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## Indoor Distribution Test Report

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

**Prepared For**  
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**Catalog Number**  
**2540**  
Order Number  
10776086  
Test Number  
1053180

Test Date

2015-05-07

Prepared By

Barry Mello Jr., Technician

Approved By

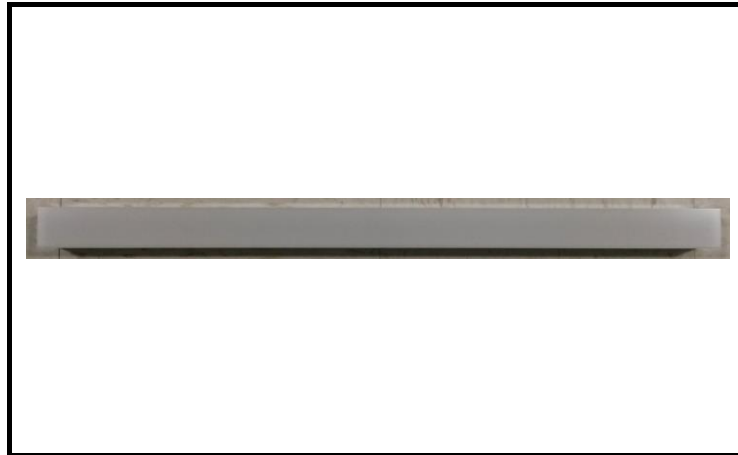
Kyle Spaziani, Project Handler

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Formed aluminum housing, frosted plastic enclosure  
**Lamp:** 36 white LEDs  
**Mounting:** Surface - Wall  
**Ballast/Driver:** One L.T.F. Electronic Transformer TA60WA12LED-0000

#### Luminaire



#### Luminaire Characteristics

Luminous Length: 0.75 in.  
Luminous Width: 24.25 in.  
Luminous Height: 1.50 in.

#### Summary of Results

Total Luminaire Output: 997.1 Lumens  
Luminaire Efficacy: 41.1 lm/w  
Maximum Candela: 217 Candela

#### Electrical Data

Test Temperature: 25.2 °C  
Voltage: 120.0 VAC  
Current: 0.2112 A  
Power: 24.28 W  
Power Factor: 0.958  
Frequency: 60 Hz  
Current THD: 29.7 %

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
25.2 °C	120.0 VAC	0.2112 A	24.28 W	0.958	60 Hz	29.7 %

### Summary of Results

#### Spacing Criteria

0-180: 3.04  
90-270: 1.21

#### Total Lumen Output:

997.1 Lumens

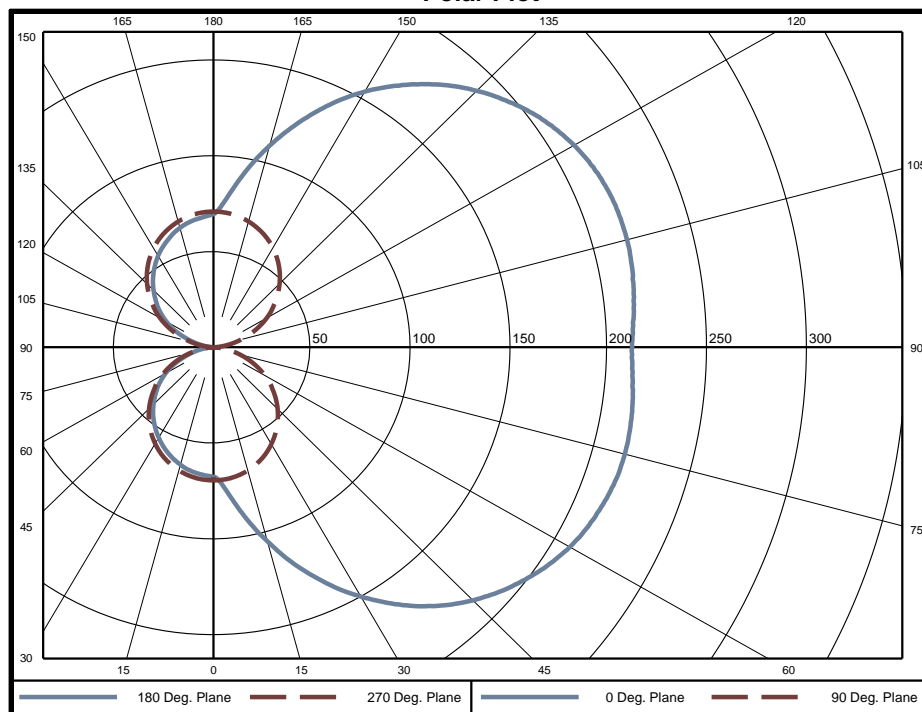
#### Luminaire Efficacy:

