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## Photometric 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  
**DL-AC-FLEX-27**

Order Number  
10761525  
Test Number  
1046651

Test Date

2015-05-04

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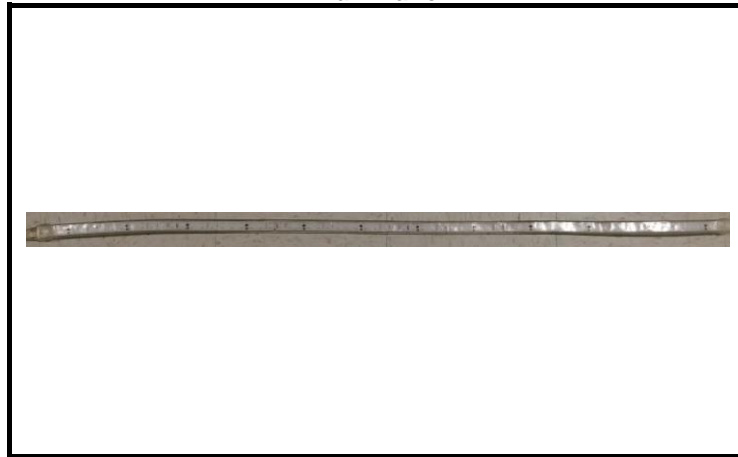
Laboratory results may not be representative of field performance  
Ballast factors have not been applied

Testing was performed in a 2-meter integrating sphere using the  $4\pi$  geometry method.  
Absorption correction was employed for Sphere measurement



**Luminaire Description:** LED strip  
**Lamp:** 72 white LEDs  
**Mounting:** Surface

**Luminaire**



**Luminaire Characteristics**

Luminous Length: 48.00 in.  
Luminous Width: 1.000 in.

**Summary of Results**

**Integrating Sphere**

Luminous Flux: 1465 Lumens  
Efficacy: 84.9 lm/w  
CCT: 2722 K  
CRI (Ra): 80.7

**Distribution**

Total Luminaire Output: 1415 Lumens  
Luminaire Efficacy: 83 lm/w  
Maximum Candela: 523 Candela

**Electrical Data at 120 VAC**

Test Temperature: 25.3 °C  
Voltage: 120.0 VAC  
Current: 0.1675 A  
Power: 17.25 W  
Power Factor: 0.858  
Frequency: 60 Hz  
Current THD: 59.7 %



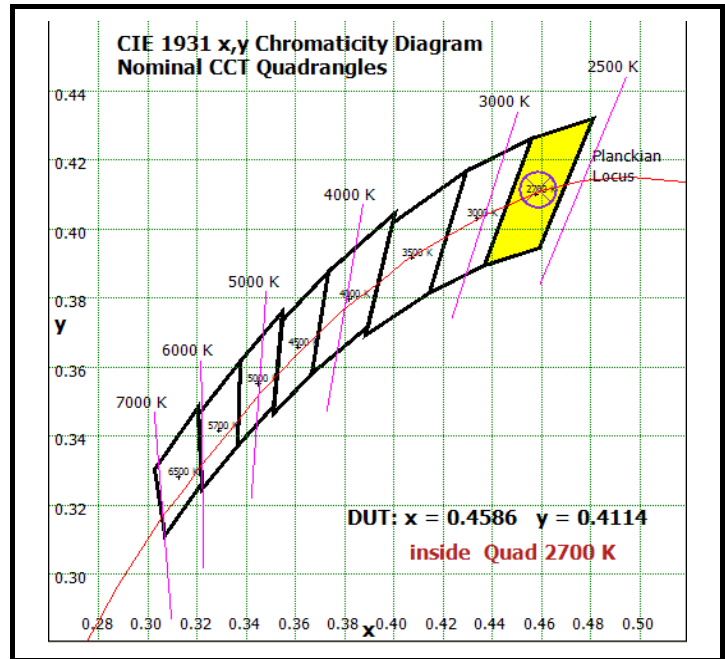
## Color Quality - Integrating Sphere

### Integrating Sphere Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.3 °C	120.0 VAC	0.1675 A	17.25 W	0.858	60 Hz	59.7 %

