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1075 W Lambert Rd Suite B
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Indoor Distribution Test Report

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

Prepared For
B-K LIGHTING INC

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United States

Catalog Number
CK-LED-X60-FL-9

Order Number
11353040
Test Number
11353040.39

Test Date

2016-09-13

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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Luminaire Description: Circular black aluminum housing, specular faceted reflector, and glass lens
Lamp: One (1) White LED
Mounting: Surface
Ballast/Driver: PowerSelect PS60U700C21T

Luminaire



Luminaire Characteristics

Luminous Diameter: 2.75 in.

Summary of Results

Total Luminaire Output:	776.3 Lumens
Luminaire Efficacy:	62.5 lm/w
Maximum Candela:	1775 Candela

Test Conditions

Test Temperature:	25.0 °C
Voltage:	120.1 VAC
Current:	0.1064 A
Power:	12.43 W
Power Factor:	0.973
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
25.0 °C	120.1 VAC	0.1064 A	12.43 W	0.973	60 Hz	14.2 %

Summary of Results

Spacing Criteria

0-180: 0.62

90-270: 0.62

Total Lumen Output:

776.3 Lumens

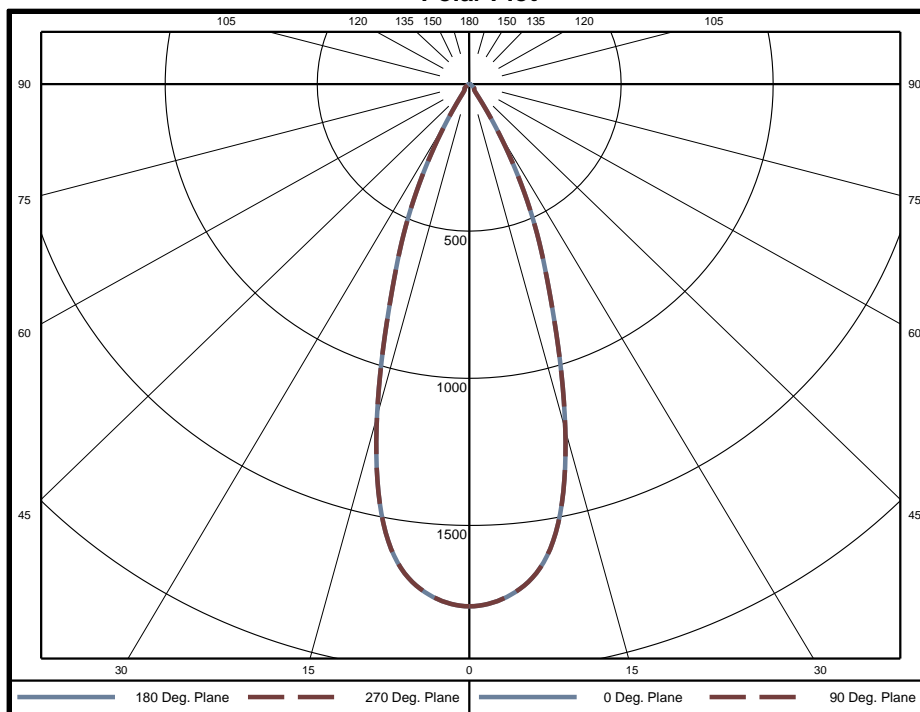
Luminaire Efficacy:

62.5 lm/w

Maximum Candela:

1775 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	41.9	5.4%	60-65	3.2	0.4%	120-125	0	0.0%
5-10	118.9	15.3%	65-70	2.5	0.3%	125-130	0	0.0%
10-15	166.0	21.4%	70-75	2.0	0.3%	130-135	0	0.0%
15-20	161.2	20.8%	75-80	1.6	0.2%	135-140	0	0.0%
20-25	128.4	16.5%	80-85	1.0	0.1%	140-145	0	0.0%
25-30	81.5	10.5%	85-90	0.3	0.0%	145-150	0	0.0%
30-35	29.5	3.8%	90-95	0	0.0%	150-155	0	0.0%
35-40	9.8	1.3%	95-100	0	0.0%	155-160	0	0.0%
40-45	8.7	1.1%	100-105	0	0.0%	160-165	0	0.0%
45-50	8.7	1.1%	105-110	0	0.0%	165-170	0	0.0%
50-55	6.9	0.9%	110-115	0	0.0%	170-175	0	0.0%
55-60	4.3	0.6%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	737	95.0%
0-60	766	98.6%
0-90	776	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	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775	1775
	5	1732	1732	1732	1732	1732	1732	1732	1732	1732	1732	1732	1732	1732	1732	1732
	10	1577	1577	1577	1577	1577	1577	1577	1577	1577	1577	1577	1577	1577	1577	1577
	15	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211	1211
	20	778	778	778	778	778	778	778	778	778	778	778	778	778	778	778
	25	467	467	467	467	467	467	467	467	467	467	467	467	467	467	467
	30	194	194	194	194	194	194	194	194	194	194	194	194	194	194	194
	35	42	42	42	42	42	42	42	42	42	42	42	42	42	42	42
	40	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	45	23	23	23	23	23	23	23	23	23	23	23	23	23	23	23
	50	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	55	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	60	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	65	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	70	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	75	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	80	2	2	2	2	2	2	2	2	2	2	2	2	2	2	2
	85	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	90	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	95	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
	105	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
	115	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
	125	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
	135	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
	145	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
	155	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
	165	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
	175	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

