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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
2710
Order Number
10776086
Test Number
1053181

Test Date

2015-05-05

Prepared By

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Approved By

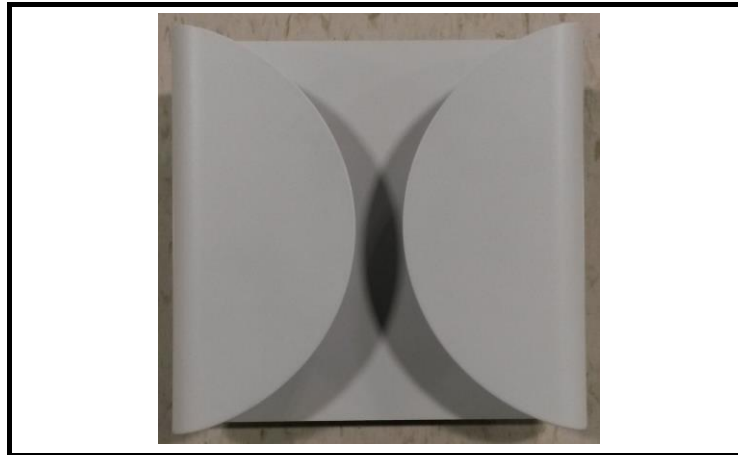
Kyle Spaziani, Project Handler

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: 30 white LEDs
Mounting: Surface - Wall
Ballast/Driver: One L.T.F. Electronic Transformer TA60WA12LED-0000

Luminaire



Luminaire Characteristics

Luminous Length: 1.25 in.
Luminous Width: 7.750 in.
Luminous Height: 8.00 in.

Summary of Results

Total Luminaire Output: 389.2 Lumens
Luminaire Efficacy: 19.4 lm/w
Maximum Candela: 81 Candela

Electrical Data

Test Temperature: 25.1 °C
Voltage: 120.0 VAC
Current: 0.1750 A
Power: 20.11 W
Power Factor: 0.958
Frequency: 60 Hz
Current THD: 29.9 %

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
25.1 °C	120.0 VAC	0.1750 A	20.11 W	0.958	60 Hz	29.9 %

Summary of Results

Spacing Criteria

0-180: 1.29
90-270: 0.63

Total Lumen Output:

389.2 Lumens

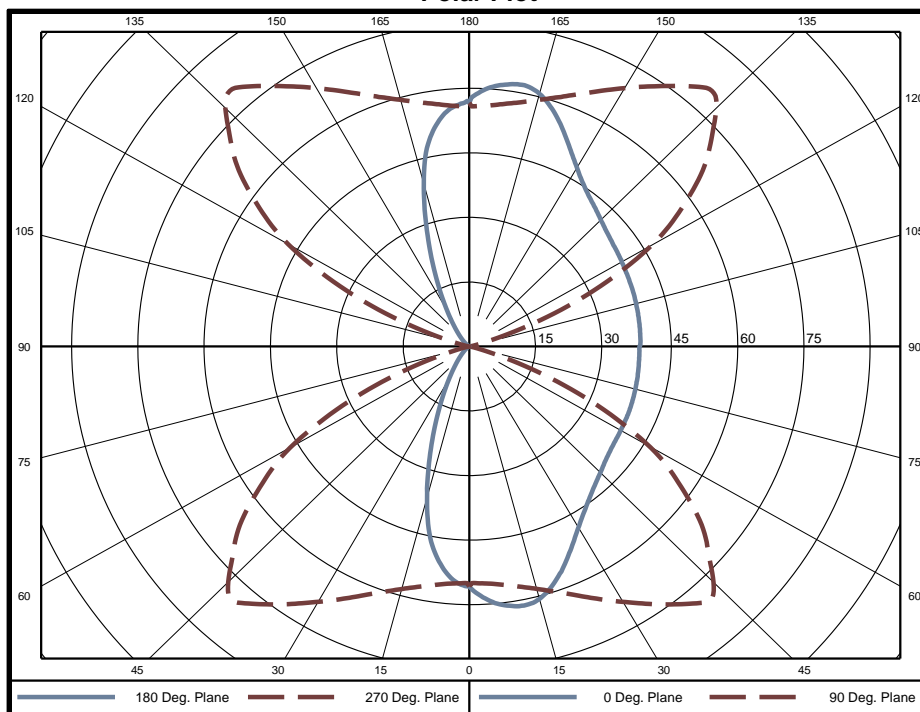
Luminaire Efficacy:

