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Floodlight Distribution Test Report

Relevant Standards
IES LM-79-2008, ANSI C82.77-2002, IES LM-35-2002 (Withdrawn)

Prepared For
B-K Lighting Inc
Chris McCarthy
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Madera, CA 93636-9515
United States

Catalog Number
SA-LED-X54-SP-9-4000K
Order Number
12406698
Test Number
12406698.05

Test Date

2018-08-31

Prepared By

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Approved By

Eric Gaudreau, Engineering Leader

The results contained in this report pertain only to the tested sample.
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Luminaire Description: White metal cylindrical housing with clear outer glass lens, inner plastic diffuse lens and semi specular linear reflector.
Lamp: One (1) white LED
Mounting: Surface - Ground
Ballast/Driver: ERP ESS015W-0350-42

Luminaire



Luminaire Characteristics

Luminous Length: 1.50 in.
Luminous Width: 3.000 in.

Summary of Results

Total Luminaire Output: 1017 Lumens
Luminaire Efficacy: 97.2 lm/w
Maximum Candela: 4397 Candela

Test Conditions

Test Temperature: 24.7 °C
Voltage: 120.0 VAC
Current: 0.08861 A
Power: 10.46 W
Power Factor: 0.983
Frequency: 60 Hz
Current THD: 15.8 %

Laboratory results may not be representative of field performance
Ballast factors have not been applied



Distribution - Goniophotometer

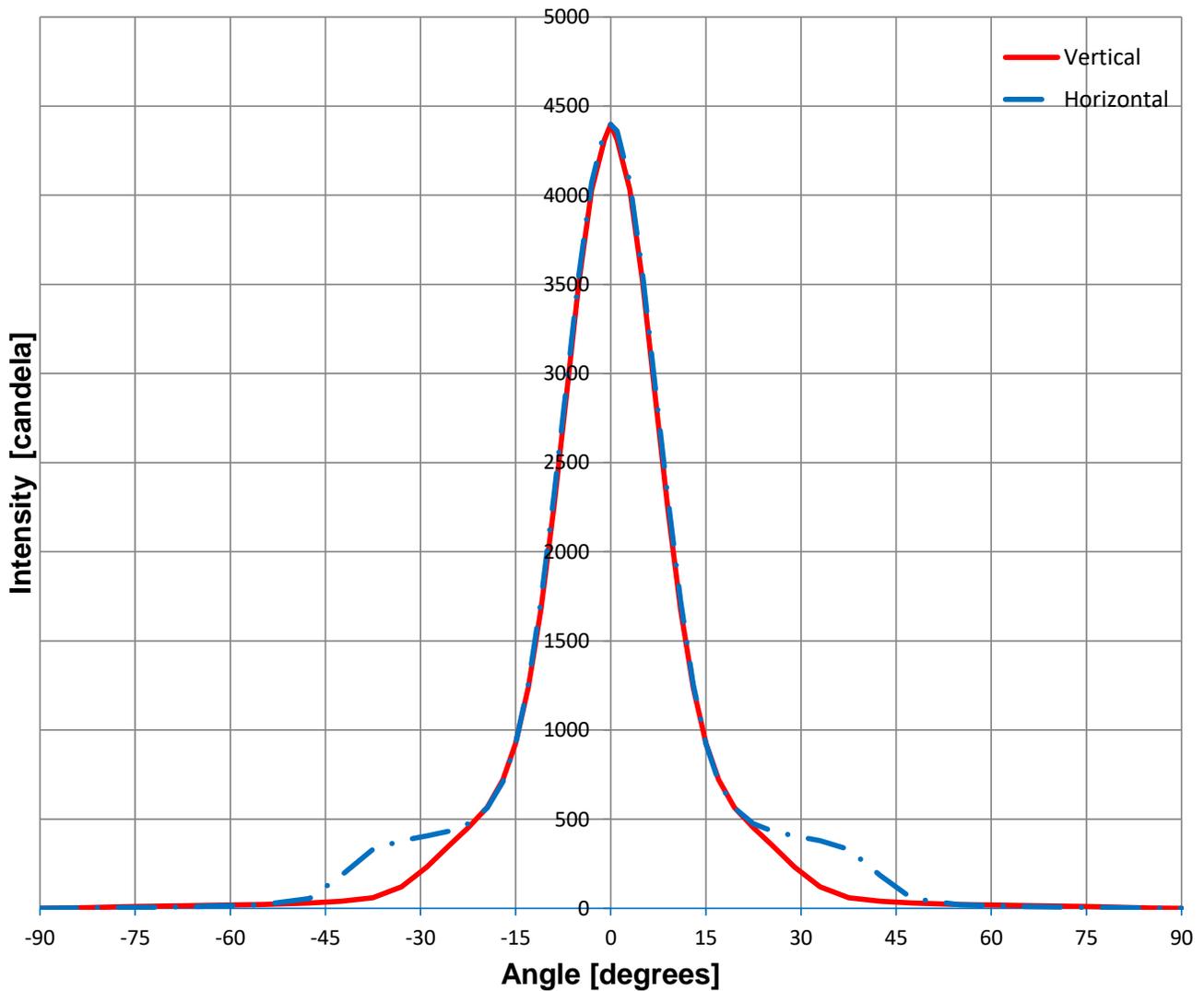
Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.7 °C	120.0 VAC	0.08861 A	10.46 W	0.983	60 Hz	15.8 %

