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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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Madera, CA 93636-9515
United States

Catalog Number
CK-LED-X66-SP-9

Order Number
11353040
Test Number
11353040.43

Test Date

2016-09-10

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 linear reflector, and glass lens
Lamp: One (1) White LED
Mounting: Surface
Ballast/Driver: Thomas Research Products LED25W-36-C0700-LE

Luminaire



Luminaire Characteristics

Luminous Diameter: 2.75 in.

Summary of Results

Total Luminaire Output:	2001 Lumens
Luminaire Efficacy:	72.6 lm/w
Maximum Candela:	17221 Candela

Test Conditions

Test Temperature:	25.9 °C
Voltage:	120.0 VAC
Current:	0.2344 A
Power:	27.58 W
Power Factor:	0.980
Frequency:	60 Hz
Current THD:	16.9 %

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
25.9 °C	120.0 VAC	0.2344 A	27.58 W	0.980	60 Hz	16.9 %

Summary of Results

Spacing Criteria

0-180: 0.24

90-270: 0.24

Total Lumen Output:

2001 Lumens

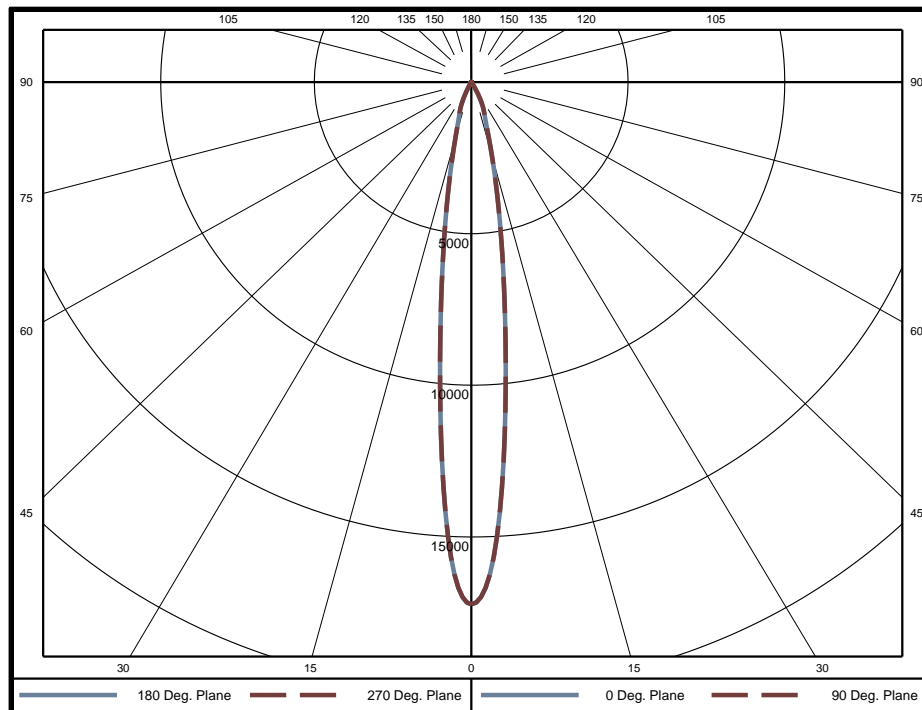
Luminaire Efficacy:

72.6 lm/w

Maximum Candela:

