



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

Chris McCarthy
40429 Brickyard Dr
Madera, CA 93636-9515
United States

Catalog Number
CK-LED-X63-SP-9

Order Number
11353040
Test Number
11353040.53

Test Date

2016-09-15

Prepared By

Khang Nguyen, Technician

Approved By

Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.
This report shall not be reproduced, except in full, without written approval of Underwriters Laboratories.
This report must not be used by the client to claim product certification, approval, or endorsement by
NVLAP, NIST, or any agency of the Federal Government.



Luminaire Description: Circular black aluminum housing, specular linear 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:	1293 Lumens
Luminaire Efficacy:	58.5 lm/w
Maximum Candela:	6998 Candela

Test Conditions

Test Temperature:	25.1 °C
Voltage:	120.1 VAC
Current:	0.1868 A
Power:	22.11 W
Power Factor:	0.986
Frequency:	60 Hz
Current THD:	12.1 %

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	120.1 VAC	0.1868 A	22.11 W	0.986	60 Hz	12.1 %

Summary of Results

Spacing Criteria

0-180: 0.30

90-270: 0.30

Total Lumen Output:

1293 Lumens

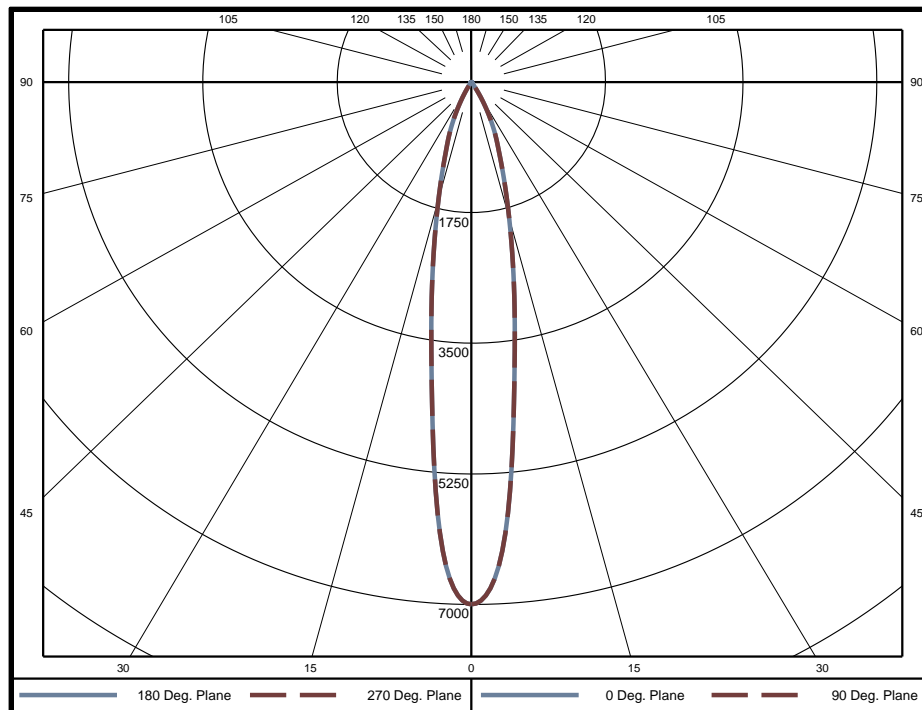
Luminaire Efficacy:

58.5 lm/w

Maximum Candela:

6998 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	150.3	11.6%	60-65	5.2	0.4%	120-125	0	0.0%
5-10	288.6	22.3%	65-70	4.5	0.3%	125-130	0	0.0%
10-15	276.4	21.4%	70-75	3.3	0.3%	130-135	0	0.0%
15-20	220.1	17.0%	75-80	2.5	0.2%	135-140	0	0.0%
20-25	165.6	12.8%	80-85	1.8	0.1%	140-145	0	0.0%
25-30	100.9	7.8%	85-90	0.7	0.1%	145-150	0	0.0%
30-35	35.3	2.7%	90-95	0	0.0%	150-155	0	0.0%
35-40	12.3	1.0%	95-100	0	0.0%	155-160	0	0.0%
40-45	8.4	0.6%	100-105	0	0.0%	160-165	0	0.0%
45-50	6.5	0.5%	105-110	0	0.0%	165-170	0	0.0%
50-55	5.4	0.4%	110-115	0	0.0%	170-175	0	0.0%
55-60	5.4	0.4%	115-120	0	0.0%	175-180	0	0.0%

Zone	Lumens	% of Luminaire
0-40	1250	96.6%
0-60	1275	98.6%
0-90	1293	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	6998	6998	6998	6998	6998	6998	6998	6998	6998	6998	6998	6998	6998	6998	6998
	5	5504	5504	5504	5504	5504	5504	5504	5504	5504	5504	5504	5504	5504	5504	5504
	10	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091	3091
	15	1767	1767	1767	1767	1767	1767	1767	1767	1767	1767	1767	1767	1767	1767	1767
	20	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014	1014
	25	592	592	592	592	592	592	592	592	592	592	592	592	592	592	592
	30	235	235	235	235	235	235	235	235	235	235	235	235	235	235	235
	35	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51
	40	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	45	19	19	19	19	19	19	19	19	19	19	19	19	19	19	19
	50	14	14	14	14	14	14	14	14	14	14	14	14	14	14	14
	55	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	60	11	11	11	11	11	11	11	11	11	11	11	11	11	11	11
	65	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	70	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	75	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	80	4	4	4	4	4	4	4	4	4	4	4	4	4	4	4
	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	1826000	1826000
	45	6972	6972
	55	5404	5404
	65	6422	6422
	75	5463	5463
	85	7531	7531