Summary of Results

Total Lumen Output:	1016.7 Lumens	Maximum Candela:	4397.4 Candela
Luminaire Efficacy:	97.2 Lumens/Watt	Maximum Angle:	0 H 0 V
Field Lumens:	634.6 Lumens	Field Angle :	50.1 H X 45.8 V
Beam Lumens:	258.6 Lumens	Beam Angle :	18.7 H X 18.3 V
Spill Light Lumens:	382.1 Lumens	IESNA Type:	4 H X 3 V

Maximum Candlepower Plot





Candela Tabulation
Lateral Angle (Degrees)

	0	1	3	5	7	9	11	13	15	17	19.5
85.0	2	2	2	2	2	2	2	2	2	2	2
75.0	10	10	10	10	10	10	9	9	9	9	9
65.0	16	16	16	16	16	16	16	16	15	15	15
55.0	21	21	21	21	21	21	20	20	20	20	19
47.5	29	29	29	29	29	29	28	28	27	26	26
42.5	40	40	40	40	40	40	39	38	38	37	36
37.5	60	60	59	59	59	59	59	58	59	59	59
33.0	121	121	121	121	121	120	118	118	117	116	116
29.0	232	234	235	234	234	229	225	223	220	217	212
25.5	352	354	354	352	348	338	334	328	323	317	308
22.5	452	453	449	444	432	419	410	401	393	383	370
19.5	566	565	556	542	513	494	472	455	437	422	406
17.0	721	716	700	664	616	571	531	496	467	444	423
15.0	925	918	887	820	746	666	599	541	495	462	435
13.0	1239	1227	1175	1062	935	807	692	603	533	487	449
11.0	1679	1671	1589	1418	1207	1005	827	683	587	520	469
9.0	2243	2247	2119	1872	1577	1267	997	797	655	562	492
7.0	2877	2891	2721	2395	1986	1571	1203	928	736	610	515
5.0	3514	3537	3298	2888	2386	1876	1423	1063	814	653	534
3.0	4030	4062	3765	3274	2708	2130	1601	1176	879	688	551
1.0	4311	4308	4013	3511	2901	2283	1715	1246	916	707	560
0.0	4397	4360	4072	3555	2930	2304	1728	1256	922	710	562
-1.0	4311	4308	4013	3511	2901	2283	1715	1246	916	707	560
-3.0	4030	4062	3765	3274	2708	2130	1601	1176	879	688	551
-5.0	3514	3537	3298	2888	2386	1876	1423	1063	814	653	534
-7.0	2877	2891	2721	2395	1986	1571	1203	928	736	610	515
-9.0	2243	2247	2119	1872	1577	1267	997	797	655	562	492
-11.0	1679	1671	1589	1418	1207	1005	827	683	587	520	469
-13.0	1239	1227	1175	1062	935	807	692	603	533	487	449
-15.0	925	918	887	820	746	666	599	541	495	462	435
-17.0	721	716	700	664	616	571	531	496	467	444	423
-19.5	566	565	556	542	513	494	472	455	437	422	406
-22.5	452	453	449	444	432	419	410	401	393	383	370
-25.5	352	354	354	352	348	338	334	328	323	317	308
-29.0	232	234	235	234	234	229	225	223	220	217	212
-33.0	121	121	121	121	121	120	118	118	117	116	116
-37.5	60	60	59	59	59	59	59	58	59	59	59
-42.5	40	40	40	40	40	40	39	38	38	37	36
-47.5	29	29	29	29	29	29	28	28	27	26	26
-55.0	21	21	21	21	21	21	20	20	20	20	19
-65.0	16	16	16	16	16	16	16	16	15	15	15
-75.0	10	10	10	10	10	10	9	9	9	9	9
-85.0	2	2	2	2	2	2	2	2	2	2	2

