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Indoor Distribution Test Report

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

Prepared For
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PO Box 394
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United States

Catalog Number
2702
Order Number
11526201
Test Number
11526201.10

Test Date

2016-11-14

Prepared By

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Approved By

Edward Bush, Project Handler

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Formed aluminum housing, frosted lens, pivoting head
Mounting: Surface – Wall
Ballast/Driver: ERP EBR010U-0250-42

Luminaire



Luminaire Characteristics

Luminous Length: 22.00 in.
Luminous Width: 3.000 in.

Summary of Results

Total Luminaire Output:	1169 Lumens
Luminaire Efficacy:	57.2 lm/w
Maximum Candela:	406 Candela

Test Conditions

Test Temperature:	24.7 °C
Voltage:	120.0 VAC
Current:	0.1720 A
Power:	20.43 W
Power Factor:	0.990
Frequency:	60 Hz
Current THD:	12.2 %

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
24.7 °C	120.0 VAC	0.1720 A	20.43 W	0.990	60 Hz	12.2 %

Summary of Results

Spacing Criteria

0-180: 17.36

90-270: 0.01

Total Lumen Output:

1169 Lumens

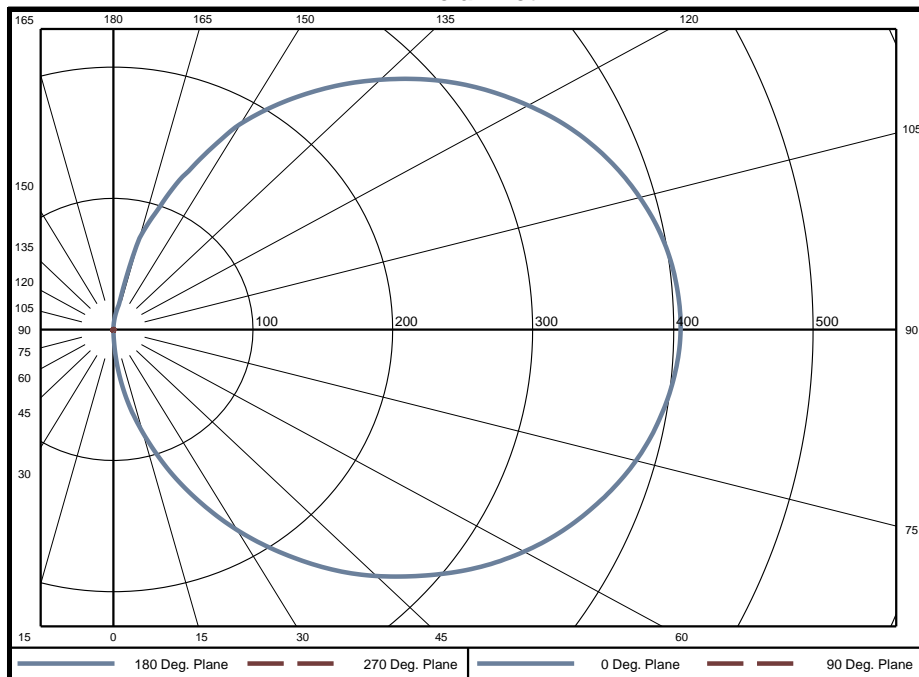
Luminaire Efficacy:

57.2 lm/w

Maximum Candela:

406 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0.12	0.0%	60-65	51.98	4.4%	120-125	46.59	4.0%
5-10	0.95	0.1%	65-70	56.83	4.9%	125-130	40.79	3.5%
10-15	2.64	0.2%	70-75	60.97	5.2%	130-135	34.66	3.0%
15-20	5.18	0.4%	75-80	64.22	5.5%	135-140	28.44	2.4%
20-25	8.58	0.7%	80-85	66.44	5.7%	140-145	22.07	1.9%
25-30	12.75	1.1%	85-90	67.62	5.8%	145-150	15.94	1.4%
30-35	17.60	1.5%	90-95	67.65	5.8%	150-155	10.65	0.9%
35-40	22.96	2.0%	95-100	66.55	5.7%	155-160	6.27	0.5%
40-45	28.74	2.5%	100-105	64.35	5.5%	160-165	3.24	0.3%
45-50	34.71	3.0%	105-110	61.10	5.2%	165-170	1.28	0.1%
50-55	40.69	3.5%	110-115	56.99	4.9%	170-175	0.36	0.0%
55-60	46.53	4.0%	115-120	52.07	4.5%	175-180	0.05	0.0%