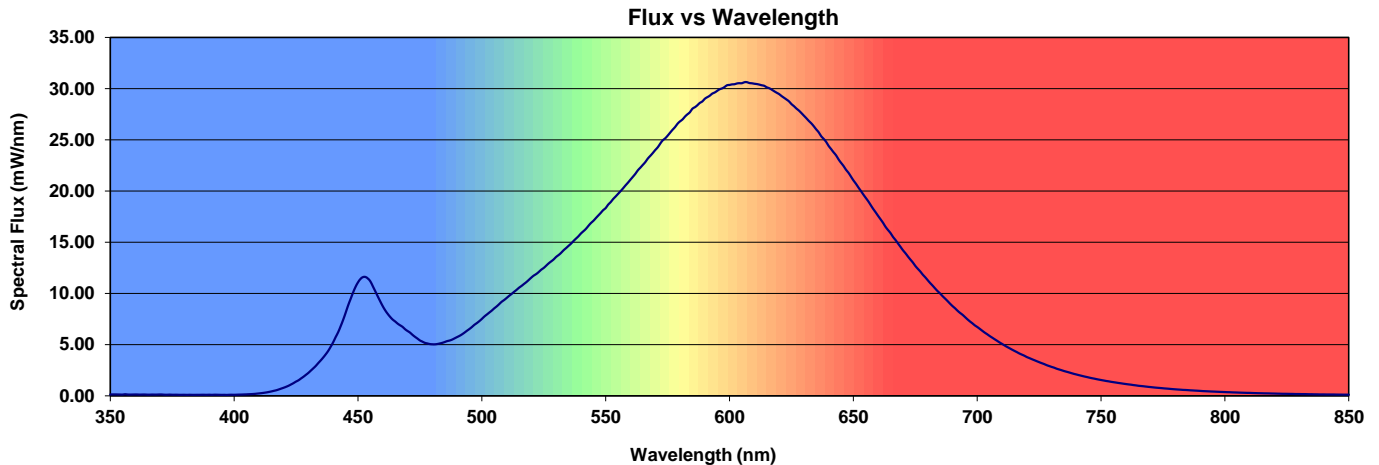
### Summary of Results

<b>Total Output:</b>	1465 Lumens
<b>Efficacy:</b>	84.9 lm/w
<b>CCT:</b>	2722 K
<b>CRI (Ra):</b>	80.7
<b>CRI (R9):</b>	9.1
Chromaticity (x):	0.4586
Chromaticity (y):	0.4114
Chromaticity (u):	0.2613
Chromaticity (v):	0.3516
Chromaticity (u'):	0.2613
Chromaticity (v'):	0.5275
Duv:	0.0001



### Color Rendering Index Detail

Ra (CRI)	R1	R2	R3	R4	R5	R6	R7	R8	R9	R10	R11	R12	R13	R14
80.7	78.3	89.3	96.8	76.5	77.5	85.7	82.8	58.5	9.1	75.0	72.9	67.5	80.4	98.5





## Distribution - Goniophotometer

### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.0 VAC	0.1658 A	17.05 W	0.857	60 Hz	60.0 %

### Summary of Results

#### Spacing Criteria

0-180: 1.24  
90-270: 1.24

#### Total Lumen Output:

1415 Lumens

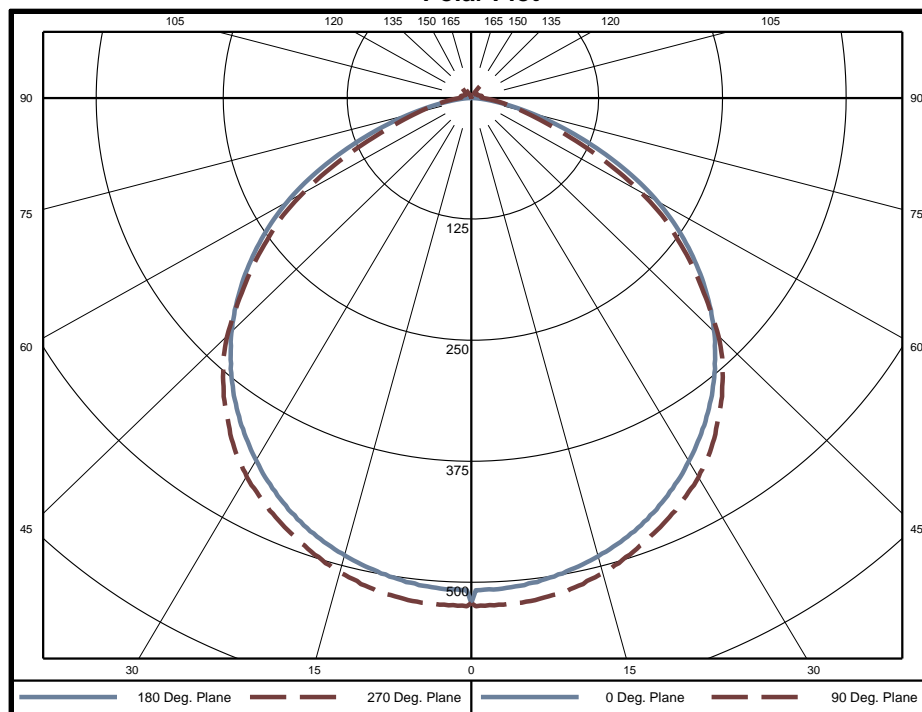
#### Luminaire Efficacy:

