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Indoor Distribution Test Report

Relevant Standards
IES LM-79-2008
ANSI C82.77-2002

Prepared For
Autronic Plastics Inc

Roy Jacob
1150 Motor Parkway
Central Islip
NY 11722
United States

Catalog Number
CL-24-M1-C-UV

Order Number
11563064
Test Number
11563064.05

Test Date

2016-12-13

Prepared By

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Approved By

Tiffany Hamm, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Aluminum housing, frosted and glass lens enclosure
Lamp: 384 white LEDs
Mounting: Recessed
Ballast/Driver: Philips XI075C200V054BST1

Luminaire



Luminaire Characteristics

Luminous Length: 40.25 in.
Luminous Width: 17.50 in.

Summary of Results

Total Luminaire Output:	8165 Lumens
Luminaire Efficacy:	106.9 lm/w
Maximum Candela:	3243 Candela

Test Conditions

Test Temperature:	24.7 °C
Voltage:	120.0 VAC
Current:	0.6381 A
Power:	76.40 W
Power Factor:	0.998
Frequency:	60 Hz
Current THD:	6.63 %

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



Distribution - Goniophotometer

Distribution Test Conditions

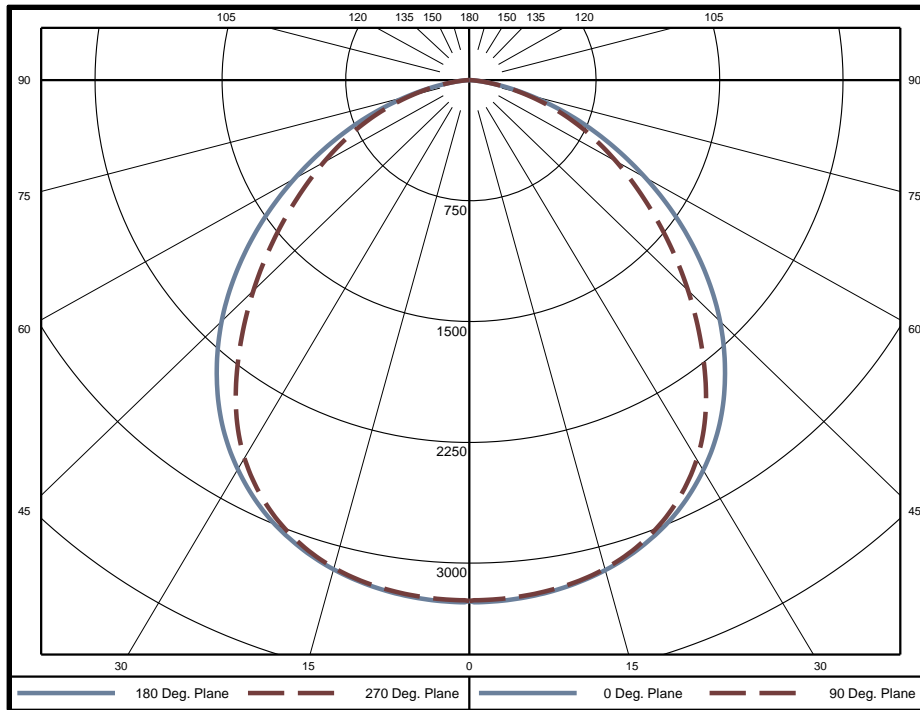
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	0.6381 A	76.40 W	0.998	60 Hz	6.63 %

Summary of Results

Spacing Criteria
 0-180: 1.28
 90-270: 1.28

Total Lumen Output: 8165 Lumens
Luminaire Efficacy: 106.9 lm/w
Maximum Candela: 3243 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	77.2	0.9%	60-65	469.3	5.7%	120-125	0	0.0%
5-10	229.8	2.8%	65-70	362.2	4.4%	125-130	0	0.0%
10-15	376.1	4.6%	70-75	250.2	3.1%	130-135	0	0.0%
15-20	510.9	6.3%	75-80	143.5	1.8%	135-140	0	0.0%
20-25	627.6	7.7%	80-85	57.4	0.7%	140-145	0	0.0%
25-30	719.8	8.8%	85-90	9.4	0.1%	145-150	0	0.0%
30-35	779.6	9.5%	90-95	0	0.0%	150-155	0	0.0%
35-40	800.5	9.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	783.5	9.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	735.2	9.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	662.1	8.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	571.1	7.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	4122	50.5%
0-60	6873	84.2%
0-90	8165	100.0%
90-180	0	0.0%