Vertical Angle (Degrees)



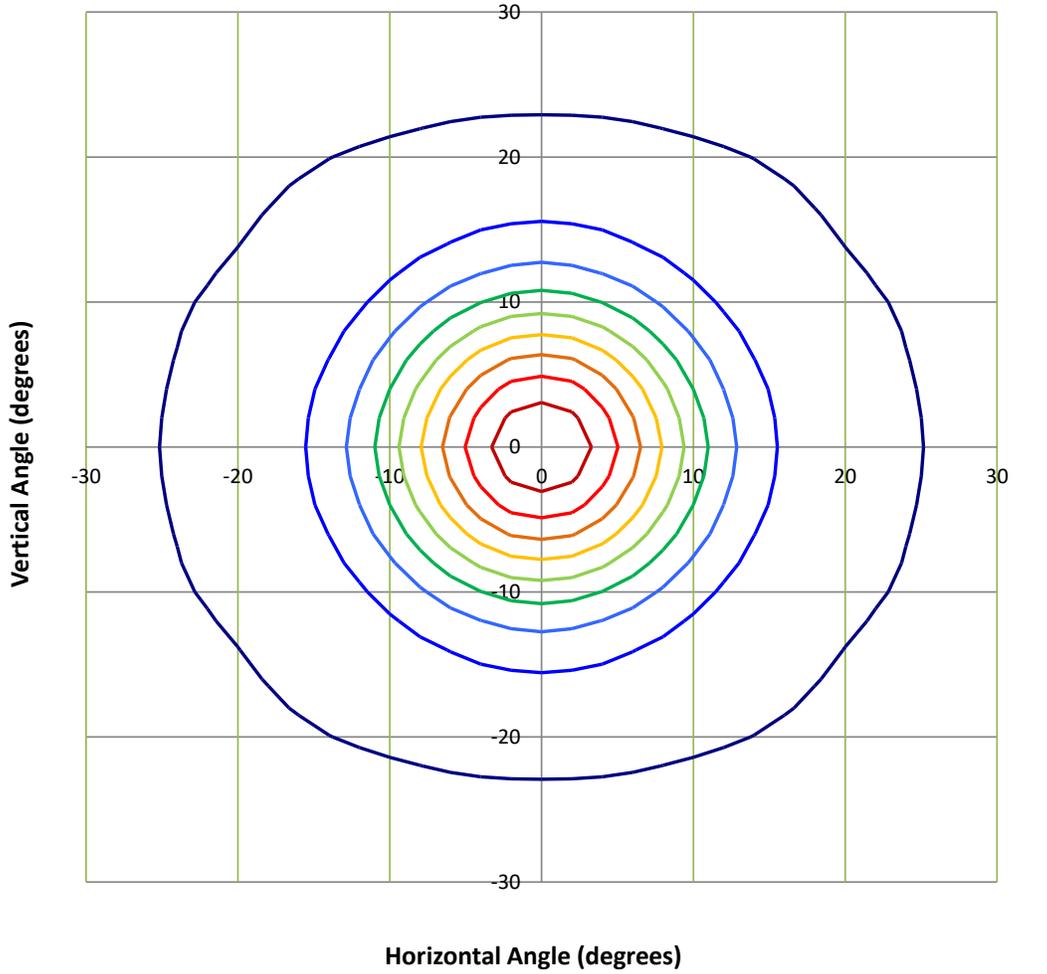
Candela Tabulation
Lateral Angle (Degrees)