Zone	Lumens	% of Luminaire
0-40	71	6.1%
0-60	221	18.9%
0-90	590	50.4%
90-180	579	49.5%



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	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2	1.2
	5	23.3	24.6	17.7	8.1	0.9	0.8	0.7	0.6	0.4	0.6	0.7	0.8	0.9	8.1	17.7
	10	52.8	51.8	38.6	19.3	0.9	0.7	0.6	0.4	0.3	0.4	0.6	0.7	0.9	19.3	38.6
	15	81.4	79.0	59.4	30.6	0.8	0.6	0.5	0.4	0.3	0.4	0.5	0.6	0.8	30.6	59.4
	20	112.5	107.9	79.8	41.4	0.8	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.8	41.4	79.8
	25	144.0	136.8	101.1	52.0	0.7	0.5	0.4	0.3	0.3	0.3	0.4	0.5	0.7	52.0	101.1
	30	176.1	165.6	122.1	62.4	0.7	0.4	0.3	0.3	0.3	0.3	0.4	0.7	62.4	122.1	165.6
	35	207.0	193.9	142.7	71.8	0.7	0.4	0.3	0.3	0.4	0.3	0.3	0.4	0.7	71.8	142.7
	40	237.5	221.2	162.3	81.4	0.7	0.4	0.3	0.4	0.4	0.4	0.3	0.4	0.7	81.4	162.3
	45	265.7	247.3	181.4	90.7	0.7	0.4	0.4	0.4	0.5	0.4	0.4	0.4	0.7	90.7	181.4
	50	291.7	271.6	199.1	99.2	0.7	0.4	0.5	0.5	0.6	0.5	0.5	0.4	0.7	99.2	199.1
	55	316.8	293.9	215.4	107.1	0.6	0.4	0.5	0.6	0.8	0.6	0.5	0.4	0.6	107.1	215.4
	60	338.9	314.1	230.3	114.5	0.6	0.4	0.6	0.7	0.9	0.7	0.6	0.4	0.6	114.5	230.3
	65	357.9	331.8	243.2	120.7	0.6	0.5	0.6	0.8	0.9	0.8	0.6	0.5	0.6	120.7	243.2
	70	373.8	346.6	254.1	126.0	0.7	0.5	0.6	0.8	0.9	0.8	0.6	0.5	0.7	126.0	254.1
	75	387.0	358.4	262.9	130.3	0.6	0.4	0.6	0.7	0.8	0.7	0.6	0.4	0.6	130.3	262.9
	80	396.5	367.2	269.3	133.4	0.6	0.4	0.5	0.6	0.7	0.6	0.5	0.4	0.6	133.4	269.3
	85	403.0	372.2	273.1	135.3	0.6	0.4	0.4	0.5	0.6	0.5	0.4	0.4	0.6	135.3	273.1
	90	405.8	374.2	274.5	136.1	0.6	0.3	0.4	0.4	0.4	0.4	0.3	0.6	136.1	274.5	374.2
	95	404.2	372.5	273.4	135.5	0.6	0.3	0.3	0.4	0.3	0.4	0.3	0.6	135.5	273.4	372.5
	100	399.0	367.6	269.9	133.8	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.6	133.8	269.9	367.6
	105	389.8	358.8	263.6	130.8	0.6	0.3	0.2	0.3	0.3	0.3	0.2	0.6	130.8	263.6	358.8
	110	377.4	347.1	255.1	126.7	0.6	0.3	0.2	0.2	0.2	0.2	0.3	0.6	126.7	255.1	347.1
	115	361.7	332.3	244.2	121.3	0.6	0.3	0.2	0.2	0.2	0.2	0.3	0.6	121.3	244.2	332.3
	120	342.2	313.9	230.7	114.7	0.5	0.3	0.2	0.2	0.2	0.2	0.3	0.5	114.7	230.7	313.9
	125	320.6	294.0	216.2	107.6	0.5	0.3	0.2	0.2	0.3	0.2	0.2	0.5	107.6	216.2	294.0
	130	296.3	271.2	199.2	99.4	0.5	0.3	0.2	0.2	0.3	0.2	0.2	0.5	99.4	199.2	271.2
	135	269.4	246.4	179.7	89.0	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.3	89.0	179.7	246.4
	140	241.2	220.0	158.8	73.8	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.3	73.8	158.8	220.0
	145	211.7	187.7	127.7	57.8	0.4	0.3	0.2	0.2	0.3	0.2	0.2	0.3	57.8	127.7	187.7
	150	180.6	154.9	95.7	42.7	0.4	0.3	0.3	0.2	0.3	0.2	0.3	0.3	42.7	95.7	154.9
	155	140.2	114.4	69.1	29.9	0.4	0.4	0.3	0.2	0.3	0.2	0.3	0.4	29.9	69.1	114.4
	160	103.4	71.2	46.0	21.9	0.4	0.4	0.3	0.2	0.2	0.2	0.3	0.4	21.9	46.0	71.2
	165	72.2	40.1	29.1	16.3	0.4	0.4	0.4	0.2	0.2	0.2	0.4	0.4	16.3	29.1	40.1
	170	16.2	18.3	16.7	10.6	0.3	0.4	0.5	0.2	0.2	0.2	0.5	0.4	10.6	16.7	18.3
	175	7.4	6.4	8.0	4.6	0.3	0.3	0.4	0.2	0.2	0.2	0.4	0.3	4.6	8.0	6.4
	180	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3

