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## Indoor Distribution Test Report

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

Prepared For  
**Jesco Lighting Group LLC**

15 Harbor Park Dr  
Port Washington, NY 11050  
United States

Catalog Number  
**RLH-6530N-3590**

Order Number

11642482

Test Number

11642482.07

Test Date

2017-02-24

Prepared By

Derek Smarr, 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:** Formed steel housing, formed aluminum heatsink, white plastic internal reflector, frosted plastic lens enclosure, semi-specular external reflector  
**Lamp:** One white LED  
**Mounting:** Recessed  
**Ballast/Driver:** One ERP ESM040W-0800-42

**Luminaire**



**Luminaire Characteristics**  
Luminous Diameter: 4.50 in.

**Summary of Results**

Total Luminaire Output:	2722 Lumens
Luminaire Efficacy:	82.2 lm/w
Maximum Candela:	2706 Candela

**Test Conditions**

Test Temperature:	24.6 °C
Voltage:	120.0 VAC
Current:	0.2788 A
Power:	33.11 W
Power Factor:	0.990
Frequency:	60 Hz
Current THD:	11.1 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

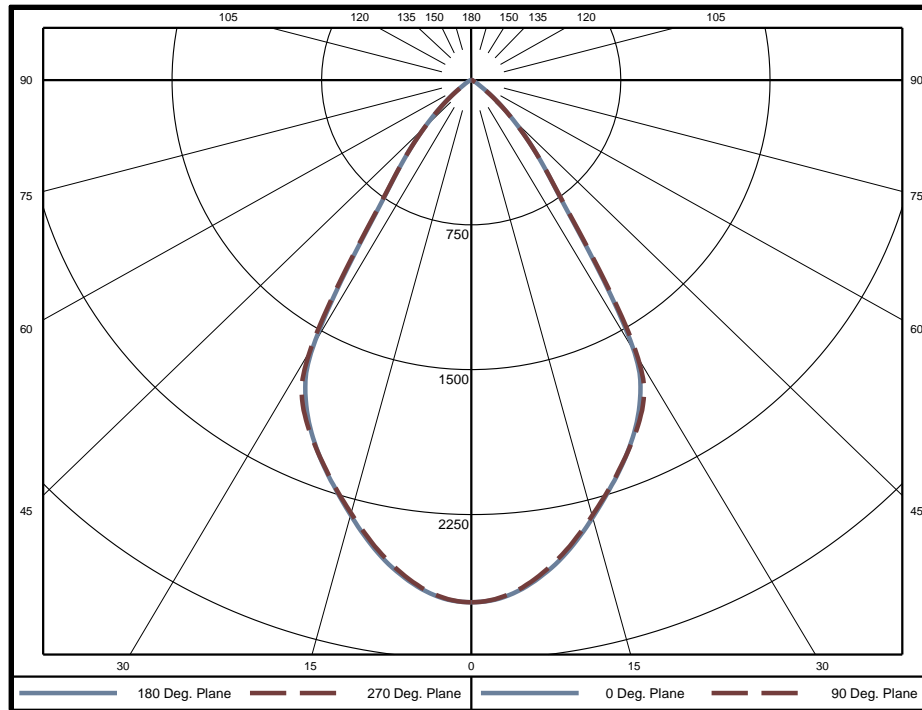
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.6 °C	120.0 VAC	0.2788 A	33.11 W	0.990	60 Hz	11.1 %