83.0 lm/w

#### Maximum Candela:

523 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	12.4	0.9%	60-65	85.1	6.0%	120-125	1.6	0.1%
5-10	36.9	2.6%	65-70	60.6	4.3%	125-130	1.6	0.1%
10-15	60.2	4.3%	70-75	38.3	2.7%	130-135	1.7	0.1%
15-20	81.7	5.8%	75-80	21.9	1.5%	135-140	2.2	0.2%
20-25	100.4	7.1%	80-85	11.4	0.8%	140-145	2.0	0.1%
25-30	116.0	8.2%	85-90	5.4	0.4%	145-150	0.8	0.1%
30-35	127.7	9.0%	90-95	3.2	0.2%	150-155	0.2	0.0%
35-40	134.7	9.5%	95-100	3.2	0.2%	155-160	0.1	0.0%
40-45	136.6	9.7%	100-105	2.9	0.2%	160-165	0.0	0.0%
45-50	132.4	9.4%	105-110	2.2	0.2%	165-170	0.0	0.0%
50-55	122.1	8.6%	110-115	1.8	0.1%	170-175	0	0.0%
55-60	106.5	7.5%	115-120	1.7	0.1%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	670	47.3%
0-60	1168	82.5%
0-90	1390	98.3%
90-180	25	1.8%



**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	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4	519.4
5	504.0	519.9	518.6	519.7	521.3	519.7	518.6	519.9	504.0	519.9	518.6	519.7	521.3	519.7	518.6	519.9
10	497.3	513.7	513.3	514.9	516.6	514.9	513.3	513.7	497.3	513.7	513.3	514.9	516.6	514.9	513.3	513.7
15	487.5	505.3	504.4	505.0	505.7	505.0	504.4	505.3	487.5	505.3	504.4	505.0	505.7	505.0	504.4	505.3
20	473.9	492.3	489.8	489.7	489.5	489.7	489.8	492.3	473.9	492.3	489.8	489.7	489.5	489.7	489.8	492.3
25	454.6	473.9	470.1	470.6	471.3	470.6	470.1	473.9	454.6	473.9	470.1	470.6	471.3	470.6	470.1	473.9
30	431.3	451.1	446.9	449.6	450.1	449.6	446.9	451.1	431.3	451.1	446.9	449.6	450.1	449.6	446.9	451.1
35	405.2	423.5	420.5	422.9	421.5	422.9	420.5	423.5	405.2	423.5	420.5	422.9	421.5	422.9	420.5	423.5
40	374.8	391.3	389.8	387.9	386.4	387.9	389.8	391.3	374.8	391.3	389.8	387.9	386.4	387.9	389.8	391.3
45	340.7	355.1	352.0	349.3	346.0	349.3	352.0	355.1	340.7	355.1	352.0	349.3	346.0	349.3	352.0	355.1
50	301.8	314.1	308.2	299.1	294.8	299.1	308.2	314.1	301.8	314.1	308.2	299.1	294.8	299.1	308.2	314.1
55	259.3	268.2	257.9	246.9	246.3	246.9	257.9	268.2	259.3	268.2	257.9	246.9	246.3	246.9	257.9	268.2
60	213.0	215.8	198.5	196.7	193.2	196.7	198.5	215.8	213.0	215.8	198.5	196.7	193.2	196.7	198.5	215.8
65	160.2	158.6	142.4	138.6	133.4	138.6	142.4	158.6	160.2	158.6	142.4	138.6	133.4	138.6	142.4	158.6
70	107.6	102.6	94.1	86.2	83.5	86.2	94.1	102.6	107.6	102.6	94.1	86.2	83.5	86.2	94.1	102.6
75	62.2	58.0	52.4	51.2	51.9	51.2	52.4	58.0	62.2	58.0	52.4	51.2	51.9	51.2	52.4	58.0
80	28.5	29.1	27.1	30.6	32.1	30.6	27.1	29.1	28.5	29.1	27.1	30.6	32.1	30.6	27.1	29.1
85	8.3	12.3	13.8	17.3	18.5	17.3	13.8	12.3	8.3	12.3	13.8	17.3	18.5	17.3	13.8	12.3
90	0.0	4.2	7.7	9.8	10.2	9.8	7.7	4.2	0.0	4.2	7.7	9.8	10.2	9.8	7.7	4.2
95	0.0	3.0	7.3	8.2	8.0	8.2	7.3	3.0	0.0	3.0	7.3	8.2	8.0	8.2	7.3	3.0
100	0.0	2.8	7.0	8.9	8.8	8.9	7.0	2.8	0.0	2.8	7.0	8.9	8.8	8.9	7.0	2.8
105	0.0	2.4	5.3	7.7	7.7	7.7	5.3	2.4	0.0	2.4	5.3	7.7	7.7	7.7	5.3	2.4
110	0.0	2.4	4.3	5.8	6.0	5.8	4.3	2.4	0.0	2.4	4.3	5.8	6.0	5.8	4.3	2.4
115	0.0	2.5	3.9	4.9	5.2	4.9	3.9	2.5	0.0	2.5	3.9	4.9	5.2	4.9	3.9	2.5
120	0.0	2.9	3.7	4.7	4.8	4.7	3.7	2.9	0.0	2.9	3.7	4.7	4.8	4.7	3.7	2.9
125	0.0	3.2	3.7	4.7	4.8	4.7	3.7	3.2	0.0	3.2	3.7	4.7	4.8	4.7	3.7	3.2
130	0.0	2.7	5.0	5.0	5.0	5.0	5.0	2.7	0.0	2.7	5.0	5.0	5.0	5.0	5.0	2.7
135	0.0	1.2	7.8	7.6	6.8	7.6	7.8	1.2	0.0	1.2	7.8	7.6	6.8	7.6	7.8	1.2
140	0.0	0.5	6.2	12.7	14.4	12.7	6.2	0.5	0.0	0.5	6.2	12.7	14.4	12.7	6.2	0.5
145	0.0	0.1	2.4	8.6	13.7	8.6	2.4	0.1	0.0	0.1	2.4	8.6	13.7	8.6	2.4	0.1
150	0.0	0.0	0.8	2.6	4.8	2.6	0.8	0.0	0.0	0.0	0.8	2.6	4.8	2.6	0.8	0.0
155	0.0	0.0	0.3	0.9	1.7	0.9	0.3	0.0	0.0	0.0	0.3	0.9	1.7	0.9	0.3	0.0
160	0.0	0.0	0.1	0.3	0.7	0.3	0.1	0.0	0.0	0.0	0.1	0.3	0.7	0.3	0.1	0.0
165	0.0	0.0	0.0	0.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	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/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