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	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235	3235
5	3234	3231	3223	3221	3222	3221	3223	3231	3234	3231	3223	3221	3222	3221	3223	3231
10	3204	3201	3194	3193	3195	3193	3194	3201	3204	3201	3194	3193	3195	3193	3194	3201
15	3150	3146	3139	3139	3142	3139	3139	3146	3150	3146	3139	3139	3142	3139	3139	3146
20	3067	3060	3050	3048	3050	3048	3050	3060	3067	3060	3050	3048	3050	3048	3050	3060
25	2953	2941	2922	2914	2914	2914	2922	2941	2953	2941	2922	2914	2914	2914	2922	2941
30	2799	2781	2750	2731	2727	2731	2750	2781	2799	2781	2750	2731	2727	2731	2750	2781
35	2610	2579	2524	2488	2476	2488	2524	2579	2610	2579	2524	2488	2476	2488	2524	2579
40	2380	2335	2251	2192	2172	2192	2251	2335	2380	2335	2251	2192	2172	2192	2251	2335
45	2123	2058	1949	1883	1861	1883	1949	2058	2123	2058	1949	1883	1861	1883	1949	2058
50	1836	1762	1647	1582	1559	1582	1647	1762	1836	1762	1647	1582	1559	1582	1647	1762
55	1532	1459	1353	1295	1277	1295	1353	1459	1532	1459	1353	1295	1277	1295	1353	1459
60	1221	1161	1073	1034	1025	1034	1073	1161	1221	1161	1073	1034	1025	1034	1073	1161
65	923	877	819	800	794	800	819	877	923	877	819	800	794	800	819	877
70	645	614	585	575	573	575	585	614	645	614	585	575	573	575	585	614
75	388	371	364	361	360	361	364	371	388	371	364	361	360	361	364	371
80	181	176	178	177	177	177	178	176	181	176	178	177	177	177	178	176
85	43	45	47	49	50	49	47	45	43	45	47	49	50	49	47	45
90	0	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	0
100	0	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	0
110	0	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	0
120	0	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	0
130	0	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	0
140	0	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	0
150	0	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	0
160	0	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	0
170	0	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	0
180	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

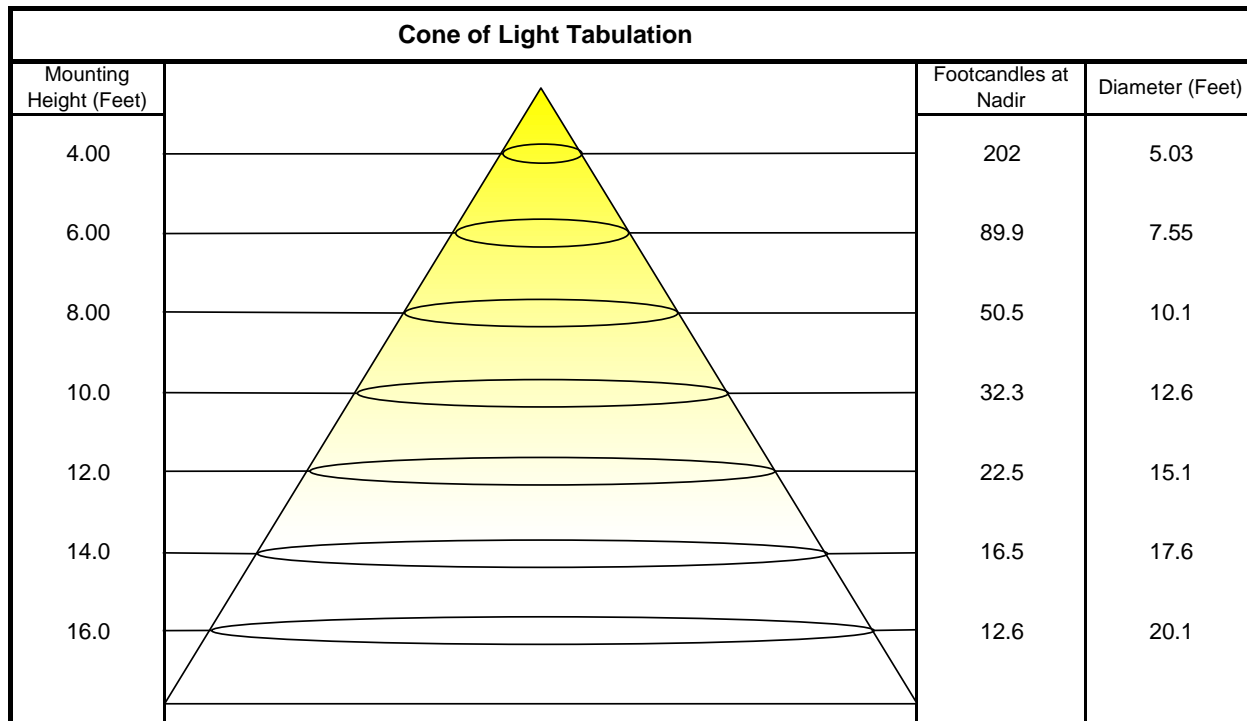
	0	45	90
0	7118	7118	7118
45	6606	6066	5792
55	5878	5192	4901
65	4804	4264	4134
75	3295	3096	3064
85	1087	1198	1258



