



UL LLC  
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## Indoor Distribution Test Report

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

**Prepared For**  
**B-K Lighting Inc**

Chris McCarthy  
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Madera, CA 93636-9515  
United States

**Catalog Number**  
**LHS-LED-L12-SD1**

Order Number  
11609588  
Test Number  
11609588.07

Test Date

2017-04-06

Prepared By

Tony Rubio, Technician

Approved By

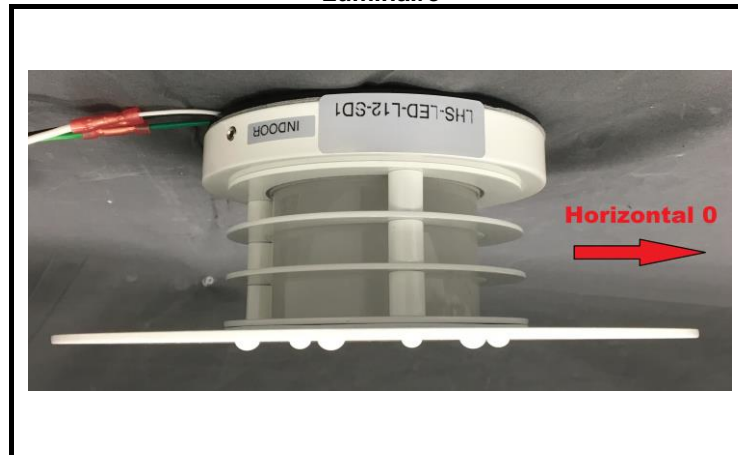
Eric Gaudreau, Senior Engineering Associate

The results contained in this report pertain only to the tested sample.  
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**Luminaire Description:** Decorative white metal housing with baffles, reflector and diffuse lens.  
**Lamp:** White LED array  
**Mounting:** Pendant

#### Luminaire



#### Luminaire Characteristics

Luminous Diameter: 10.00 in.  
Luminous Height: 2.50 in.

#### Summary of Results

Total Luminaire Output: 325.5 Lumens  
Luminaire Efficacy: 32.9 lm/w  
Maximum Candela: 46 Candela

#### Test Conditions

Test Temperature: 25.1 °C  
Voltage: 120.1 VAC  
Current: 0.08423 A  
Power: 9.885 W  
Power Factor: 0.978  
Frequency: 60 Hz  
Current THD: 19.5 %

