



UL Verification Services Inc.
7036 Snowdrift Road
Allentown, PA 18106
610-774-1300



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-S1-C-UV

Order Number
11563064
Test Number
11563064.04

Test Date

2016-12-13

Prepared By

Daniel Booth, Technician

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:	6618 Lumens
Luminaire Efficacy:	109.4 lm/w
Maximum Candela:	2630 Candela

Test Conditions

Test Temperature:	25.4 °C
Voltage:	119.9 VAC
Current:	0.5066 A
Power:	60.51 W
Power Factor:	0.996
Frequency:	60 Hz
Current THD:	8.56 %

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



Distribution - Goniophotometer

Distribution Test Conditions

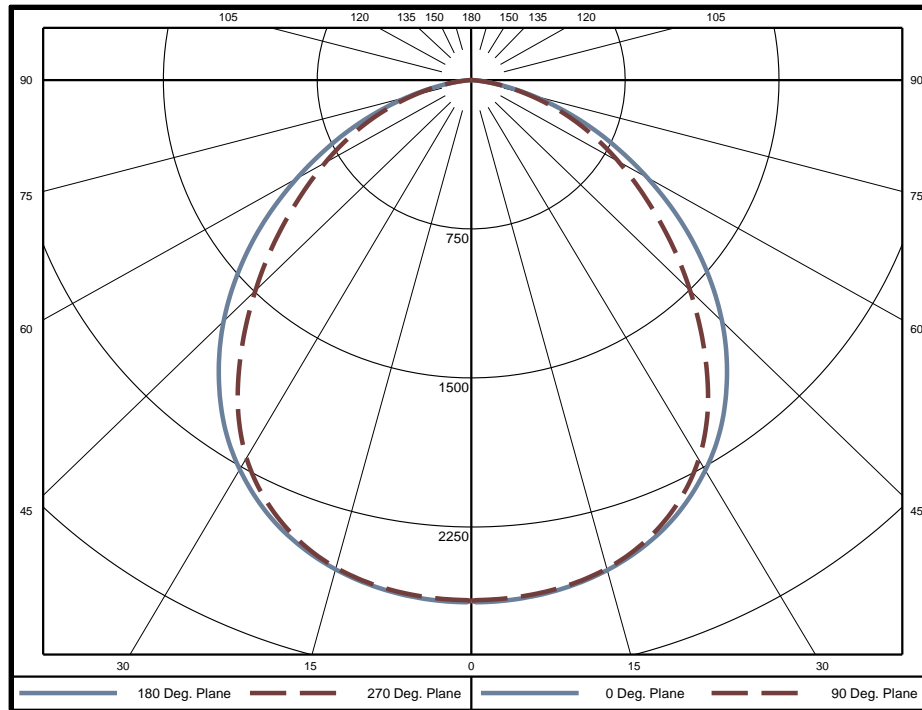
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.4 °C	119.9 VAC	0.5066 A	60.51 W	0.996	60 Hz	8.56 %

Summary of Results

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

Total Lumen Output: 6618 Lumens
Luminaire Efficacy: 109.4 lm/w
Maximum Candela: 2630 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	62.6	0.9%	60-65	380.9	5.8%	120-125	0	0.0%
5-10	186.3	2.8%	65-70	294.0	4.4%	125-130	0	0.0%
10-15	304.9	4.6%	70-75	202.7	3.1%	130-135	0	0.0%
15-20	414.1	6.3%	75-80	116.1	1.8%	135-140	0	0.0%
20-25	508.7	7.7%	80-85	46.5	0.7%	140-145	0	0.0%
25-30	583.3	8.8%	85-90	7.6	0.1%	145-150	0	0.0%
30-35	631.8	9.5%	90-95	0	0.0%	150-155	0	0.0%
35-40	648.7	9.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	634.8	9.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	595.7	9.0%	105-110	0	0.0%	165-170	0	0.0%
50-55	536.5	8.1%	110-115	0	0.0%	170-175	0	0.0%
55-60	462.7	7.0%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	3340	50.5%
0-60	5570	84.2%
0-90	6618	100.0%
90-180	0	0.0%