Utilization of Lumens - 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 Lumens delivered to the task surface **																	
0	9721	9721	9721	9721	9495	9495	9495	9495	9073	9073	9073	8687	8687	8687	8332	8332	8332	8165
1	8965	8611	8293	8007	8747	8427	8139	7877	8083	7846	7629	7767	7575	7397	7476	7322	7178	7012
2	8207	7582	7065	6630	7998	7430	6955	6552	7144	6745	6400	6881	6548	6256	6637	6363	6118	5948
3	7520	6710	6083	5584	7323	6583	6002	5534	6344	5847	5438	6122	5699	5344	5917	5560	5254	5083
4	6910	5980	5299	4779	6728	5874	5238	4746	5672	5120	4682	5485	5007	4619	5311	4899	4559	4388
5	6373	5368	4666	4148	6205	5278	4619	4125	5108	4527	4081	4949	4439	4038	4801	4354	3996	3828
6	5898	4851	4148	3644	5745	4774	4110	3628	4629	4038	3596	4494	3968	3565	4367	3900	3535	3372
7	5477	4410	3719	3234	5339	4345	3689	3223	4221	3630	3199	4105	3573	3177	3996	3519	3154	2997
8	5105	4034	3360	2897	4980	3978	3335	2888	3871	3287	2871	3771	3241	2854	3677	3196	2837	2685
9	4774	3709	3056	2615	4661	3660	3036	2608	3568	2996	2595	3481	2958	2582	3399	2920	2569	2423
10	4479	3427	2797	2377	4376	3385	2780	2372	3305	2747	2362	3229	2715	2351	3157	2683	2341	2202

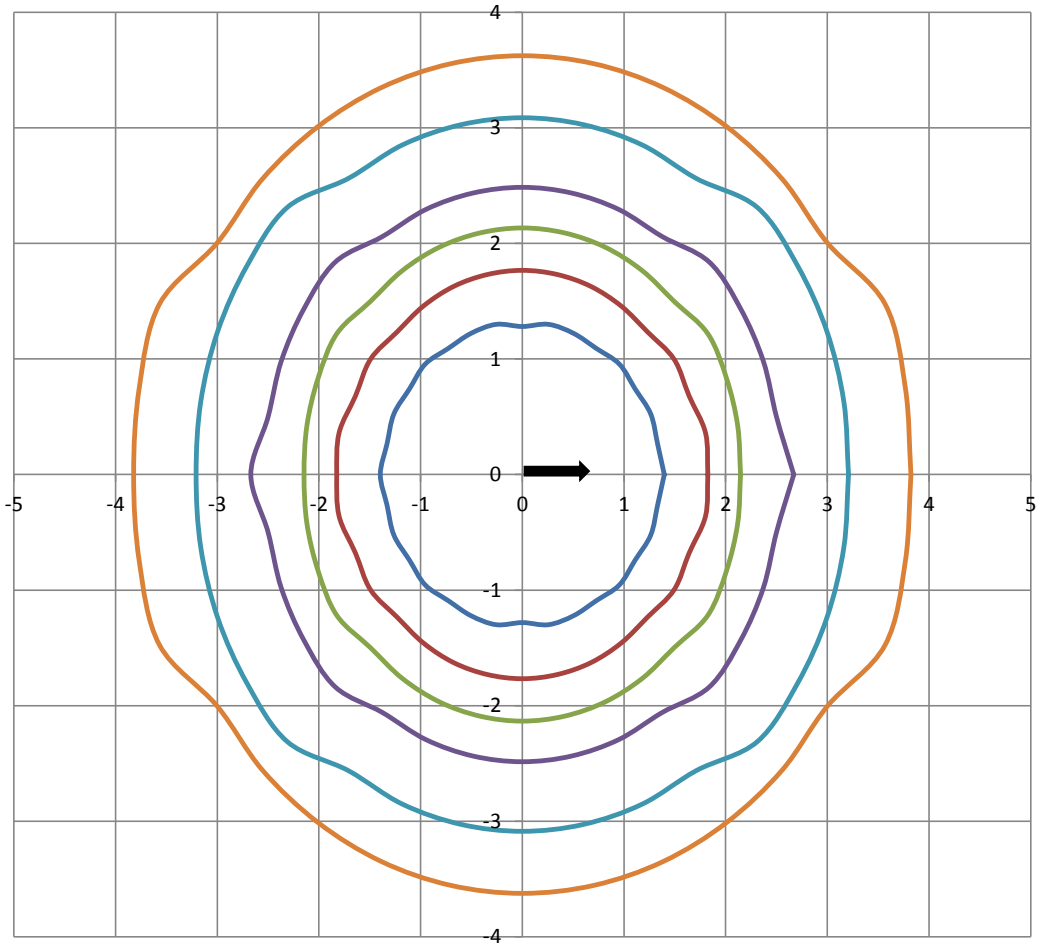
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	3235 Candela
Central Cone Intensity:	3232 Candela
Beam Flux:	5770.6 Lumens
Beam Angle (0-180):	107.2 Degrees
Beam Angle (90-270):	98.0 Degrees
Field Angle (0-180):	152.8 Degrees
Field Angle (90-270):	151.9 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