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	463100	463100
	45	8372	8372
	55	5434	5434
	65	3399	3399
	75	3424	3424
	85	4068	4068



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	924	924	924	924	903	903	903	903	863	863	863	826	826	826	792	792	792	776
1	886	867	850	834	868	851	835	821	819	807	796	791	781	772	764	757	750	737
2	850	817	790	767	834	804	779	758	779	759	742	757	740	726	736	723	711	699
3	816	773	740	714	801	763	732	708	743	718	697	725	704	686	708	691	676	665
4	784	734	698	670	771	726	692	666	710	681	659	695	671	651	681	661	644	633
5	754	699	661	633	742	692	657	630	679	649	625	667	641	620	656	633	615	605
6	725	668	629	601	715	662	626	599	651	619	595	641	613	591	631	607	588	578
7	699	639	600	573	690	634	597	571	625	592	569	616	587	566	608	583	563	554
8	674	613	574	548	665	608	572	547	601	568	544	593	564	542	587	560	540	531
9	650	588	550	525	643	585	549	524	578	545	522	572	542	521	566	539	519	510
10	628	566	529	504	621	563	527	503	557	524	502	552	522	501	547	519	499	491

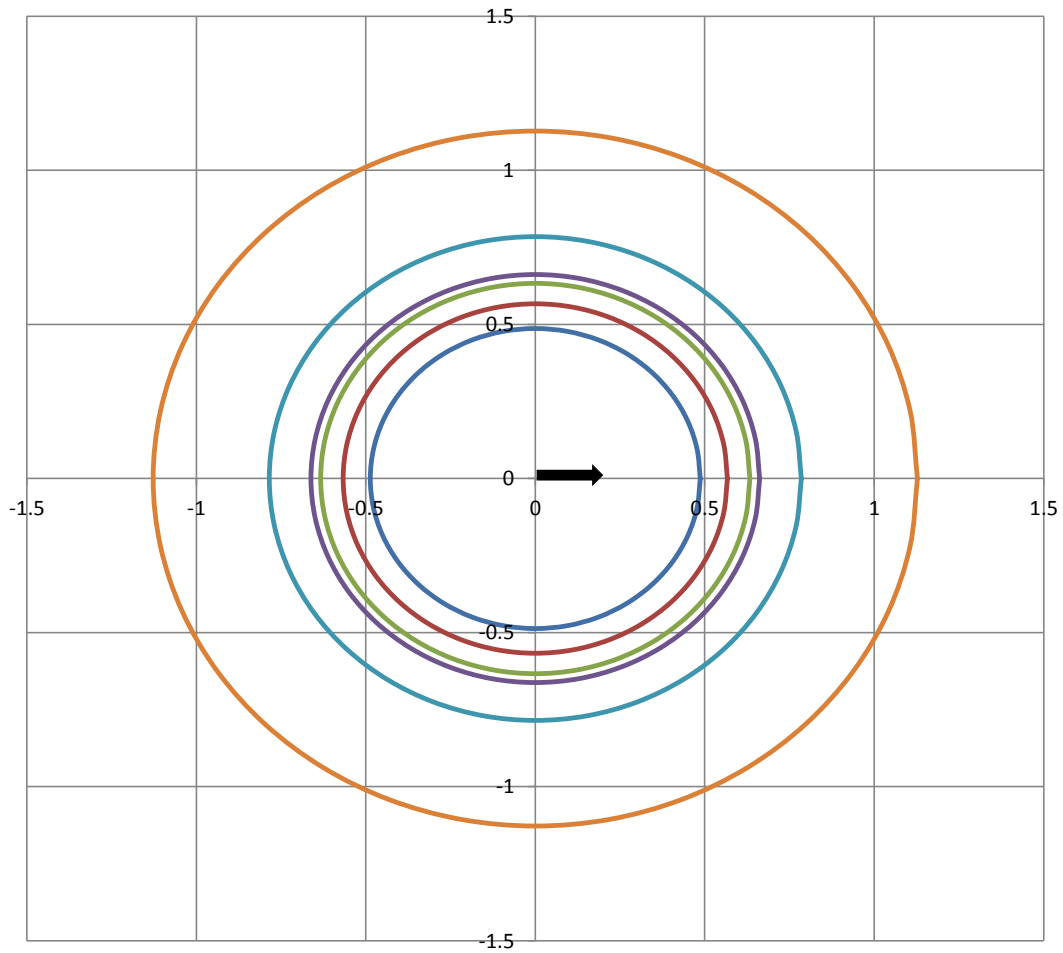
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	1775 Candela
Central Cone Intensity:	1760 Candela
Beam Flux:	447.1 Lumens
Beam Angle (0-180):	37.2 Degrees
Beam Angle (90-270):	37.2 Degrees
Field Angle (0-180):	60.7 Degrees
Field Angle (90-270):	60.7 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		111	2.47
6.00		49.3	3.70
8.00		27.7	4.93
10.0		17.7	6.17
12.0		12.3	7.40
14.0		9.05	8.64
16.0		6.93	9.87



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

5 fc 2 fc 1 fc 0.5 fc 0.2 fc 0.1 fc