19.4 lm/w

Maximum Candela:

81 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	1.35	0.3%	60-65	12.94	3.3%	120-125	13.85	3.6%
5-10	4.04	1.0%	65-70	11.92	3.1%	125-130	14.33	3.7%
10-15	6.58	1.7%	70-75	10.99	2.8%	130-135	14.58	3.7%
15-20	8.74	2.2%	75-80	10.61	2.7%	135-140	14.52	3.7%
20-25	10.44	2.7%	80-85	10.53	2.7%	140-145	13.84	3.6%
25-30	11.75	3.0%	85-90	10.52	2.7%	145-150	12.94	3.3%
30-35	12.80	3.3%	90-95	10.63	2.7%	150-155	11.88	3.1%
35-40	13.70	3.5%	95-100	10.63	2.7%	155-160	10.56	2.7%
40-45	14.37	3.7%	100-105	10.69	2.7%	160-165	8.86	2.3%
45-50	14.42	3.7%	105-110	11.08	2.8%	165-170	6.68	1.7%
50-55	14.17	3.6%	110-115	12.03	3.1%	170-175	4.10	1.1%
55-60	13.71	3.5%	115-120	13.06	3.4%	175-180	1.37	0.4%

Zone	Lumens	% of Luminaire
0-40	69	17.8%
0-60	114	32.4%
0-90	194	49.7%
90-180	196	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	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77	55.77
5	59.59	59.74	59.10	57.38	55.33	55.16	54.77	54.07	53.57	54.07	54.77	55.16	55.33	57.38	59.10	59.74
10	61.31	61.61	61.28	59.70	56.46	55.10	51.97	49.34	47.77	49.34	51.97	55.10	56.46	59.70	61.28	61.61
15	60.73	61.81	62.82	62.28	58.31	54.39	46.89	40.62	37.73	40.62	46.89	54.39	58.31	62.28	62.82	61.81
20	57.37	59.59	63.62	65.21	60.87	52.64	38.42	29.58	26.41	29.58	38.42	52.64	60.87	65.21	63.62	59.59
25	52.94	55.85	63.32	68.50	64.45	49.07	28.98	19.79	17.11	19.79	28.98	49.07	64.45	68.50	63.32	55.85
30	48.73	51.93	62.09	71.80	68.51	42.46	20.03	12.65	10.62	12.65	20.03	42.46	68.51	71.80	62.09	51.93
35	45.54	48.52	60.27	74.72	73.13	34.16	13.15	7.84	6.34	7.84	13.15	34.16	73.13	74.72	60.27	48.52
40	43.15	45.84	57.88	76.26	77.97	25.52	8.22	4.68	3.81	4.68	8.22	25.52	77.97	76.26	57.88	45.84
45	41.50	43.82	55.07	75.29	77.46	17.75	4.94	2.75	2.21	2.75	4.94	17.75	77.46	75.29	55.07	43.82
50	40.17	42.39	52.15	73.10	69.21	11.01	2.81	1.58	1.26	1.58	2.81	11.01	69.21	73.10	52.15	42.39
55	39.44	41.44	49.53	70.26	58.84	6.05	1.56	0.85	0.62	0.85	1.56	6.05	58.84	70.26	49.53	41.44
60	39.09	40.68	47.26	67.19	46.99	2.99	0.76	0.32	0.19	0.32	0.76	2.99	46.99	67.19	47.26	40.68
65	38.92	40.18	45.56	63.63	30.20	1.25	0.22	0.00	0.00	0.00	0.22	1.25	30.20	63.63	45.56	40.18
70	38.67	39.92	44.12	60.02	13.27	0.36	0.00	0.00	0.00	0.00	0.00	0.36	13.27	60.02	44.12	39.92
75	38.44	39.72	43.00	56.96	2.65	0.00	0.00	0.00	0.00	0.00	0.00	0.00	2.65	56.96	43.00	39.72
80	38.27	39.51	42.17	55.07	0.38	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.38	55.07	42.17	39.51
85	38.13	39.39	41.67	53.99	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.99	41.67	39.39
90	38.07	39.38	41.48	53.63	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	53.63	41.48	39.38
95	38.35	39.78	42.15	54.60	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.02	54.60	42.15	39.78
100	38.50	39.86	42.49	55.55	0.46	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.46	55.55	42.49	39.86
105	38.65	40.03	43.22	57.39	2.90	0.02	0.00	0.00	0.00	0.00	0.00	0.02	2.90	57.39	43.22	40.03
110	38.84	40.21	44.31	60.41	13.79	0.37	0.00	0.00	0.00	0.00	0.00	0.37	13.79	60.41	44.31	40.21
115	39.05	40.48	45.67	64.14	30.83	1.27	0.23	0.01	0.00	0.01	0.23	1.27	30.83	64.14	45.67	40.48
120	39.39	41.07	47.48	67.83	47.52	3.08	0.77	0.34	0.27	0.34	0.77	3.08	47.52	67.83	47.48	41.07
125	39.85	41.86	49.79	71.12	59.75	6.25	1.57	0.86	0.74	0.86	1.57	6.25	59.75	71.12	49.79	41.86
130	40.54	42.78	52.45	73.98	70.03	11.35	2.87	1.58	1.39	1.58	2.87	11.35	70.03	73.98	52.45	42.78
135	41.63	44.13	55.31	76.18	78.40	18.44	4.99	2.75	2.45	2.75	4.99	18.44	78.40	76.18	55.31	44.13
140	43.16	46.04	58.11	77.13	78.82	26.57	8.34	4.70	4.12	4.70	8.34	26.57	78.82	77.13	58.11	46.04
145	45.09	48.56	60.43	75.57	73.84	35.42	13.29	7.85	6.93	7.85	13.29	35.42	73.84	75.57	60.43	48.56
150	48.09	52.04	62.37	72.72	69.29	43.77	20.45	12.72	11.58	12.72	20.45	43.77	69.29	72.72	62.37	52.04
155	52.23	55.90	63.63	69.21	65.20	50.13	29.55	20.06	18.73	20.06	29.55	50.13	65.20	69.21	63.63	55.90
160	56.97	59.67	64.08	65.90	61.84	53.60	39.28	30.11	28.67	30.11	39.28	53.60	61.84	65.90	64.08	59.67
165	60.76	62.14	63.37	63.04	59.30	55.30	47.77	41.35	40.59	41.35	47.77	55.30	59.30	63.04	63.37	62.14
170	61.89	62.02	61.76	60.50	57.47	55.95	52.66	50.02	50.10	50.02	52.66	55.95	57.47	60.50	61.76	62.02
175	60.58	60.29	59.56	58.29	56.26	56.03	55.32	54.71	55.14	54.71	55.32	56.03	56.26	58.29	59.56	60.29
180	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66	56.66

