50	292.8	3.7%	105-110	281.7	3.5%	165-170	93.3	1.2%
50-55	299.1	3.7%	110-115	294.6	3.7%	170-175	55.6	0.7%
55-60	303.4	3.8%	115-120	302.2	3.8%	175-180	18.4	0.2%

Zone	Lumens	% of Luminaire
0-40	1166	14.6%
0-60	2342	29.3%
0-90	4000	50.0%
90-180	4004	50.0%



**Candela Tabulation**  
Horizontal 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	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8	768.8
5	769.6	760.1	772.4	775.0	778.2	775.0	772.4	760.1	769.6	760.1	772.4	775.0	778.2	775.0	772.4	760.1
10	762.7	766.2	781.1	805.2	800.8	805.2	781.1	766.2	762.7	766.2	781.1	805.2	800.8	805.2	781.1	766.2
15	751.5	764.1	790.4	834.6	834.4	834.6	790.4	764.1	751.5	764.1	790.4	834.6	834.4	834.6	790.4	764.1
20	729.3	757.7	803.7	837.9	835.5	837.9	803.7	757.7	729.3	757.7	803.7	837.9	835.5	837.9	803.7	757.7
25	699.0	741.9	807.6	850.2	891.3	850.2	807.6	741.9	699.0	741.9	807.6	850.2	891.3	850.2	807.6	741.9
30	668.8	709.4	786.8	888.4	901.2	888.4	786.8	709.4	668.8	709.4	786.8	888.4	901.2	888.4	786.8	709.4
35	631.4	680.7	811.3	940.9	937.4	940.9	811.3	680.7	631.4	680.7	811.3	940.9	937.4	940.9	811.3	680.7
40	595.2	652.5	806.4	884.7	904.3	884.7	806.4	652.5	595.2	652.5	806.4	884.7	904.3	884.7	806.4	652.5
45	540.9	614.6	785.5	852.0	902.9	852.0	785.5	614.6	540.9	614.6	785.5	852.0	902.9	852.0	785.5	614.6
50	473.9	583.8	694.8	854.0	923.2	854.0	694.8	583.8	473.9	583.8	694.8	854.0	923.2	854.0	694.8	583.8
55	393.4	513.5	635.6	873.8	927.2	873.8	635.6	513.5	393.4	513.5	635.6	873.8	927.2	873.8	635.6	513.5
60	309.9	446.0	660.8	854.2	920.3	854.2	660.8	446.0	309.9	446.0	660.8	854.2	920.3	854.2	660.8	446.0
65	221.6	365.5	642.9	830.9	870.7	830.9	642.9	365.5	221.6	365.5	642.9	830.9	870.7	830.9	642.9	365.5
70	137.4	307.0	638.0	811.4	879.7	811.4	638.0	307.0	137.4	307.0	638.0	811.4	879.7	811.4	638.0	307.0
75	76.2	261.0	593.6	774.4	810.5	774.4	593.6	261.0	76.2	261.0	593.6	774.4	810.5	774.4	593.6	261.0
80	37.8	220.1	571.9	755.8	812.4	755.8	571.9	220.1	37.8	220.1	571.9	755.8	812.4	755.8	571.9	220.1
85	15.2	189.7	543.1	716.1	774.7	716.1	543.1	189.7	15.2	189.7	543.1	716.1	774.7	716.1	543.1	189.7
90	6.5	179.4	547.3	711.1	774.6	711.1	547.3	179.4	6.5	179.4	547.3	711.1	774.6	711.1	547.3	179.4
95	14.6	193.2	544.8	711.2	757.2	711.2	544.8	193.2	14.6	193.2	544.8	711.2	757.2	711.2	544.8	193.2
100	36.2	224.2	573.5	743.1	802.0	743.1	573.5	224.2	36.2	224.2	573.5	743.1	802.0	743.1	573.5	224.2
105	73.9	266.1	599.7	767.4	829.6	767.4	599.7	266.1	73.9	266.1	599.7	767.4	829.6	767.4	599.7	266.1
110	133.3	305.7	632.6	806.8	864.2	806.8	632.6	305.7	133.3	305.7	632.6	806.8	864.2	806.8	632.6	305.7
115	215.8	361.2	672.2	830.6	874.9	830.6	672.2	361.2	215.8	361.2	672.2	830.6	874.9	830.6	672.2	361.2
120	309.4	435.9	649.6	876.9	915.3	876.9	649.6	435.9	309.4	435.9	649.6	876.9	915.3	876.9	649.6	435.9
125	396.0	507.8	650.9	886.4	951.5	886.4	650.9	507.8	396.0	507.8	650.9	886.4	951.5	886.4	650.9	507.8
130	467.5	571.0	698.2	840.1	932.8	840.1	698.2	571.0	467.5	571.0	698.2	840.1	932.8	840.1	698.2	571.0
135	525.0	615.4	777.1	826.3	877.1	826.3	777.1	615.4	525.0	615.4	777.1	826.3	877.1	826.3	777.1	615.4
140	585.7	653.5	810.1	901.3	909.3	901.3	810.1	653.5	585.7	653.5	810.1	901.3	909.3	901.3	810.1	653.5
145	634.2	696.6	794.9	933.1	935.7	933.1	794.9	696.6	634.2	696.6	794.9	933.1	935.7	933.1	794.9	696.6
150	674.8	722.5	810.9	872.1	910.6	872.1	810.9	722.5	674.8	722.5	810.9	872.1	910.6	872.1	810.9	722.5
155	705.7	732.8	799.5	857.1	875.8	857.1	799.5	732.8	705.7	732.8	799.5	857.1	875.8	857.1	799.5	732.8
160	730.6	757.1	812.1	845.7	852.9	845.7	812.1	757.1	730.6	757.1	812.1	845.7	852.9	845.7	812.1	757.1
165	754.9	748.2	795.2	826.8	831.3	826.8	795.2	748.2	754.9	748.2	795.2	826.8	831.3	826.8	795.2	748.2
170	774.4	755.6	795.7	799.4	798.4	799.4	795.7	755.6	774.4	755.6	795.7	799.4	798.4	799.4	795.7	755.6
175	782.1	768.0	760.4	765.0	767.0	765.0	760.4	768.0	782.1	768.0	760.4	765.0	767.0	765.0	760.4	768.0
180	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8	781.8

