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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-4210-40

Order Number
10761525
Test Number
1046658

Test Date

2015-05-07

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: 3.25 in.

Summary of Results

Total Luminaire Output:	617.5 Lumens
Luminaire Efficacy:	70 lm/w
Maximum Candela:	407 Candela

Electrical Data

Test Temperature:	25.4 °C
Voltage:	120.0 VAC
Current:	0.07385 A
Power:	8.822 W
Power Factor:	0.995
Frequency:	60 Hz
Current THD:	9.68 %

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	120.0 VAC	0.07385 A	8.822 W	0.995	60 Hz	9.68 %

Summary of Results

Spacing Criteria

0-180: 1.07
90-270: 1.07

Total Lumen Output:

617.5 Lumens

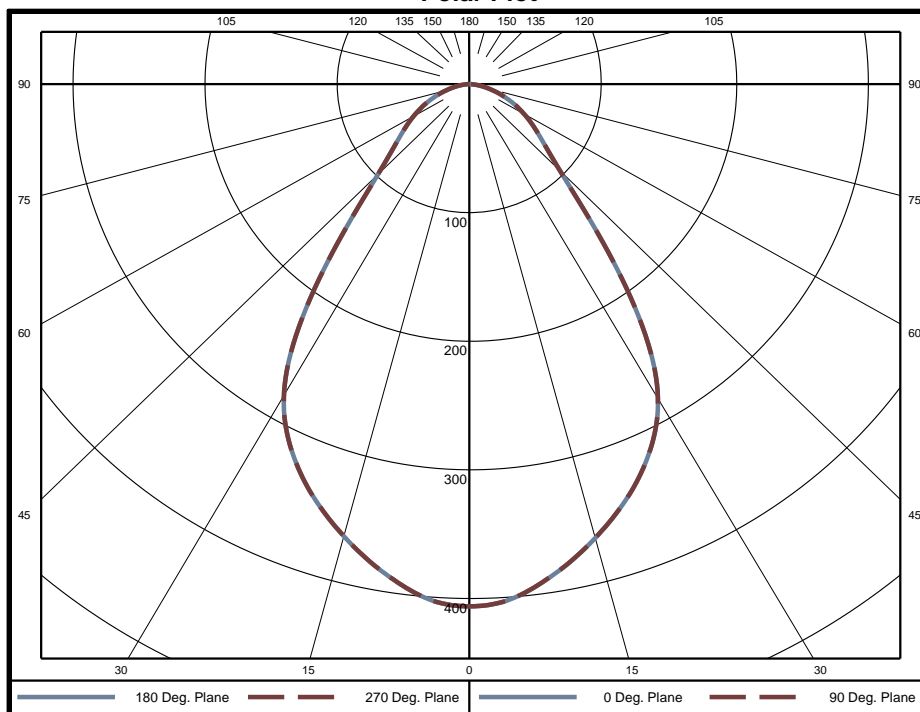
Luminaire Efficacy:

70.0 lm/w

Maximum Candela:

407 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	9.67	1.6%	60-65	21.15	3.4%	120-125	0	0.0%
5-10	28.11	4.6%	65-70	16.63	2.7%	125-130	0	0.0%
10-15	44.52	7.2%	70-75	12.04	1.9%	130-135	0	0.0%
15-20	58.49	9.5%	75-80	7.72	1.3%	135-140	0	0.0%
20-25	69.51	11.3%	80-85	4.10	0.7%	140-145	0	0.0%
25-30	76.29	12.4%	85-90	1.13	0.2%	145-150	0	0.0%
30-35	74.84	12.1%	90-95	0	0.0%	150-155	0	0.0%
35-40	60.81	9.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	43.88	7.1%	100-105	0	0.0%	160-165	0	0.0%
45-50	34.19	5.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	29.18	4.7%	110-115	0	0.0%	170-175	0	0.0%
55-60	25.27	4.1%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	422	68.4%
0-60	555	89.8%
0-90	618	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	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0	407.0
5	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3	401.3
10	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4	385.4
15	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9	365.9
20	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3	344.3
25	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3	318.3
30	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7	282.7
35	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4	221.4
40	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1	146.1
45	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6	97.6
50	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5	74.5
55	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6	60.6
60	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0	49.0
65	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2	38.2
70	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8	27.8
75	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4	18.4
80	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8	10.8
85	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	4.6
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)

	0	45	90
0	76050	76050	76050
45	25780	25780	25780
55	19730	19730	19730
65	16900	16900	16900
75	13250	13250	13250
85	9782	9782	9782



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	735	735	735	735	718	718	718	718	686	686	686	657	657	657	630	630	630	618
1	686	663	642	623	670	649	630	613	624	608	594	600	588	576	578	568	559	547
2	638	597	563	535	623	586	555	529	565	539	517	546	524	505	528	510	494	483
3	593	540	499	467	579	531	493	463	514	481	455	498	470	447	483	460	440	428
4	553	492	447	413	540	484	442	410	470	433	405	456	425	400	444	417	395	383
5	516	450	403	369	505	443	400	367	431	393	364	420	386	360	409	380	357	345
6	483	413	367	333	473	408	364	332	398	358	329	388	353	327	379	348	324	313
7	453	382	335	303	444	377	333	302	368	329	300	360	324	298	352	320	296	286
8	426	354	308	277	417	350	306	276	342	303	275	335	300	273	328	296	272	262
9	402	329	285	255	394	326	283	254	319	280	253	313	278	252	307	275	251	241
10	379	307	264	236	372	304	263	235	299	261	234	293	258	234	288	256	233	223

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	25.4	4.29
6.00	11.3	6.44
8.00	6.36	8.58
10.0	4.07	10.7
12.0	2.83	12.9
14.0	2.08	15.0
16.0	1.59	17.2

Cone of Light Plot