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



## Distribution - Goniophotometer

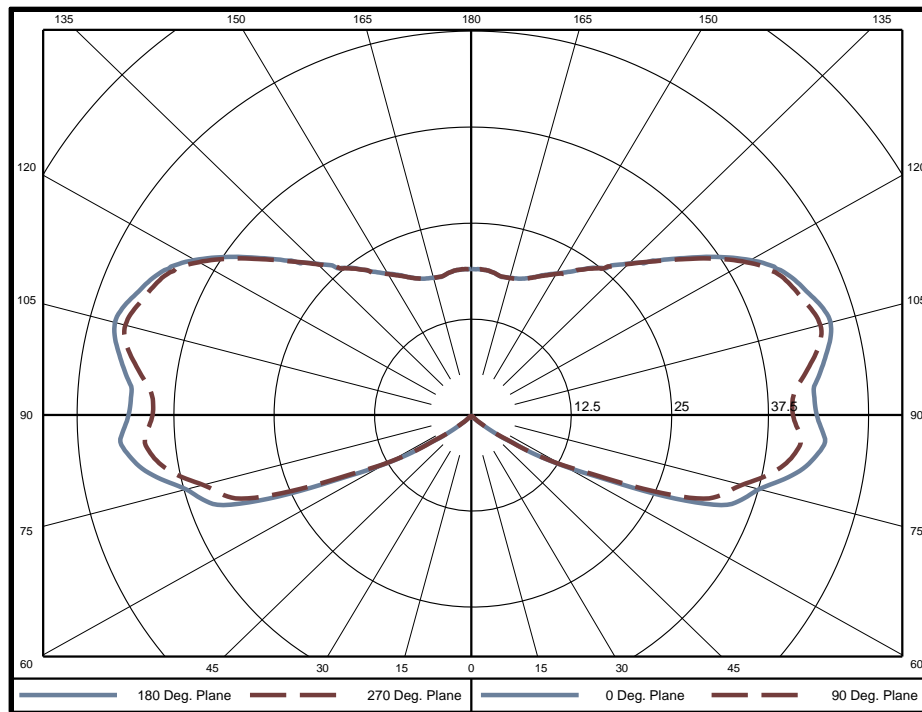
### Distribution Test Conditions

Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
25.1 °C	120.1 VAC	0.08423 A	9.885 W	0.978	60 Hz	19.5 %

### Summary of Results

Total Lumen Output:	325.5 Lumens
Luminaire Efficacy:	32.9 lm/w
Maximum Candela:	46 Candela

### Polar Plot



### Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	0	0.0%	60-65	7.67	2.4%	120-125	17.00	5.2%
5-10	0	0.0%	65-70	13.71	4.2%	125-130	14.07	4.3%
10-15	0	0.0%	70-75	17.75	5.5%	130-135	11.49	3.5%
15-20	0	0.0%	75-80	20.25	6.2%	135-140	9.35	2.9%
20-25	0	0.0%	80-85	22.44	6.9%	140-145	7.68	2.4%
25-30	0	0.0%	85-90	22.86	7.0%	145-150	6.18	1.9%
30-35	0	0.0%	90-95	22.43	6.9%	150-155	4.96	1.5%
35-40	0	0.0%	95-100	23.02	7.1%	155-160	3.86	1.2%
40-45	0.01	0.0%	100-105	23.75	7.3%	160-165	2.91	0.9%
45-50	0.29	0.1%	105-110	23.20	7.1%	165-170	2.07	0.6%
50-55	1.44	0.4%	110-115	21.70	6.7%	170-175	1.27	0.4%
55-60	3.98	1.2%	115-120	19.75	6.1%	175-180	0.43	0.1%

Zone	Lumens	% of Luminaire
0-40	0	0.0%
0-60	6	1.8%
0-90	110	33.9%
90-180	215	66.1%