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

	0	45	90
0	8922	8922	8922
45	1269	1992	8625
55	1085	1624	6633
65	1001	1406	3558
75	955	1290	338
85	944	1252	0



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	417	417	417	417	384	384	384	384	324	324	324	268	268	268	217	217	217	194
1	372	351	333	316	341	323	307	292	271	259	248	223	214	206	178	172	166	145
2	336	303	275	252	307	279	255	234	233	215	200	192	178	166	153	143	135	116
3	305	264	232	207	278	243	215	193	204	183	165	167	151	138	134	122	112	95
4	278	232	199	174	254	214	185	162	180	157	139	148	131	117	119	106	95	80
5	255	206	173	148	233	190	160	138	160	137	119	132	114	100	106	93	82	69
6	234	185	151	127	214	171	141	119	144	121	103	119	101	87	96	82	71	60
7	216	166	134	111	198	154	125	104	130	107	90	108	90	77	88	74	63	53
8	201	151	119	98	184	140	111	92	119	96	80	99	81	68	80	67	56	47
9	187	137	107	87	171	127	100	82	109	87	71	91	73	61	74	61	51	42
10	174	126	97	78	160	117	91	73	100	79	64	84	67	55	69	56	46	38

Cone of Light Tabulation

Mounting Height	Footcandles at Nadir	Diameter (Feet)
4.00	3.49	4.81
6.00	1.55	7.21
8.00	0.871	9.62
10.0	0.558	12.0
12.0	0.387	14.4
14.0	0.285	16.8
16.0	0.218	19.2

Cone of Light Plot