	0	45	90
0	#VALUE!	#VALUE!	#VALUE!
45	#VALUE!	#VALUE!	#VALUE!
55	#VALUE!	#VALUE!	#VALUE!
65	#VALUE!	#VALUE!	#VALUE!
75	#VALUE!	#VALUE!	#VALUE!
85	#VALUE!	#VALUE!	#VALUE!



### 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	1679	1679	1679	1679	1637	1637	1637	1637	1559	1559	1559	1487	1487	1487	1421	1421	1421	1390
1	1546	1483	1427	1377	1505	1449	1398	1352	1385	1343	1305	1326	1292	1261	1271	1244	1219	1189
2	1413	1303	1213	1136	1374	1275	1192	1121	1221	1152	1091	1172	1114	1063	1126	1078	1036	1005
3	1293	1151	1041	953	1256	1127	1025	943	1082	995	923	1040	966	904	1001	939	886	855
4	1186	1023	903	812	1152	1003	891	805	964	868	792	929	846	778	896	824	765	735
5	1092	916	793	702	1061	898	783	697	866	765	687	836	747	677	807	730	668	638
6	1009	825	702	614	980	810	694	610	783	680	603	757	665	596	733	652	588	559
7	935	748	627	542	910	736	621	540	712	609	534	690	597	529	669	586	523	495
8	871	683	565	484	847	672	560	482	652	550	477	632	540	473	614	531	469	442
9	813	627	513	436	792	617	508	434	599	500	430	583	492	427	567	484	423	398
10	762	578	468	395	743	570	464	393	554	457	390	540	450	388	526	444	385	360

### Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	32.5	5.11
6.00	14.4	7.66
8.00	8.12	10.2
10.0	5.19	12.8
12.0	3.61	15.3
14.0	2.65	17.9
16.0	2.03	20.4

### Cone of Light Plot