### Summary of Results

**Spacing Criteria**  
 0-180: 1.00  
 90-270: 1.00

**Total Lumen Output:** 2722 Lumens  
**Luminaire Efficacy:** 82.2 lm/w  
**Maximum Candela:** 2706 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	64.1	2.4%	60-65	10.5	0.4%	120-125	0	0.0%
5-10	184.9	6.8%	65-70	6.3	0.2%	125-130	0	0.0%
10-15	287.7	10.6%	70-75	4.0	0.1%	130-135	0	0.0%
15-20	369.6	13.6%	75-80	2.6	0.1%	135-140	0	0.0%
20-25	432.0	15.9%	80-85	1.4	0.1%	140-145	0	0.0%
25-30	465.2	17.1%	85-90	0.4	0.0%	145-150	0	0.0%
30-35	366.8	13.5%	90-95	0	0.0%	150-155	0	0.0%
35-40	223.0	8.2%	95-100	0	0.0%	155-160	0	0.0%
40-45	151.0	5.5%	100-105	0	0.0%	160-165	0	0.0%
45-50	90.4	3.3%	105-110	0	0.0%	165-170	0	0.0%
50-55	43.5	1.6%	110-115	0	0.0%	170-175	0	0.0%
55-60	18.6	0.7%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	2393	87.9%
0-60	2697	99.1%
0-90	2722	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	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705	2705
5	2657	2657	2654	2652	2651	2652	2654	2657	2657	2657	2654	2652	2651	2652	2654	2657
10	2527	2521	2519	2516	2514	2516	2519	2521	2527	2521	2519	2516	2514	2516	2519	2521
15	2344	2341	2338	2334	2333	2334	2338	2341	2344	2341	2338	2334	2333	2334	2338	2341
20	2157	2154	2156	2154	2152	2154	2156	2154	2157	2154	2156	2154	2152	2154	2156	2154
25	1955	1965	1973	1971	1971	1971	1973	1965	1955	1965	1973	1971	1971	1971	1973	1965
30	1632	1642	1662	1660	1665	1660	1662	1642	1632	1642	1662	1660	1665	1660	1662	1642
35	862	866	872	874	878	874	872	866	862	866	872	874	878	874	872	866
40	524	523	523	524	525	524	523	523	524	523	523	524	525	524	523	523
45	309	307	306	306	306	306	306	307	309	307	306	306	306	306	306	307
50	157	154	152	151	152	151	152	154	157	154	152	151	152	151	152	154
55	62	60	58	57	57	57	58	60	62	60	58	57	57	57	58	60
60	32	30	28	27	27	27	28	30	32	30	28	27	27	27	28	30
65	18	17	16	15	15	15	16	17	18	17	16	15	15	15	16	17
70	11	10	9	9	9	9	9	10	11	10	9	9	9	9	9	10
75	7	7	6	6	5	6	6	7	7	7	6	6	5	6	6	7
80	4	4	4	3	3	3	4	4	4	4	4	3	3	3	4	4
85	2	2	2	1	1	1	2	2	2	2	2	1	1	1	2	2
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/m<sup>2</sup>)**

Horizontal Angle (Degrees)

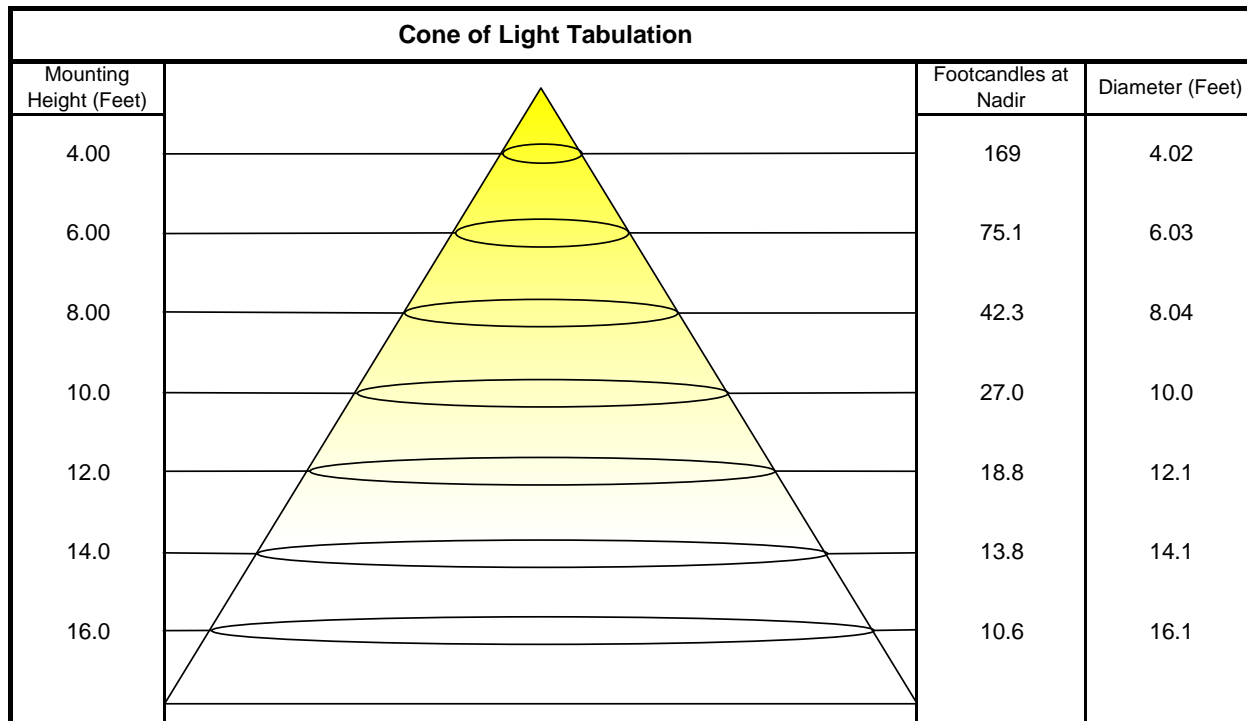
	0	45	90
0	263600	263600	263600
45	42630	42120	42150
55	10560	9840	9639
65	4201	3641	3395
75	2591	2216	2056
85	1929	1736	1634