	22.5	25.5	29	33	37.5	42.5	47.5	55	65	75	85
85.0	2	2	2	2	2	2	2	2	2	2	1
75.0	9	8	8	7	6	5	4	3	3	2	1
65.0	14	14	13	12	11	9	8	5	4	3	1
55.0	19	18	17	16	15	13	11	8	5	3	1
47.5	25	24	23	22	20	17	14	10	6	4	2
42.5	34	33	31	29	26	22	17	11	6	4	2
37.5	58	57	54	48	39	30	21	12	7	4	2
33.0	114	111	104	90	69	44	26	14	7	4	2
29.0	205	197	185	160	117	65	32	15	8	4	2
25.5	296	284	266	232	172	92	38	16	8	4	2
22.5	356	342	323	288	218	113	43	17	8	4	2
19.5	390	376	358	326	256	136	47	18	9	4	2
17.0	405	390	374	347	281	149	50	19	9	4	2
15.0	413	399	383	357	295	158	52	19	9	4	2
13.0	423	407	390	364	305	166	53	19	9	4	2
11.0	435	414	394	369	314	172	54	20	9	5	2
9.0	447	420	397	372	320	177	55	20	9	5	2
7.0	455	424	400	374	325	181	55	20	10	5	2
5.0	463	427	402	377	328	182	55	20	10	5	2
3.0	470	431	404	378	330	184	56	21	10	5	2
1.0	474	433	405	379	331	185	55	21	10	5	2
0.0	475	433	405	379	331	184	55	21	10	5	2
-1.0	474	433	405	379	331	185	55	21	10	5	2
-3.0	470	431	404	378	330	184	56	21	10	5	2
-5.0	463	427	402	377	328	182	55	20	10	5	2
-7.0	455	424	400	374	325	181	55	20	10	5	2
-9.0	447	420	397	372	320	177	55	20	9	5	2
-11.0	435	414	394	369	314	172	54	20	9	5	2
-13.0	423	407	390	364	305	166	53	19	9	4	2
-15.0	413	399	383	357	295	158	52	19	9	4	2
-17.0	405	390	374	347	281	149	50	19	9	4	2
-19.5	390	376	358	326	256	136	47	18	9	4	2
-22.5	356	342	323	288	218	113	43	17	8	4	2
-25.5	296	284	266	232	172	92	38	16	8	4	2
-29.0	205	197	185	160	117	65	32	15	8	4	2
-33.0	114	111	104	90	69	44	26	14	7	4	2
-37.5	58	57	54	48	39	30	21	12	7	4	2
-42.5	34	33	31	29	26	22	17	11	6	4	2
-47.5	25	24	23	22	20	17	14	10	6	4	2
-55.0	19	18	17	16	15	13	11	8	5	3	1
-65.0	14	14	13	12	11	9	8	5	4	3	1
-75.0	9	8	8	7	6	5	4	3	3	2	1
-85.0	2	2	2	2	2	2	2	2	2	2	1

Vertical Angle (Degrees)



Isocandela Diagram (Percent of Maximum Intensity)



- 3957 cd (90%)
- 3517 cd (80%)
- 3078 cd (70%)
- 2638 cd (60%)
- 2198 cd (50%)
- 1758 cd (40%)
- 1319 cd (30%)
- 879 cd (20%)
- 439 cd (10%)