41.1 lm/w

#### Maximum Candela:

217 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.65	0.2%	60-65	40.03	4.0%	120-125	39.63	4.0%
5-10	5.11	0.5%	65-70	40.21	4.0%	125-130	37.99	3.8%
10-15	8.87	0.9%	70-75	39.71	4.0%	130-135	35.70	3.6%
15-20	12.86	1.3%	75-80	38.47	3.9%	135-140	32.84	3.3%
20-25	17.00	1.7%	80-85	36.97	3.7%	140-145	29.46	3.0%
25-30	21.14	2.1%	85-90	35.61	3.6%	145-150	25.68	2.6%
30-35	25.14	2.5%	90-95	35.54	3.6%	150-155	21.63	2.2%
35-40	28.90	2.9%	95-100	36.91	3.7%	155-160	17.40	1.7%
40-45	32.28	3.2%	100-105	38.53	3.9%	160-165	13.18	1.3%
45-50	35.15	3.5%	105-110	39.86	4.0%	165-170	9.10	0.9%
50-55	37.43	3.8%	110-115	40.57	4.1%	170-175	5.25	0.5%
55-60	39.12	3.9%	115-120	40.50	4.1%	175-180	1.69	0.2%

Zone	Lumens	% of Luminaire
0-40	121	12.1%
0-60	244	26.5%
0-90	496	49.7%
90-180	501	50.3%



