



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  
**Jesco Lighting Group LLC**

15 Harbor Park Dr  
Port Washington, NY 11050  
United States

Catalog Number  
**RLET-P401FX-20-3590-M-WHWH**

Order Number  
11642482  
Test Number  
11642482.03

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.  
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.  
This report must not be used by the client to claim product certification, approval, or endorsement by  
NVLAP, NIST, or any agency of the Federal Government.



**Luminaire Description:** Formed steel housing, black formed aluminum heatsink, patterned specular internal reflector, clear plastic lens enclosure, white formed steel external reflector  
**Lamp:** One white LED  
**Mounting:** Recessed  
**Ballast/Driver:** One ERP ESM030W-0550-42

**Luminaire**



**Luminaire Characteristics**  
Luminous Diameter: 4.00 in.

**Summary of Results**

Total Luminaire Output:	1358 Lumens
Luminaire Efficacy:	61.8 lm/w
Maximum Candela:	2833 Candela

**Test Conditions**

Test Temperature:	24.9 °C
Voltage:	120.0 VAC
Current:	0.1861 A
Power:	21.96 W
Power Factor:	0.984
Frequency:	60 Hz
Current THD:	14.2 %

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



## Distribution - Goniophotometer

### Distribution Test Conditions

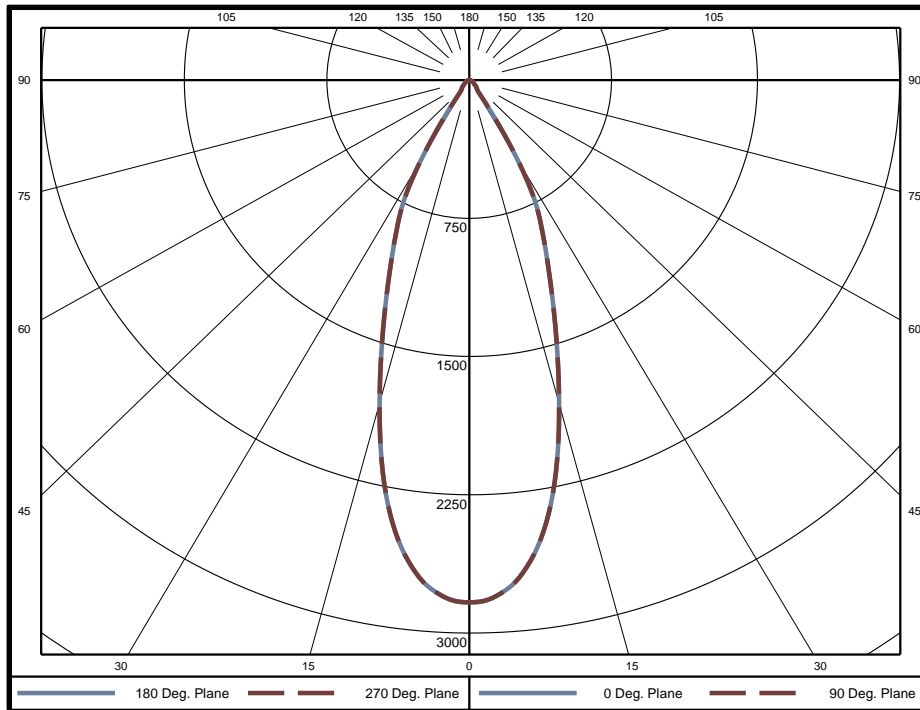
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.9 °C	120.0 VAC	0.1861 A	21.96 W	0.984	60 Hz	14.2 %

### Summary of Results

**Spacing Criteria**  
 0-180: 0.60  
 90-270: 0.60

**Total Lumen Output:** 1358 Lumens  
**Luminaire Efficacy:** 61.8 lm/w  
**Maximum Candela:** 2833 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	66.6	4.9%	60-65	10.0	0.7%	120-125	0	0.0%
5-10	183.4	13.5%	65-70	8.1	0.6%	125-130	0	0.0%
10-15	247.9	18.3%	70-75	6.2	0.5%	130-135	0	0.0%
15-20	249.6	18.4%	75-80	4.3	0.3%	135-140	0	0.0%
20-25	223.3	16.4%	80-85	2.4	0.2%	140-145	0	0.0%
25-30	183.5	13.5%	85-90	0.9	0.1%	145-150	0	0.0%
30-35	83.7	6.2%	90-95	0	0.0%	150-155	0	0.0%
35-40	24.8	1.8%	95-100	0	0.0%	155-160	0	0.0%
40-45	20.7	1.5%	100-105	0	0.0%	160-165	0	0.0%
45-50	16.8	1.2%	105-110	0	0.0%	165-170	0	0.0%
50-55	13.6	1.0%	110-115	0	0.0%	170-175	0	0.0%
55-60	11.8	0.9%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1263	93.0%
0-60	1326	97.6%
0-90	1358	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	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833	2833
	5	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735	2735
	10	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385	2385
	15	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808	1808
	20	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270	1270
	25	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897	897
	30	520	520	520	520	520	520	520	520	520	520	520	520	520	520	520	520
	35	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114	114
	40	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62	62
	45	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50	50
	50	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35
	55	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	60	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	65	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	70	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	75	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
80	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6	
85	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	
90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	
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)