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

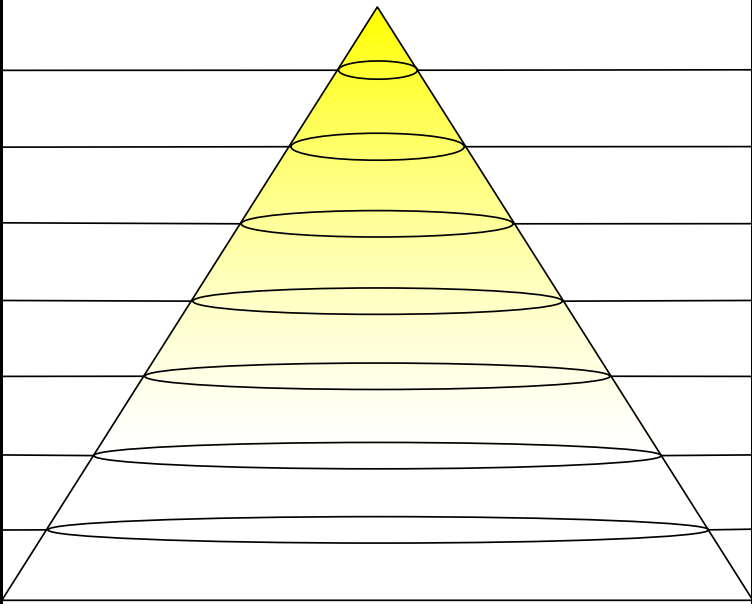
Vertical Angle (Degrees)	0	45	90
	0	28	28
	45	8826	6024
	55	12970	8818
	65	19890	13520
	75	35110	23850
	85	108600	73580



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	1253	1253	1253	1253	1157	1157	1157	1157	977	977	977	812	812	812	661	661	661	589
1	1075	995	923	858	981	911	847	790	753	704	659	608	571	536	475	447	421	354
2	951	831	731	647	864	758	669	594	621	552	492	495	442	396	379	339	303	244
3	852	708	596	508	771	645	546	466	526	448	384	416	356	305	314	268	229	176
4	769	613	498	410	696	558	455	376	454	373	308	358	295	243	269	220	179	133
5	700	536	422	338	632	488	386	309	398	316	253	313	249	198	235	185	145	103
6	640	474	363	283	579	432	332	259	352	272	212	278	214	165	208	158	119	82
7	588	423	316	241	532	386	289	221	315	237	180	249	186	140	187	138	100	67
8	543	380	278	207	492	347	254	190	284	208	154	225	164	120	169	121	85	55
9	504	344	246	180	457	314	225	165	258	185	134	205	146	104	155	108	74	46
10	469	313	220	158	426	286	201	144	236	165	117	188	131	90	142	97	64	39

