



UL LLC
1075 W Lambert Rd Suite B
Brea, CA 92821

Indoor Distribution Test Report

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

Prepared For
B-K LIGHTING INC

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Madera, CA 93636-9515
United States

Catalog Number
OL-LED-X66-FL-9

Order Number
11353040
Test Number
11353040.45

Test Date

2016-09-16

Prepared By

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Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
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Luminaire Description: Upper glass lens, specular faceted reflector, circular black aluminum housing,
lower specular faceted reflector, and glass lens
Lamp: Two (2) White LEDs
Mounting: Surface
Ballast/Driver: Two (2) Thomas Research Products LED25W-36-C0700-LE

Luminaire



Luminaire Characteristics

Luminous Diameter: 2.75 in.
Luminous Height: 10.250 in.

Summary of Results

Total Luminaire Output:	3167 Lumens
Luminaire Efficacy:	57.1 lm/w
Maximum Candela:	4844 Candela

Test Conditions

Test Temperature:	25.5 °C
Voltage:	120.0 VAC
Current:	0.4693 A
Power:	55.43 W
Power Factor:	0.984
Frequency:	60 Hz
Current THD:	14.8 %

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
25.5 °C	120.0 VAC	0.4693 A	55.43 W	0.984	60 Hz	14.8 %

Summary of Results

Spacing Criteria

0-180: 0.51
90-270: 0.51

Total Lumen Output:

3167 Lumens

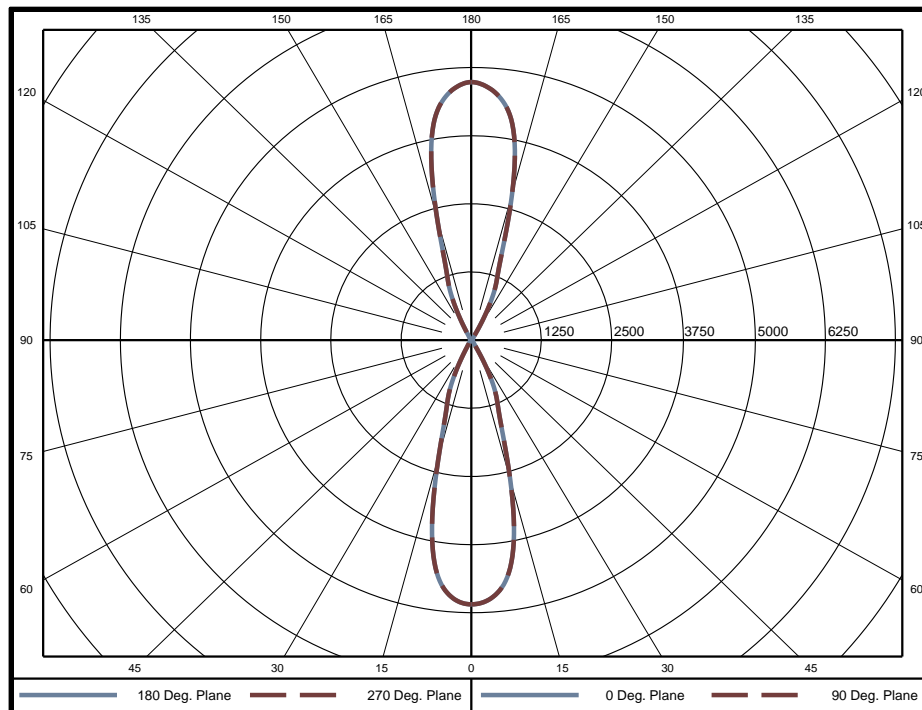
Luminaire Efficacy:

57.1 lm/w

Maximum Candela:

4844 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	114.1	3.6%	60-65	6.5	0.2%	120-125	7.0	0.2%
5-10	313.9	9.9%	65-70	4.9	0.2%	125-130	10.7	0.3%
10-15	385.1	12.2%	70-75	3.8	0.1%	130-135	14.7	0.5%
15-20	291.8	9.2%	75-80	2.5	0.1%	135-140	15.1	0.5%
20-25	227.7	7.2%	80-85	1.2	0.0%	140-145	17.7	0.6%
25-30	128.5	4.1%	85-90	0.2	0.0%	145-150	30.3	1.0%
30-35	42.9	1.4%	90-95	0.1	0.0%	150-155	114.8	3.6%
35-40	24.0	0.8%	95-100	0.9	0.0%	155-160	222.6	7.0%
40-45	18.9	0.6%	100-105	1.9	0.1%	160-165	300.4	9.5%
45-50	16.7	0.5%	105-110	2.9	0.1%	165-170	395.1	12.5%
50-55	12.4	0.4%	110-115	3.8	0.1%	170-175	308.6	9.7%
55-60	8.8	0.3%	115-120	5.1	0.2%	175-180	111.1	3.5%