Candela Tabulation
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	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	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622	2622
5	2622	2618	2612	2611	2612	2611	2612	2618	2622	2618	2612	2611	2612	2611	2612	2618
10	2598	2594	2589	2588	2591	2588	2589	2594	2598	2594	2589	2588	2591	2588	2589	2594
15	2554	2550	2544	2544	2547	2544	2544	2550	2554	2550	2544	2544	2547	2544	2544	2550
20	2487	2481	2472	2470	2472	2470	2472	2481	2487	2481	2472	2470	2472	2470	2472	2481
25	2394	2383	2369	2361	2362	2361	2369	2383	2394	2383	2369	2361	2362	2361	2369	2383
30	2270	2255	2229	2213	2211	2213	2229	2255	2270	2255	2229	2213	2211	2213	2229	2255
35	2117	2090	2046	2015	2007	2015	2046	2090	2117	2090	2046	2015	2007	2015	2046	2090
40	1930	1892	1823	1774	1762	1774	1823	1892	1930	1892	1823	1774	1762	1774	1823	1892
45	1721	1667	1579	1524	1509	1524	1579	1667	1721	1667	1579	1524	1509	1524	1579	1667
50	1489	1428	1334	1280	1266	1280	1334	1428	1489	1428	1334	1280	1266	1280	1334	1428
55	1243	1183	1096	1048	1036	1048	1096	1183	1243	1183	1096	1048	1036	1048	1096	1183
60	990	941	870	837	833	837	870	941	990	941	870	837	833	837	870	941
65	750	714	665	649	647	649	665	714	750	714	665	649	647	649	665	714
70	523	498	473	465	465	465	473	498	523	498	473	465	465	465	473	498
75	315	301	294	291	293	291	294	301	315	301	294	291	293	291	294	301
80	147	143	143	142	144	142	143	143	147	143	143	142	144	142	143	143
85	35	37	38	39	40	39	38	37	35	37	38	39	40	39	38	37
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)

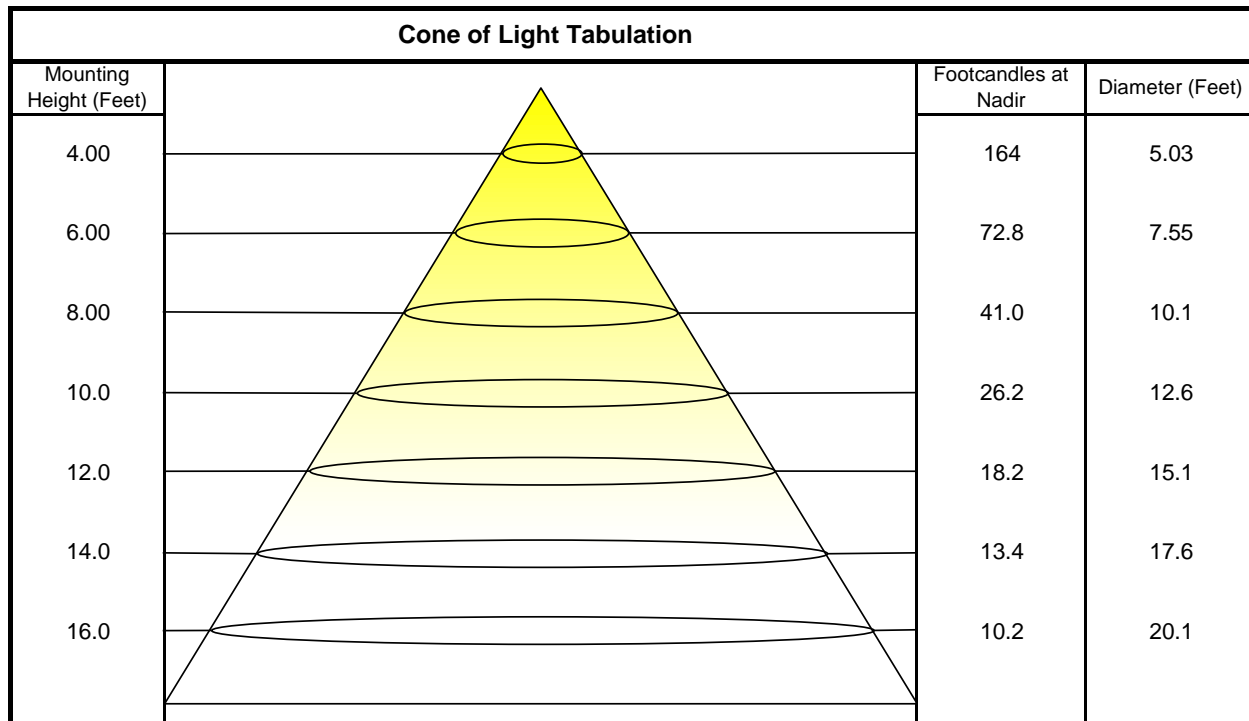
Vertical Angle (Degrees)	Horizontal Angle (Degrees)		
	0	45	90
0	5769	5769	5769
45	5357	4913	4696
55	4768	4203	3976
65	3903	3460	3367
75	2678	2500	2489
85	894	965	1022