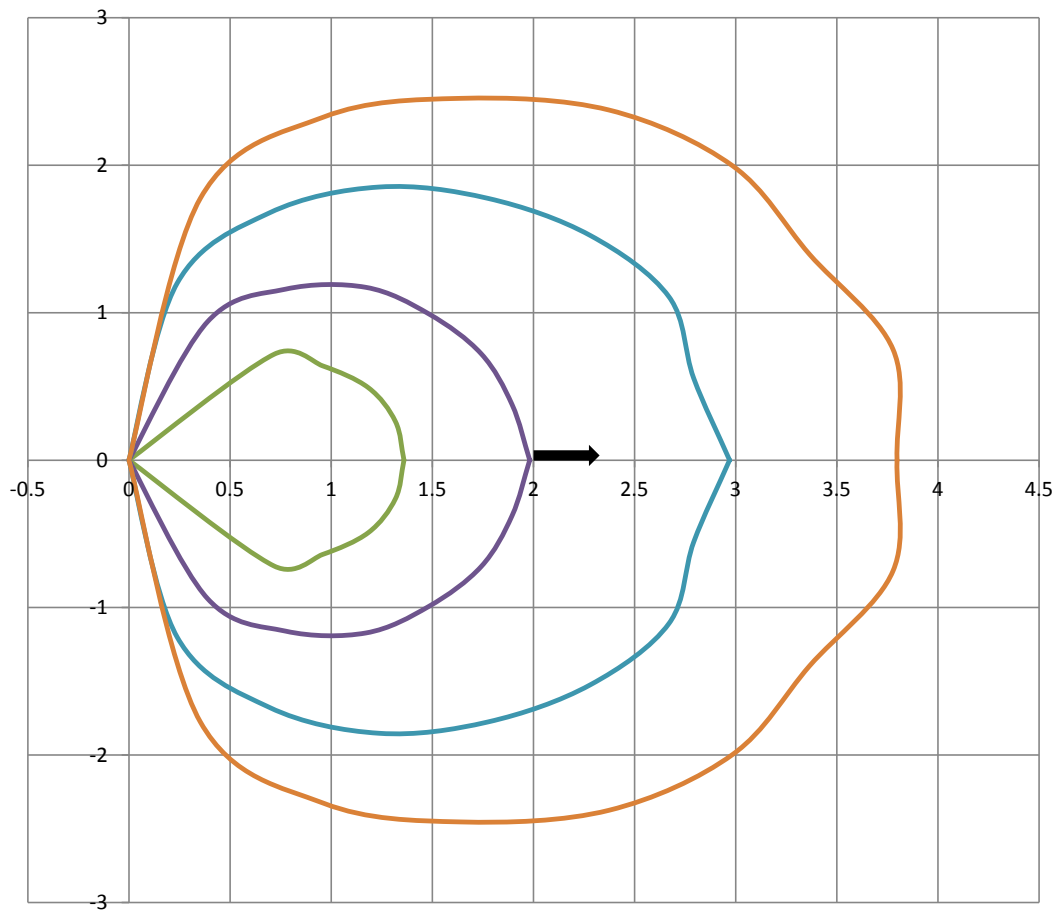
Beam and Field Information	
CIE Type:	Direct/Indirect
Center Beam Intensity:	1.2 Candela
Central Cone Intensity:	4 Candela
Beam Flux:	1166.5 Lumens
Beam Angle (0-180):	180.0 Degrees
Beam Angle (90-270):	164.9 Degrees
Field Angle (0-180):	#REF! Degrees
Field Angle (90-270):	#REF! Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		0.0753	46.2
6.00		0.0335	69.4
8.00		0.0188	92.5
10.0		0.0121	116
12.0		0.00837	139
14.0		0.00615	162
16.0		0.00471	185



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