Zone	Lumens	% of Luminaire
0-40	1528	48.2%
0-60	1585	50.0%
0-90	1604	50.6%
90-180	1563	49.3%



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	4843	4843	4843	4843	4843	4843	4843	4843	4843	4843	4843	4843	4843	4843	4843
	5	4689	4689	4689	4689	4689	4689	4689	4689	4689	4689	4689	4689	4689	4689	4689
	10	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020	4020
	15	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462	2462
	20	1342	1342	1342	1342	1342	1342	1342	1342	1342	1342	1342	1342	1342	1342	1342
	25	823	823	823	823	823	823	823	823	823	823	823	823	823	823	823
	30	253	253	253	253	253	253	253	253	253	253	253	253	253	253	253
	35	93	93	93	93	93	93	93	93	93	93	93	93	93	93	93
	40	59	59	59	59	59	59	59	59	59	59	59	59	59	59	59
	45	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
	50	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
	55	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	60	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	65	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	70	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	75	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	80	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	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	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	100	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	105	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	110	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	115	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	120	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	125	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	130	32	32	32	32	32	32	32	32	32	32	32	32	32	32	32
	135	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39
	140	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45
	145	67	67	67	67	67	67	67	67	67	67	67	67	67	67	67
	150	191	191	191	191	191	191	191	191	191	191	191	191	191	191	191
	155	782	782	782	782	782	782	782	782	782	782	782	782	782	782	782
	160	1334	1334	1334	1334	1334	1334	1334	1334	1334	1334	1334	1334	1334	1334	1334
	165	2586	2586	2586	2586	2586	2586	2586	2586	2586	2586	2586	2586	2586	2586	2586
	170	4018	4018	4018	4018	4018	4018	4018	4018	4018	4018	4018	4018	4018	4018	4018
	175	4566	4566	4566	4566	4566	4566	4566	4566	4566	4566	4566	4566	4566	4566	4566
	180	4733	4733	4733	4733	4733	4733	4733	4733	4733	4733	4733	4733	4733	4733	4733

Average Luminance (cd/m²)

Horizontal Angle (Degrees)

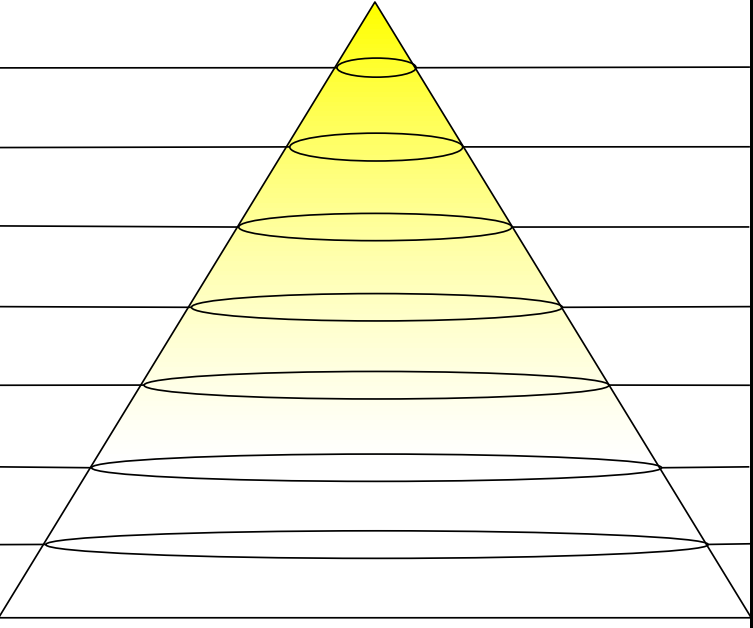
Vertical Angle (Degrees)	0	45	90
	0	1264000	1264000
	45	16920	16920
	55	10220	10220
	65	6950	6950
	75	5940	5940
	85	3751	3751



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	3398	3398	3398	3398	3137	3137	3137	3137	2651	2651	2651	2205	2205	2205	1796	1796	1796	1604
1	3189	3089	2999	2918	2951	2868	2793	2725	2455	2405	2359	2075	2044	2015	1725	1708	1691	1531
2	2996	2826	2685	2566	2780	2637	2518	2417	2283	2202	2131	1957	1904	1858	1655	1624	1596	1461
3	2820	2602	2433	2298	2623	2440	2296	2180	2134	2033	1950	1852	1784	1728	1589	1548	1513	1397
4	2660	2409	2226	2085	2480	2269	2111	1989	2003	1890	1801	1756	1680	1617	1527	1479	1439	1338
5	2514	2242	2052	1912	2350	2119	1955	1832	1887	1767	1675	1671	1587	1522	1469	1415	1372	1284
6	2382	2097	1906	1768	2232	1989	1822	1701	1784	1661	1569	1593	1506	1440	1415	1357	1313	1235
7	2262	1970	1781	1648	2126	1875	1709	1591	1693	1569	1479	1523	1434	1368	1364	1304	1258	1189
8	2153	1858	1673	1545	2028	1773	1610	1496	1611	1488	1399	1459	1369	1303	1316	1255	1209	1147
9	2054	1759	1578	1456	1939	1683	1523	1414	1538	1415	1329	1401	1311	1246	1272	1210	1164	1108
10	1964	1670	1495	1378	1858	1602	1446	1341	1471	1350	1267	1347	1258	1194	1230	1168	1122	1072