### 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	3240	3240	3240	3240	3165	3165	3165	3165	3024	3024	3024	2896	2896	2896	2778	2778	2778	2722
1	3081	3003	2932	2868	3014	2944	2880	2823	2833	2782	2736	2732	2691	2654	2638	2607	2577	2528
2	2919	2780	2665	2568	2858	2733	2628	2539	2644	2558	2483	2563	2492	2430	2487	2430	2379	2333
3	2762	2578	2436	2323	2707	2540	2409	2304	2468	2358	2267	2401	2309	2231	2339	2262	2196	2152
4	2612	2397	2238	2118	2562	2365	2218	2105	2306	2179	2080	2250	2142	2055	2199	2107	2031	1988
5	2471	2233	2066	1943	2426	2206	2050	1934	2157	2021	1916	2111	1992	1899	2068	1965	1882	1840
6	2339	2085	1914	1791	2298	2063	1902	1785	2021	1879	1773	1982	1856	1760	1945	1835	1748	1707
7	2216	1951	1780	1659	2178	1932	1770	1655	1897	1751	1645	1864	1733	1636	1832	1716	1627	1588
8	2101	1830	1660	1543	2067	1814	1652	1539	1784	1637	1532	1755	1622	1526	1728	1608	1519	1480
9	1995	1721	1553	1439	1964	1707	1546	1437	1681	1534	1431	1656	1522	1426	1632	1511	1421	1383
10	1897	1621	1457	1347	1868	1609	1451	1345	1586	1441	1341	1565	1431	1337	1544	1422	1333	1296

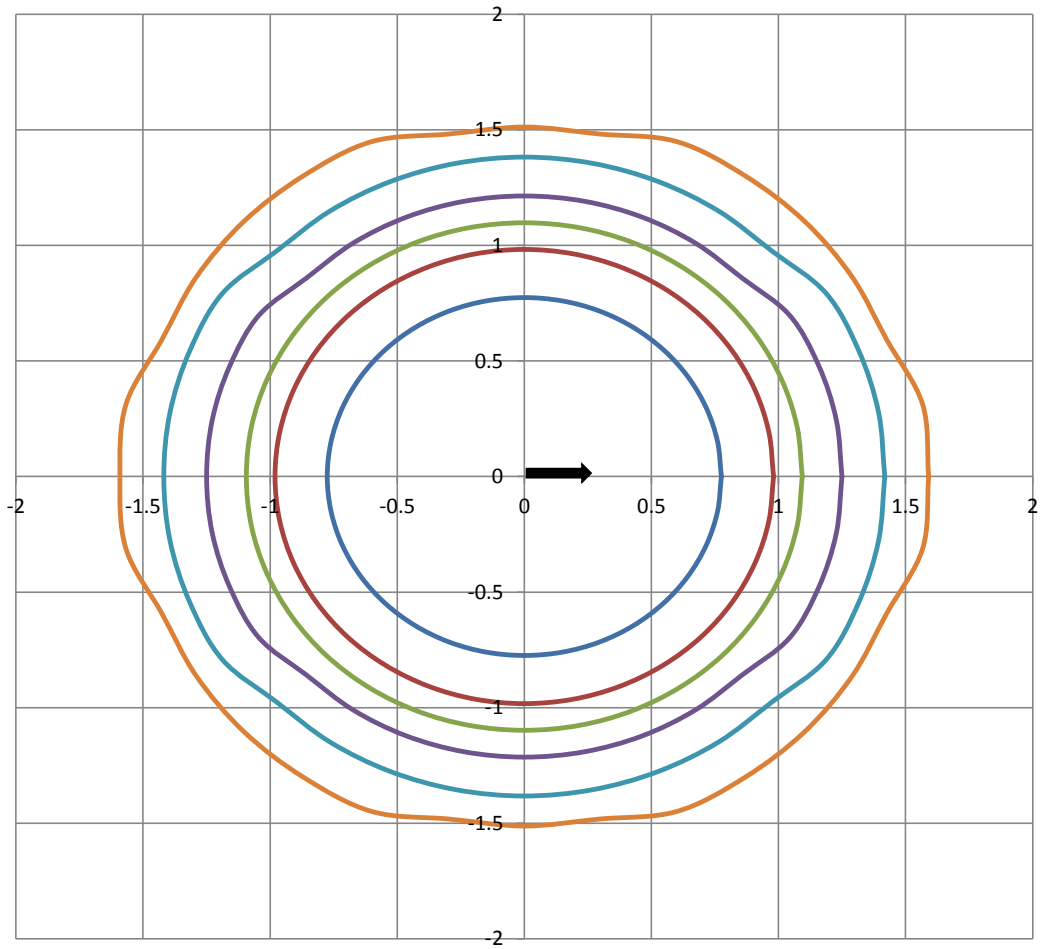
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2705 Candela
Central Cone Intensity:	2687 Candela
Beam Flux:	1965.0 Lumens
Beam Angle (0-180):	63.6 Degrees
Beam Angle (90-270):	64.0 Degrees
Field Angle (0-180):	92.2 Degrees
Field Angle (90-270):	92.0 Degrees





### ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