**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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	10	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	15	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	20	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	25	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	30	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	40	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
	45	0.08	0.12	0.13	0.10	0.09	0.10	0.13	0.12	0.08	0.12	0.13	0.10	0.09	0.10	0.13
	50	1.63	1.64	1.68	1.66	1.63	1.66	1.68	1.64	1.63	1.64	1.68	1.66	1.63	1.66	1.68
	55	4.99	5.27	5.45	5.35	5.13	5.35	5.45	5.27	4.99	5.27	5.45	5.35	5.13	5.35	5.45
	60	11.90	12.03	11.88	11.66	11.75	11.66	11.88	12.03	11.90	12.03	11.88	11.66	11.75	11.66	11.88
	65	21.35	20.52	20.96	21.17	20.16	21.17	20.96	20.52	21.35	20.52	20.96	21.17	20.16	21.17	20.96
	70	33.11	31.50	32.25	32.78	30.74	32.78	32.25	31.50	33.11	31.50	32.25	32.78	30.74	32.78	32.25
	75	36.29	35.03	35.76	36.18	34.14	36.18	35.76	35.03	36.29	35.03	35.76	36.18	34.14	36.18	35.76
	80	40.78	39.43	40.24	40.56	38.38	40.56	40.24	39.43	40.78	39.43	40.24	40.56	38.38	40.56	40.24
	85	43.36	41.74	42.53	42.84	40.45	42.84	42.53	41.74	43.36	41.74	42.53	42.84	40.45	42.84	42.53
	90	42.28	40.48	41.29	41.66	39.32	41.66	41.29	40.48	42.28	40.48	41.29	41.66	39.32	41.66	41.29
	95	42.10	40.92	41.36	41.64	39.93	41.64	41.36	40.92	42.10	40.92	41.36	41.64	39.93	41.64	41.36
	100	44.11	43.50	43.50	43.55	42.67	43.55	43.50	43.50	44.11	43.50	43.50	43.55	42.67	43.55	43.50
	105	45.59	45.06	44.83	44.72	44.30	44.72	44.83	45.06	45.59	45.06	44.83	44.72	44.30	44.72	44.83
	110	44.34	43.82	43.56	43.31	43.19	43.31	43.56	43.82	44.34	43.82	43.56	43.31	43.19	43.31	43.56
	115	42.54	42.27	41.94	41.60	41.84	41.60	41.94	42.27	42.54	42.27	41.94	41.60	41.84	41.60	41.94
	120	39.36	39.16	38.79	38.44	38.80	38.44	38.79	39.16	39.36	39.16	38.79	38.44	38.80	38.44	38.79
	125	34.93	34.82	34.48	34.11	34.57	34.11	34.48	34.82	34.93	34.82	34.48	34.11	34.57	34.11	34.48
	130	30.48	30.50	30.20	29.88	30.27	29.88	30.20	30.50	30.48	30.50	30.20	29.88	30.27	29.88	30.20
	135	26.91	26.95	26.66	26.40	26.82	26.40	26.66	26.95	26.91	26.95	26.66	26.40	26.82	26.40	26.66
	140	24.02	24.12	23.98	23.73	23.97	23.73	23.98	24.12	24.02	24.12	23.98	23.73	23.97	23.73	23.98
	145	22.00	22.11	21.91	21.85	22.05	21.85	21.91	22.11	22.00	22.11	21.91	21.85	22.05	21.85	21.91
	150	20.27	20.30	20.30	20.25	20.21	20.25	20.30	20.30	20.27	20.30	20.30	20.25	20.21	20.25	20.30
	155	18.94	18.96	18.96	18.94	18.91	18.94	18.96	18.96	18.94	18.96	18.96	18.94	18.91	18.94	18.96
	160	17.92	17.92	17.89	17.90	17.90	17.90	17.89	17.92	17.92	17.92	17.89	17.90	17.90	17.90	17.89
	165	17.52	17.51	17.51	17.50	17.47	17.50	17.51	17.51	17.52	17.51	17.51	17.50	17.47	17.50	17.51
	170	17.58	17.55	17.56	17.54	17.59	17.54	17.56	17.55	17.58	17.55	17.56	17.54	17.59	17.54	17.56
	175	17.97	17.97	17.99	17.98	17.97	17.98	17.99	17.97	17.97	17.97	17.99	17.98	17.97	17.98	17.99
	180	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04	18.04



### 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	336	336	336	336	303	303	303	303	242	242	242	186	186	186	135	135	135	110
1	284	260	239	220	252	231	213	196	178	164	151	128	118	108	83	75	68	46
2	250	216	188	164	221	191	166	145	145	126	110	102	88	75	62	52	43	23
3	224	184	153	129	197	163	136	114	122	102	85	85	69	56	50	39	29	12
4	203	160	129	104	179	141	114	92	106	85	68	73	57	44	42	31	21	7
5	185	141	110	87	163	124	97	76	93	72	56	64	48	36	37	26	17	4
6	170	125	95	73	149	110	84	65	83	62	47	57	42	30	33	22	14	2
7	157	112	83	63	138	99	73	55	75	55	40	52	37	26	30	19	11	1
8	145	101	73	54	128	89	65	48	68	49	35	47	33	22	28	17	10	1
9	135	92	65	47	119	81	58	42	62	43	31	43	29	19	26	16	8	0
10	125	84	58	42	111	74	52	37	57	39	27	40	26	17	24	14	7	0