17221 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	342.7	17.1%	60-65	6.4	0.3%	120-125	0	0.0%
5-10	555.4	27.8%	65-70	5.3	0.3%	125-130	0	0.0%
10-15	416.0	20.8%	70-75	4.1	0.2%	130-135	0	0.0%
15-20	267.8	13.4%	75-80	3.0	0.1%	135-140	0	0.0%
20-25	202.2	10.1%	80-85	2.0	0.1%	140-145	0	0.0%
25-30	107.3	5.4%	85-90	0.8	0.0%	145-150	0	0.0%
30-35	30.1	1.5%	90-95	0	0.0%	150-155	0	0.0%
35-40	19.6	1.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	13.8	0.7%	100-105	0	0.0%	160-165	0	0.0%
45-50	9.8	0.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	7.6	0.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	7.1	0.4%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1941	97.0%
0-60	1979	98.9%
0-90	2001	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	17220	17220	17220	17220	17220	17220	17220	17220	17220	17220	17220	17220	17220	17220	17220
	5	11700	11700	11700	11700	11700	11700	11700	11700	11700	11700	11700	11700	11700	11700	11700
	10	5275	5275	5275	5275	5275	5275	5275	5275	5275	5275	5275	5275	5275	5275	5275
	15	2319	2319	2319	2319	2319	2319	2319	2319	2319	2319	2319	2319	2319	2319	2319
	20	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209	1209
	25	719	719	719	719	719	719	719	719	719	719	719	719	719	719	719
	30	186	186	186	186	186	186	186	186	186	186	186	186	186	186	186
	35	73	73	73	73	73	73	73	73	73	73	73	73	73	73	73
	40	46	46	46	46	46	46	46	46	46	46	46	46	46	46	46
	45	30	30	30	30	30	30	30	30	30	30	30	30	30	30	30
	50	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	55	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	60	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	65	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	70	9	9	9	9	9	9	9	9	9	9	9	9	9	9	9
	75	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	80	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	85	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
	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)

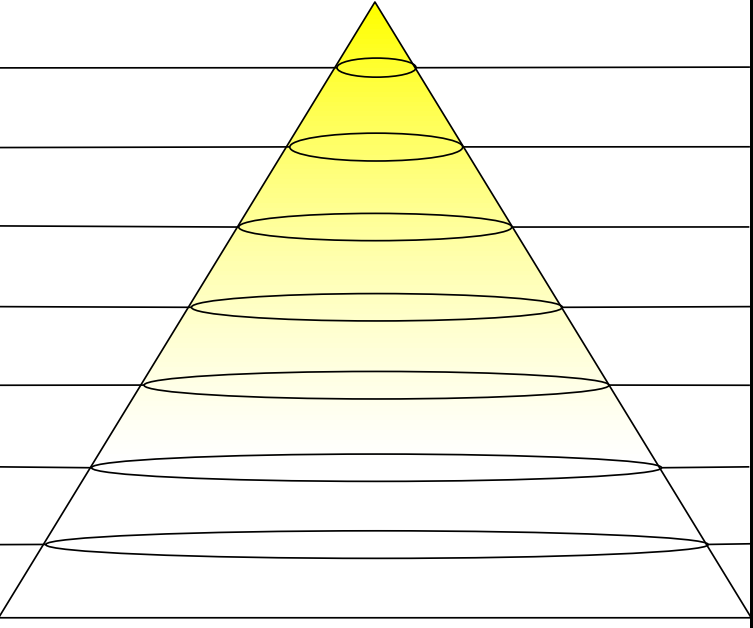
Vertical Angle (Degrees)	0	45	90
	0	4494000	4494000
	45	10910	10910
	55	7377	7377
	65	7300	7300
	75	6661	6661
	85	8729	8729



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	2382	2382	2382	2382	2326	2326	2326	2326	2223	2223	2223	2128	2128	2128	2042	2042	2042	2001
1	2301	2259	2221	2187	2254	2216	2183	2152	2137	2111	2086	2064	2044	2025	1996	1981	1967	1933
2	2227	2155	2096	2046	2186	2122	2069	2024	2060	2017	1980	2003	1969	1939	1950	1923	1899	1870
3	2159	2067	1996	1940	2123	2041	1977	1925	1992	1939	1895	1946	1903	1866	1904	1869	1839	1813
4	2096	1991	1914	1855	2065	1970	1899	1844	1931	1871	1824	1894	1844	1803	1860	1818	1784	1760
5	2038	1923	1844	1785	2011	1907	1832	1777	1875	1811	1762	1845	1791	1748	1817	1771	1734	1712
6	1984	1863	1783	1725	1960	1850	1774	1720	1824	1758	1709	1799	1742	1698	1776	1727	1688	1667
7	1933	1809	1729	1673	1912	1798	1723	1669	1776	1710	1661	1756	1697	1653	1737	1685	1646	1626
8	1886	1760	1681	1627	1867	1751	1676	1624	1733	1666	1618	1716	1656	1612	1700	1646	1606	1588
9	1842	1715	1638	1586	1825	1707	1634	1583	1692	1625	1579	1677	1617	1574	1664	1610	1570	1552
10	1800	1674	1598	1548	1785	1667	1595	1546	1654	1588	1543	1642	1581	1539	1630	1575	1536	1519

