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Indoor Distribution Test Report

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

Prepared For
Jesco Lighting Group LLC

Vic Nasrudin
15 Harbor Park Dr
Port Washington, NY 11050

Catalog Number
RLR-5612-40-WH/WH

Order Number
10761525
Test Number
1046660

Test Date

2015-05-03

Prepared By

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Approved By

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The results contained in this report pertain only to the tested sample.
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Luminaire Description: Aluminum heatsink, white enamel aluminum reflector, frosted plastic lens enclosure
Lamp: 10 white LEDs
Mounting: Recessed

Luminaire



Luminaire Characteristics

Luminous Diameter: 5.50 in.

Summary of Results

Total Luminaire Output:	1175 Lumens
Luminaire Efficacy:	91.4 lm/w
Maximum Candela:	565 Candela

Electrical Data

Test Temperature:	24.9 °C
Voltage:	120.0 VAC
Current:	0.1078 A
Power:	12.86 W
Power Factor:	0.994
Frequency:	60 Hz
Current THD:	10.7 %

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



Distribution - Goniophotometer

Distribution Test Conditions

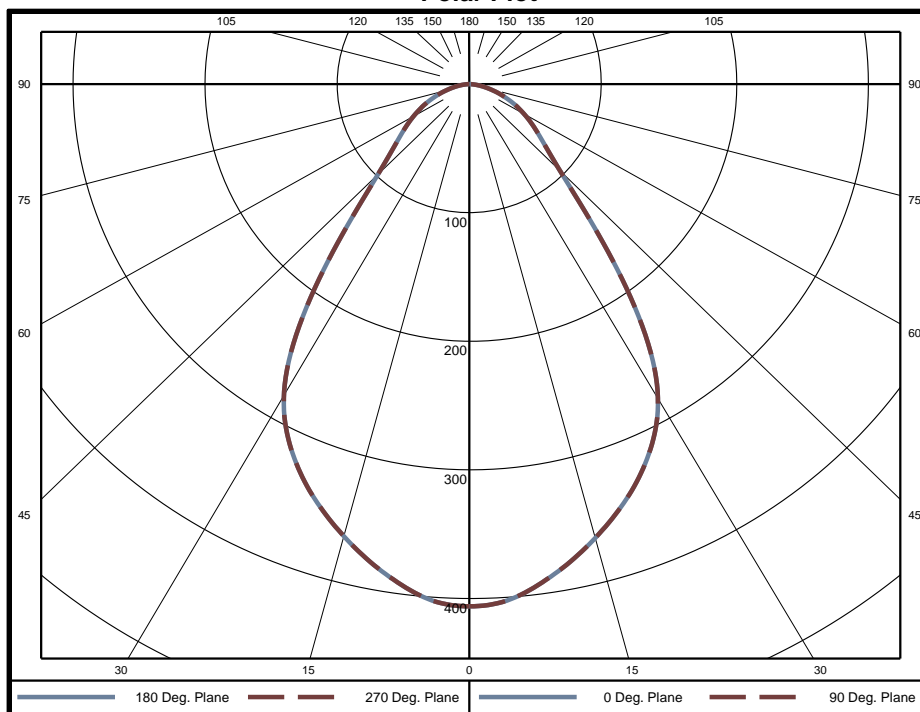
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	0.1078 A	12.86 W	0.994	60 Hz	10.7 %

Summary of Results

Spacing Criteria
 0-180: 1.12
 90-270: 1.12

Total Lumen Output: 1175 Lumens
Luminaire Efficacy: 91.4 lm/w
Maximum Candela: 565 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	13.4	1.1%	60-65	48.5	4.1%	120-125	0	0.0%
5-10	38.9	3.3%	65-70	32.2	2.7%	125-130	0	0.0%
10-15	61.5	5.2%	70-75	19.9	1.7%	130-135	0	0.0%
15-20	80.8	6.9%	75-80	10.8	0.9%	135-140	0	0.0%
20-25	97.0	8.3%	80-85	5.8	0.5%	140-145	0	0.0%
25-30	110.0	9.4%	85-90	1.2	0.1%	145-150	0	0.0%
30-35	119.6	10.2%	90-95	0	0.0%	150-155	0	0.0%
35-40	125.3	10.7%	95-100	0	0.0%	155-160	0	0.0%
40-45	125.0	10.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	116.8	9.9%	105-110	0	0.0%	165-170	0	0.0%
50-55	97.4	8.3%	110-115	0	0.0%	170-175	0	0.0%
55-60	71.3	6.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	647	55.0%
0-60	1057	90.0%
0-90	1175	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	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7	564.7
	5	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0	556.0
	10	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8	532.8
	15	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1	505.1
	20	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6	476.6
	25	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9	448.9
	30	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9	420.9
	35	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3	391.3
	40	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4	358.4
	45	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3	316.3
	50	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2	259.2
	55	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3	188.3
	60	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7	123.7
	65	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4	79.4
	70	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5	49.5
	75	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3	28.3
80	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	14.1	
85	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	6.4	
90	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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	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)	0	45	90	
	0	36840	36840	36840
	45	29180	29180	29180
	55	21420	21420	21420
	65	12260	12260	12260
	75	7125	7125	7125
	85	4808	4808	4808



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	1399	1399	1399	1399	1367	1367	1367	1367	1306	1306	1306	1250	1250	1250	1199	1199	1199	1175
1	1301	1254	1212	1174	1270	1228	1190	1155	1178	1147	1119	1133	1108	1085	1092	1072	1053	1030
2	1199	1116	1047	989	1170	1095	1031	978	1054	1001	955	1017	973	934	982	946	914	890
3	1105	996	912	845	1078	978	900	837	944	878	823	913	857	809	884	837	796	772
4	1020	893	801	730	994	878	792	726	850	775	716	824	759	707	799	744	698	674
5	943	806	710	639	920	793	703	636	769	690	629	747	677	622	726	665	616	593
6	875	731	634	564	853	720	629	562	699	618	557	680	608	553	663	598	548	526
7	814	666	570	503	794	657	566	502	639	558	498	623	550	495	608	542	491	470
8	759	610	517	452	742	603	513	451	587	506	448	573	500	446	560	493	443	422
9	711	562	471	410	695	555	468	409	542	462	407	530	457	405	518	452	403	382
10	667	520	432	373	653	514	429	372	503	425	371	492	420	369	482	416	368	348

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	35.3	4.48
6.00	15.7	6.72
8.00	8.82	8.96
10.0	5.65	11.2
12.0	3.92	13.4
14.0	2.88	15.7
16.0	2.21	17.9

Cone of Light Plot