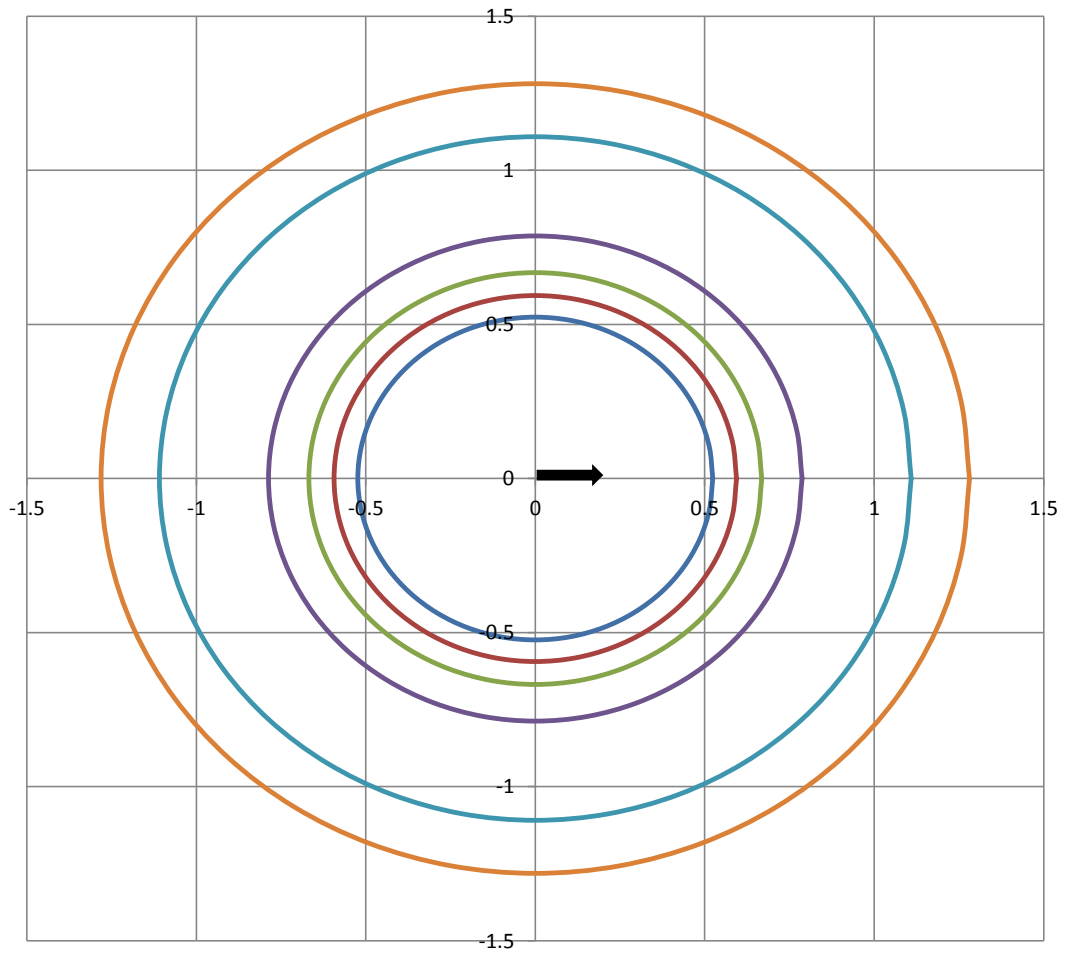
Beam and Field Information	
CIE Type:	Direct/Indirect
Center Beam Intensity:	4843 Candela
Central Cone Intensity:	4792 Candela
Beam Flux:	1669.5 Lumens
Beam Angle (0-180):	30.2 Degrees
Beam Angle (90-270):	30.2 Degrees
Field Angle (0-180):	55.4 Degrees
Field Angle (90-270):	55.4 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		303	2.06
6.00		135	3.08
8.00		75.7	4.11
10.0		48.4	5.14
12.0		33.6	6.17
14.0		24.7	7.20
16.0		18.9	8.22



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