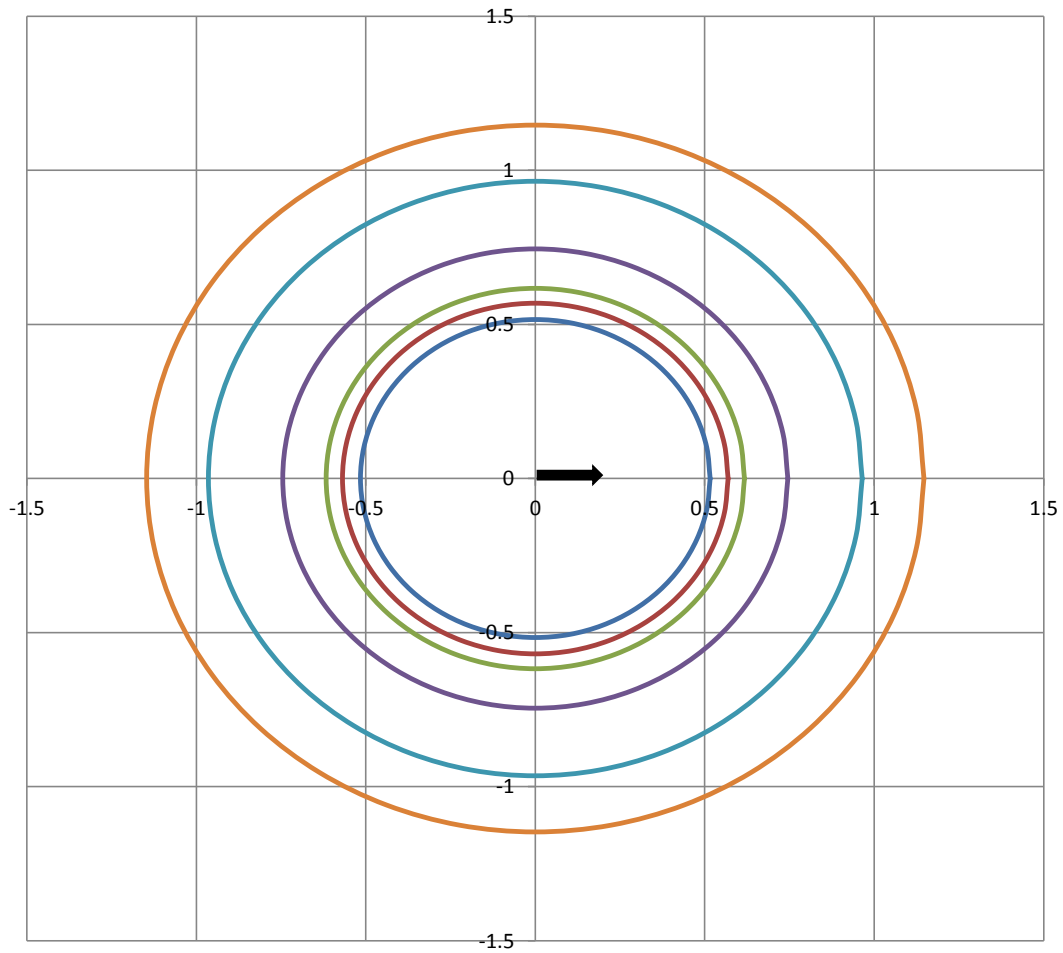
Beam and Field Information	
CIE Type:	Direct
Center Beam Intensity:	17220 Candela
Central Cone Intensity:	15172 Candela
Beam Flux:	565.0 Lumens
Beam Angle (0-180):	13.9 Degrees
Beam Angle (90-270):	13.9 Degrees
Field Angle (0-180):	33.9 Degrees
Field Angle (90-270):	33.9 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		1080	0.960
6.00		478	1.44
8.00		269	1.92
10.0		172	2.40
12.0		120	2.88
14.0		87.9	3.36
16.0		67.3	3.84



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