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

	0	45	90
0	11510	11510	11510
45	9581	9015	9562
55	8029	7518	9970
65	5533	8099	9812
75	2547	8266	9911
85	805	8751	10710

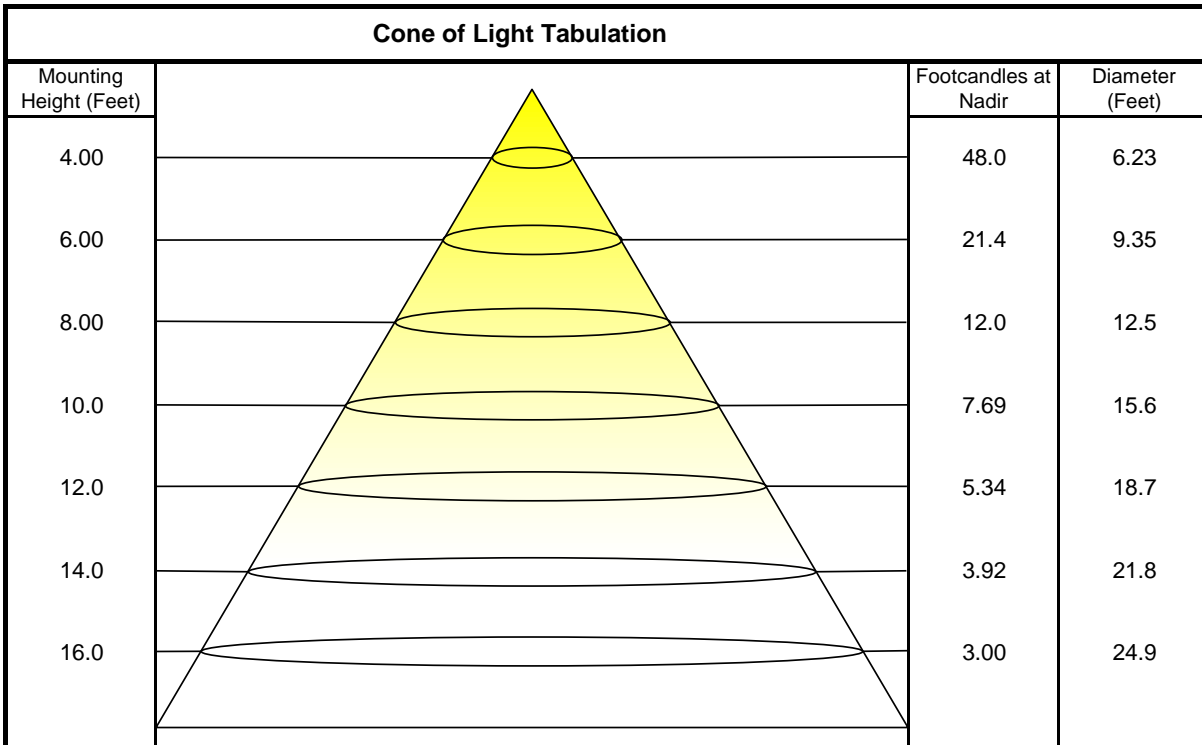


### Coefficients of Utilization - Zonal Cavity Method

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	107	107	107	107	99	99	99	99	83	83	83	69	69	69	56	56	56	50
1	95	89	84	80	87	82	78	74	69	65	62	56	54	51	45	43	41	36
2	85	76	69	63	78	70	64	58	58	53	49	48	44	41	38	35	33	28
3	77	66	58	51	70	61	53	47	51	45	40	41	37	33	33	29	27	22
4	70	58	49	42	64	53	45	39	44	38	33	36	31	28	29	25	22	18
5	64	51	42	36	58	47	39	33	39	33	28	32	27	23	25	22	19	15
6	59	46	37	30	54	42	34	28	35	29	24	29	24	20	23	19	16	13
7	54	41	32	26	49	38	30	25	32	25	21	26	21	18	21	17	14	11
8	50	37	29	23	46	34	27	21	29	23	18	24	19	15	19	15	12	10
9	47	34	26	20	43	31	24	19	26	20	16	22	17	14	17	14	11	9
10	43	31	23	18	40	28	22	17	24	18	15	20	15	12	16	13	10	8

Beam and Field Information	
CIE Type:	Direct/Indirect
Center Beam Intensity:	768.8 Candela
Central Cone Intensity:	#REF! Candela
Beam Flux:	7534.5 Lumens
Beam Angle (0-180):	111.1 Degrees
Beam Angle (90-270):	#REF! Degrees
Field Angle (0-180):	149.9 Degrees
Field Angle (90-270):	#REF! Degrees





### ISOFootcandle Plot

Mounting Height - 8 Feet