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	7878	7878	7878	7878	7695	7695	7695	7695	7353	7353	7353	7040	7040	7040	6753	6753	6753	6618
1	7266	6979	6721	6489	7089	6830	6596	6384	6551	6359	6183	6295	6139	5995	6059	5934	5818	5683
2	6652	6145	5726	5373	6482	6022	5637	5310	5790	5467	5187	5577	5307	5070	5379	5157	4959	4821
3	6094	5438	4930	4526	5935	5335	4865	4485	5141	4738	4407	4962	4619	4331	4795	4506	4258	4119
4	5600	4847	4295	3873	5452	4760	4245	3847	4597	4149	3795	4445	4058	3744	4304	3971	3694	3556
5	5165	4351	3782	3362	5029	4278	3743	3343	4140	3669	3308	4011	3597	3272	3891	3529	3238	3103
6	4780	3931	3362	2953	4656	3869	3331	2940	3752	3272	2915	3642	3216	2890	3540	3161	2865	2733
7	4439	3574	3014	2621	4327	3522	2989	2612	3421	2942	2593	3327	2896	2575	3239	2852	2556	2429
8	4138	3269	2723	2348	4036	3224	2703	2341	3137	2664	2327	3056	2627	2313	2980	2590	2299	2176
9	3869	3006	2477	2119	3777	2967	2460	2114	2892	2428	2103	2821	2397	2093	2755	2367	2082	1964
10	3630	2777	2267	1927	3547	2743	2253	1922	2678	2226	1914	2617	2200	1906	2559	2175	1897	1784

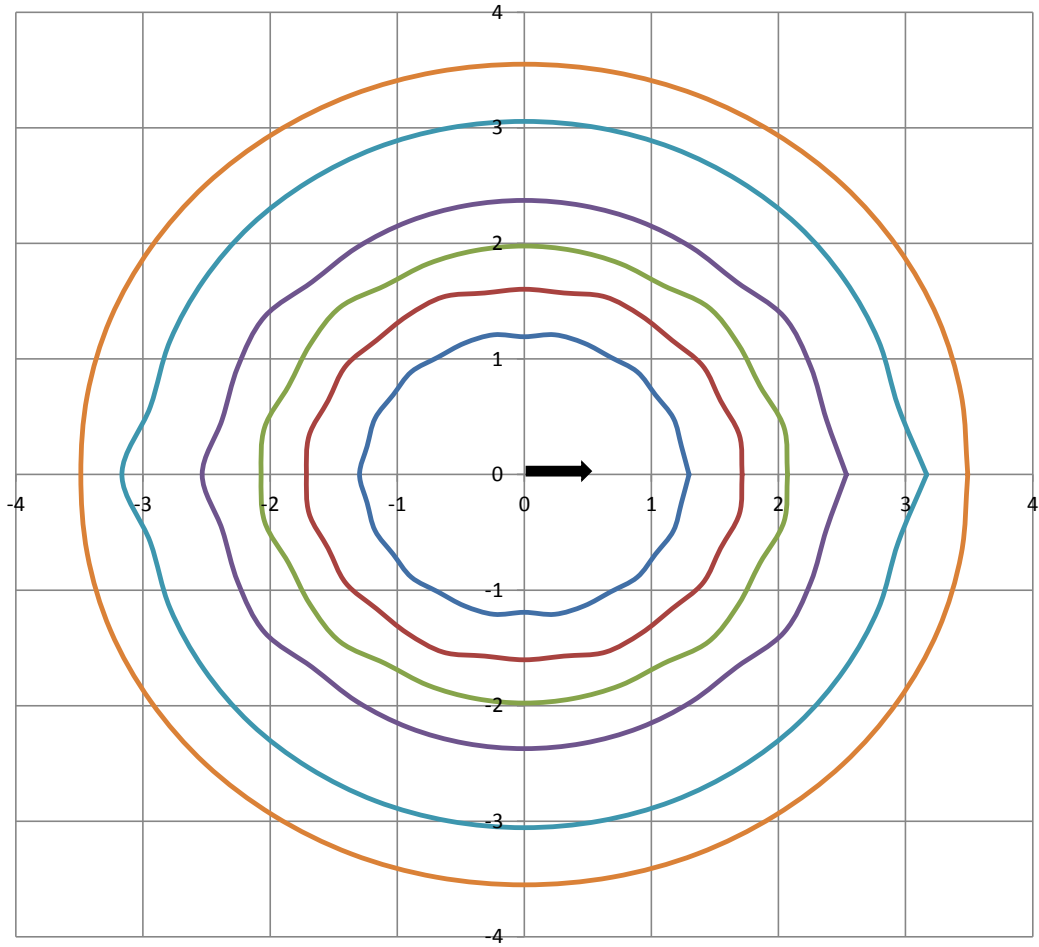
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2622 Candela
Central Cone Intensity:	2619 Candela
Beam Flux:	4676.6 Lumens
Beam Angle (0-180):	107.3 Degrees
Beam Angle (90-270):	98.1 Degrees
Field Angle (0-180):	152.8 Degrees
Field Angle (90-270):	151.9 Degrees





ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