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	1540	1540	1540	1540	1504	1504	1504	1504	1437	1437	1437	1376	1376	1376	1320	1320	1320	1293
1	1483	1453	1427	1403	1452	1426	1402	1381	1374	1355	1338	1326	1312	1299	1283	1272	1262	1239
2	1429	1379	1338	1303	1402	1358	1320	1288	1317	1287	1261	1280	1255	1234	1245	1226	1209	1190
3	1380	1315	1266	1226	1356	1298	1253	1216	1266	1228	1197	1236	1205	1179	1209	1183	1161	1144
4	1334	1260	1205	1164	1313	1246	1196	1157	1220	1177	1144	1196	1160	1131	1173	1143	1119	1102
5	1291	1210	1153	1111	1273	1199	1146	1107	1178	1132	1097	1158	1119	1088	1140	1106	1079	1064
6	1251	1165	1108	1067	1235	1156	1102	1063	1139	1092	1056	1122	1081	1050	1107	1071	1043	1029
7	1213	1125	1067	1027	1199	1117	1063	1025	1103	1055	1020	1089	1046	1015	1076	1039	1010	996
8	1178	1088	1031	992	1165	1081	1028	990	1069	1021	986	1057	1014	983	1047	1008	979	966
9	1145	1054	998	960	1133	1048	995	959	1038	990	956	1028	984	953	1019	979	950	938
10	1113	1022	968	931	1103	1017	965	930	1009	961	928	1000	957	926	992	952	924	911

Beam and Field Information

CIE Type:	Direct
Center Beam Intensity:	6998 Candela
Central Cone Intensity:	6492 Candela
Beam Flux:	370.4 Lumens
Beam Angle (0-180):	17.7 Degrees
Beam Angle (90-270):	17.7 Degrees
Field Angle (0-180):	47.3 Degrees
Field Angle (90-270):	47.3 Degrees

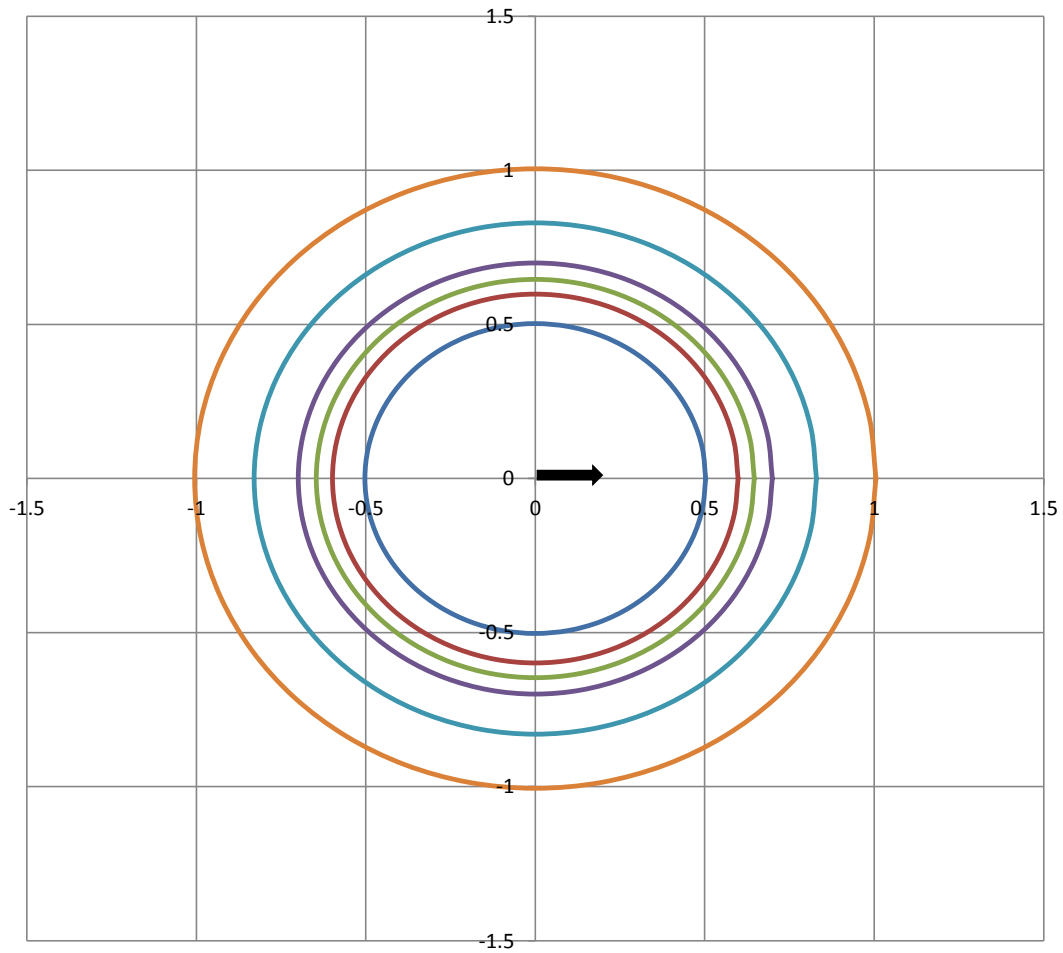
Cone of Light Tabulation

Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		437	1.20
6.00		194	1.81
8.00		109	2.41
10.0		70.0	3.01
12.0		48.6	3.61
14.0		35.7	4.22
16.0		27.3	4.82



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