**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	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0	68.0
5	75.1	75.1	72.2	69.2	69.2	67.2	66.9	66.8	66.7	66.8	66.9	67.2	69.2	69.2	72.2	75.1
10	89.3	87.9	80.6	71.8	68.2	66.1	65.6	65.5	65.6	65.5	65.6	66.1	68.2	71.8	80.6	87.9
15	104.6	102.3	90.4	75.0	66.7	64.5	63.9	63.8	63.7	63.8	63.9	64.5	66.7	75.0	90.4	102.3
20	120.7	116.8	100.3	78.2	64.6	62.3	61.7	61.6	61.4	61.6	61.7	62.3	64.6	78.2	100.3	116.8
25	136.0	130.8	110.0	81.3	61.9	59.7	59.1	58.9	58.6	58.9	59.1	59.7	61.9	81.3	110.0	130.8
30	150.5	143.8	118.9	83.9	58.7	56.5	55.9	55.7	55.2	55.7	55.9	56.5	58.7	83.9	118.9	143.8
35	163.9	155.6	127.0	86.0	55.0	52.9	52.2	52.1	51.6	52.1	52.2	52.9	55.0	86.0	127.0	155.6
40	176.3	166.4	134.0	87.4	50.8	48.9	48.4	48.2	47.7	48.2	48.4	48.9	50.8	87.4	134.0	166.4
45	186.7	175.7	139.9	88.1	46.2	44.6	44.1	43.9	43.4	43.9	44.1	44.6	46.2	88.1	139.9	175.7
50	195.4	183.4	144.6	88.0	41.3	39.8	39.5	39.3	38.8	39.3	39.5	39.8	41.3	88.0	144.6	183.4
55	202.7	189.7	148.0	87.1	36.2	35.1	34.8	34.6	34.1	34.6	34.8	35.1	36.2	87.1	148.0	189.7
60	208.6	194.4	150.4	85.8	30.8	29.8	29.6	29.4	28.9	29.4	29.6	29.8	30.8	85.8	150.4	194.4
65	212.5	197.6	151.3	84.1	25.0	24.2	24.2	24.1	23.4	24.1	24.2	24.2	25.0	84.1	151.3	197.6
70	214.9	199.2	151.0	80.8	19.0	18.6	18.7	18.0	17.2	18.0	18.7	18.6	19.0	80.8	151.0	199.2
75	216.0	199.4	149.5	77.5	13.2	12.9	12.6	12.1	11.6	12.1	12.6	12.9	13.2	77.5	149.5	199.4
80	215.2	198.2	147.3	73.4	7.6	7.8	7.1	7.2	6.9	7.2	7.1	7.8	7.6	73.4	147.3	198.2
85	213.4	196.0	144.5	69.8	2.8	2.9	2.8	2.9	2.7	2.9	2.8	2.9	2.8	69.8	144.5	196.0
90	212.3	195.0	143.2	68.2	0.2	0.7	0.4	0.3	0.1	0.3	0.4	0.7	0.2	68.2	143.2	195.0
95	214.0	197.0	145.5	70.3	2.7	2.4	1.8	1.5	1.6	1.5	1.8	2.4	2.7	70.3	145.5	197.0
100	216.0	199.5	148.6	74.3	7.7	7.2	6.0	5.4	5.6	5.4	6.0	7.2	7.7	74.3	148.6	199.5
105	217.1	201.0	151.2	79.1	13.5	12.5	11.4	10.5	10.6	10.5	11.4	12.5	13.5	79.1	151.2	201.0
110	216.9	201.3	153.3	82.7	19.6	18.3	17.6	16.5	16.4	16.5	17.6	18.3	19.6	82.7	153.3	201.3
115	215.0	200.1	154.0	85.9	25.8	24.2	23.3	22.7	22.8	22.7	23.3	24.2	25.8	85.9	154.0	200.1
120	211.1	196.9	153.2	88.3	31.8	29.9	28.9	28.3	28.4	28.3	28.9	29.9	31.8	88.3	153.2	196.9
125	205.5	192.3	151.0	90.0	37.3	35.4	34.3	33.6	33.7	33.6	34.3	35.4	37.3	90.0	151.0	192.3
130	198.2	185.9	147.5	91.1	42.6	40.4	39.1	38.4	38.6	38.4	39.1	40.4	42.6	91.1	147.5	185.9
135	189.2	178.0	143.0	91.4	47.7	45.3	44.0	43.3	43.4	43.3	44.0	45.3	47.7	91.4	143.0	178.0
140	179.0	168.7	137.3	91.1	52.3	49.8	48.5	47.7	47.9	47.7	48.5	49.8	52.3	91.1	137.3	168.7
145	167.2	158.1	130.4	89.6	56.5	53.9	52.7	51.9	52.0	51.9	52.7	53.9	56.5	89.6	130.4	158.1
150	154.3	146.3	122.3	87.7	60.2	57.6	56.5	55.8	55.9	55.8	56.5	57.6	60.2	87.7	122.3	146.3
155	139.8	133.3	113.5	85.0	63.4	60.7	59.7	59.1	59.2	59.1	59.7	60.7	63.4	85.0	113.5	133.3
160	124.3	119.2	103.6	81.7	66.0	63.4	62.5	62.0	62.3	62.0	62.5	63.4	66.0	81.7	103.6	119.2
165	108.6	104.8	93.5	78.3	68.1	65.7	64.9	64.4	64.8	64.4	64.9	65.7	68.1	78.3	93.5	104.8
170	93.1	90.4	83.8	74.9	69.6	67.5	66.7	66.4	66.7	66.4	66.7	67.5	69.6	74.9	83.8	90.4
175	78.3	77.4	74.9	71.7	70.6	68.8	68.3	68.0	68.0	68.0	68.3	68.8	70.6	71.7	74.9	77.4
180	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8	69.8

**Average Luminance (cd/m<sup>2</sup>)**  
Horizontal Angle (Degrees)

	0	45	90
0	5793	5793	5793
45	7501	6861	5248
55	7810	7137	4944
65	8103	7395	4445
75	8401	7644	3518
85	8746	8001	1590



### 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	1068	1068	1068	1068	984	984	984	984	829	829	829	687	687	687	557	557	557	496
1	938	879	827	780	859	808	761	720	673	638	606	549	523	499	435	416	398	343
2	839	747	671	607	766	685	618	561	569	517	473	461	422	388	362	333	308	259
3	757	645	558	489	689	591	514	452	490	430	381	396	350	312	309	275	246	202
4	687	563	472	403	625	516	435	373	428	364	314	345	297	257	269	232	202	163
5	627	496	405	337	570	455	374	313	378	313	264	305	255	216	238	200	169	135
6	575	441	351	287	523	405	325	266	337	273	225	273	223	184	213	175	144	114
7	529	395	308	247	482	363	285	230	303	240	194	246	196	159	193	154	125	97
8	490	356	273	215	446	328	252	200	274	213	169	223	175	139	175	138	109	84
9	455	324	243	189	415	298	225	176	250	191	149	204	157	123	161	124	97	74
10	424	295	218	167	387	272	203	156	229	172	132	188	142	109	149	112	86	66

### Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	4.25	7.48
6.00	1.89	11.2
8.00	1.06	15.0
10.0	0.680	18.7
12.0	0.472	22.4
14.0	0.347	26.2
16.0	0.266	29.9

### Cone of Light Plot