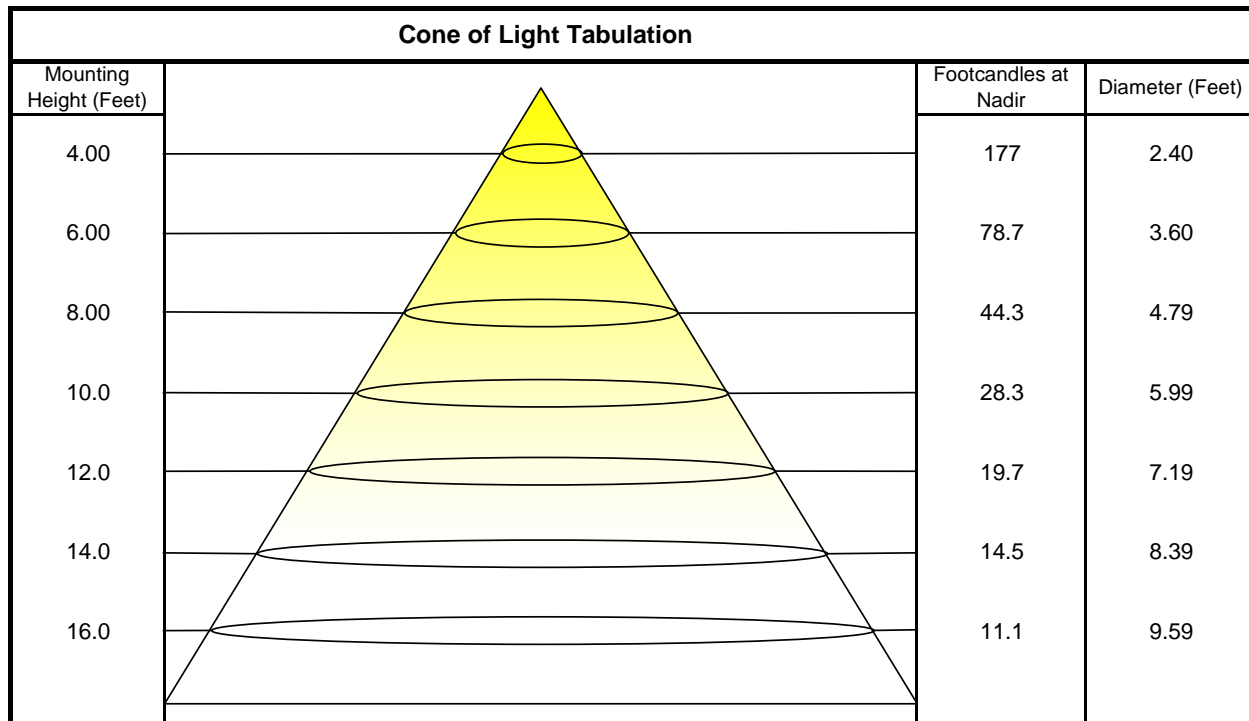
Vertical Angle (Degrees)	0	45	90	
	0	349400	349400	349400
	45	8700	8700	8700
	55	6083	6083	6083
	65	5342	5342	5342
	75	4701	4701	4701
	85	4054	4054	4054



### 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	1616	1616	1616	1616	1579	1579	1579	1579	1509	1509	1509	1444	1444	1444	1385	1385	1385	1358
1	1545	1509	1477	1448	1512	1480	1452	1425	1425	1403	1382	1375	1357	1341	1329	1315	1302	1278
2	1477	1415	1364	1321	1447	1392	1345	1306	1348	1310	1278	1308	1278	1251	1271	1247	1225	1203
3	1412	1332	1270	1221	1386	1313	1257	1211	1279	1231	1192	1246	1207	1173	1216	1183	1155	1135
4	1352	1259	1191	1139	1328	1244	1181	1132	1215	1161	1119	1189	1143	1106	1164	1125	1093	1074
5	1295	1193	1122	1069	1274	1181	1114	1065	1157	1100	1055	1135	1086	1046	1115	1072	1037	1019
6	1242	1134	1062	1010	1223	1124	1056	1006	1104	1044	1000	1086	1033	993	1069	1023	987	969
7	1192	1080	1008	957	1175	1072	1003	955	1055	994	950	1040	986	945	1025	977	940	923
8	1146	1032	960	910	1131	1024	956	909	1010	949	905	997	942	901	985	935	898	881
9	1102	987	916	868	1088	980	913	867	968	907	864	957	901	861	946	896	859	843
10	1061	946	876	830	1049	940	874	829	930	869	827	920	864	825	911	860	823	807

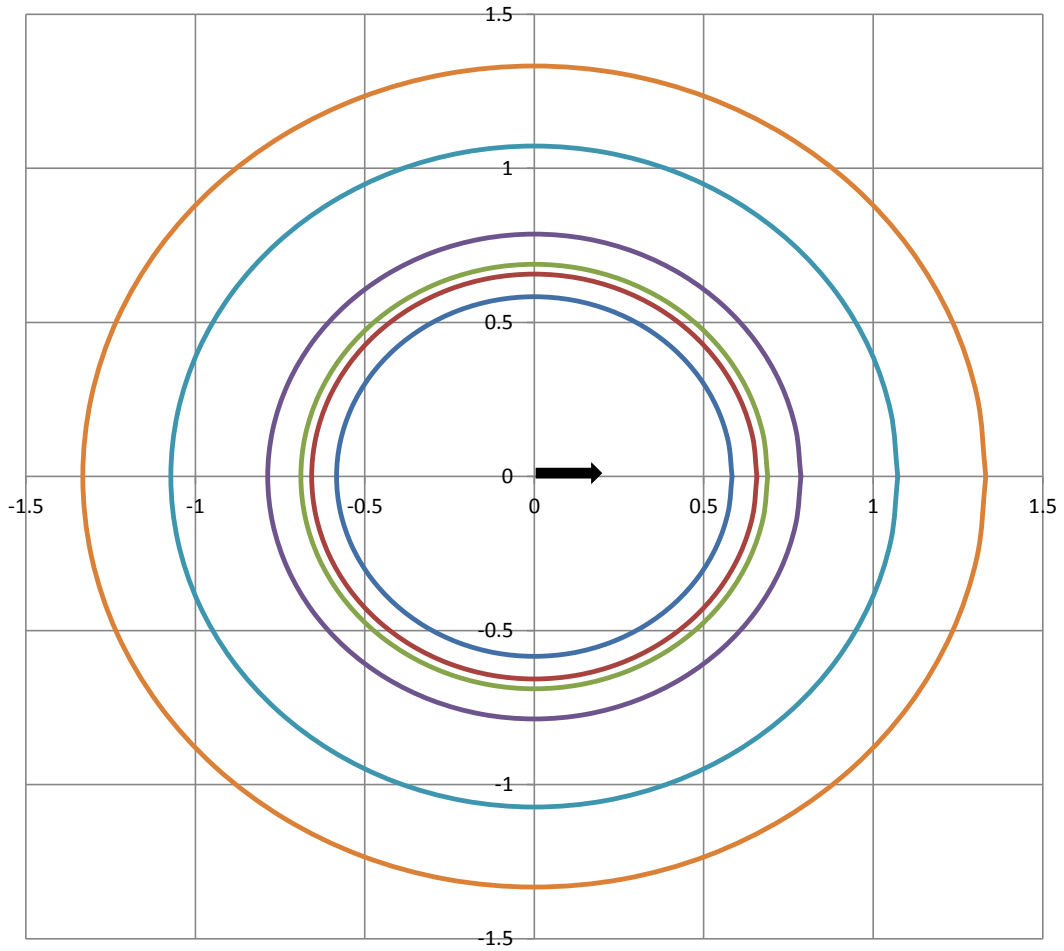
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	2833 Candela
Central Cone Intensity:	2800 Candela
Beam Flux:	672.1 Lumens
Beam Angle (0-180):	37.0 Degrees
Beam Angle (90-270):	37.0 Degrees
Field Angle (0-180):	64.8 Degrees
Field Angle (90-270):	64.8 Degrees





### ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

