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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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United States

Catalog Number
MA-LED-C26-MFL-12-4000K
Order Number
12496749
Test Number
12496749.06B
Revised:
2018-11-27
Test Date
2018-11-12

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: White cylindrical metal housing with specular prismatic reflector and glass prismatic lens above and below

Lamp: Two (2) Lumenetix CTM1C19 16-80K 2000L 35W 24V Module with diffuse lens and specular reflector. One (1) above and one (1) below.

Mounting: Pendant

Ballast/Driver: Two (2) EFORE RSLP070-24

Luminaire



Luminaire Characteristics

Luminous Diameter: 4.50 in.
Luminous Height: 14.500 in.

Summary of Results

Total Luminaire Output:	2493 Lumens
Luminaire Efficacy:	30.9 lm/w
Maximum Candela:	3447 Candela

Test Conditions

Test Temperature:	24.8 °C
Voltage:	120.1 VAC
Current:	0.6849 A
Power:	80.57 W
Power Factor:	0.980
Frequency:	60 Hz
Current THD:	14.7 %

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



Distribution - Goniophotometer

Distribution Test Conditions

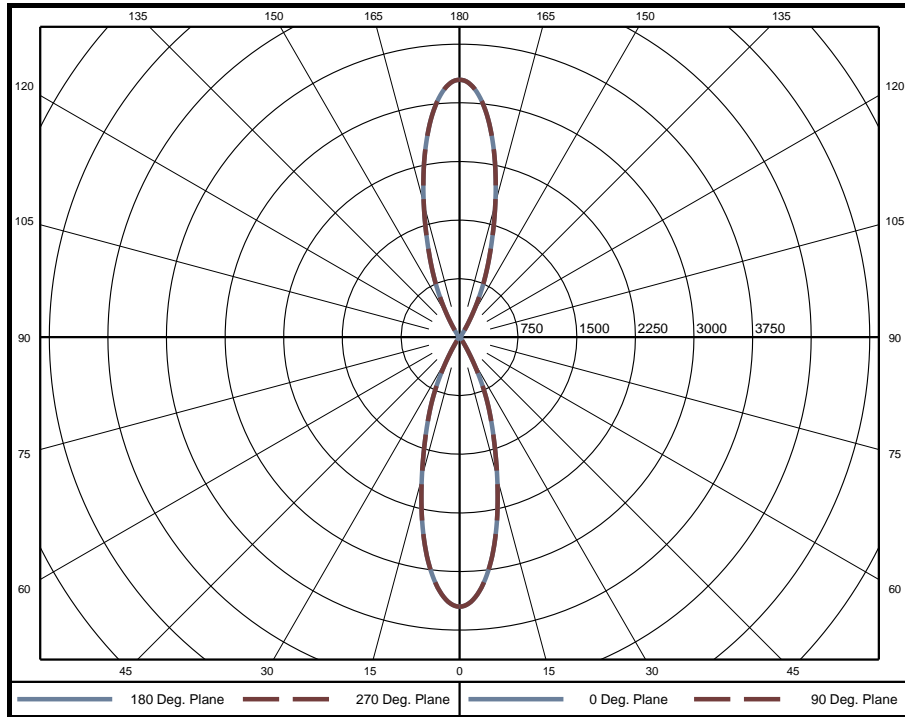
Temperature	Voltage	Current	Power	Power Factor	Frequency	Current THD
24.8 °C	120.1 VAC	0.6849 A	80.57 W	0.980	60 Hz	14.7 %

Summary of Results

Spacing Criteria
 0-180: 0.53
 90-270: 0.53

Total Lumen Output: 2493 Lumens
Luminaire Efficacy: 30.9 lm/w
Maximum Candela: 3447 Candela

Polar Plot



Zonal Lumen Summary

Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire	Zone	Lumens	% of Luminaire
0-5	79.7	3.2%	60-65	9.8	0.4%	120-125	10.1	0.4%
5-10	208.3	8.4%	65-70	8.5	0.3%	125-130	11.5	0.5%
10-15	263.8	10.6%	70-75	7.0	0.3%	130-135	13.1	0.5%
15-20	249.3	10.0%	75-80	5.3	0.2%	135-140	15.2	0.6%
20-25	202.0	8.1%	80-85	3.8	0.2%	140-145	22.7	0.9%
25-30	121.8	4.9%	85-90	1.7	0.1%	145-150	51.5	2.1%
30-35	47.5	1.9%	90-95	1.5	0.1%	150-155	114.5	4.6%
35-40	19.8	0.8%	95-100	3.4	0.1%	155-160	185.6	7.4%
40-45	14.1	0.6%	100-105	4.7	0.2%	160-165	235.2	9.4%
45-50	12.5	0.5%	105-110	6.2	0.2%	165-170	250.2	10.0%
50-55	11.6	0.5%	110-115	7.5	0.3%	170-175	198.1	7.9%
55-60	10.8	0.4%	115-120	8.8	0.4%	175-180	76.1	3.1%

Zone	Lumens	% of Luminaire
0-40	1192	47.8%
0-60	1241	49.8%
0-90	1277	51.2%
90-180	1216	48.8%



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	3447	3447	3447	3447	3447	3447	3447	3447	3447	3447	3447	3447	3447	3447	3447
	5	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216	3216
	10	2624	2624	2624	2624	2624	2624	2624	2624	2624	2624	2624	2624	2624	2624	2624
	15	1867	1867	1867	1867	1867	1867	1867	1867	1867	1867	1867	1867	1867	1867	1867
	20	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224	1224
	25	724	724	724	724	724	724	724	724	724	724	724	724	724	724	724
	30	282	282	282	282	282	282	282	282	282	282	282	282	282	282	282
	35	87	87	87	87	87	87	87	87	87	87	87	87	87	87	87
	40	44	44	44	44	44	44	44	44	44	44	44	44	44	44	44
	45	34	34	34	34	34	34	34	34	34	34	34	34	34	34	34
	50	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28
	55	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25
	60	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
	65	18	18	18	18	18	18	18	18	18	18	18	18	18	18	18
	70	15	15	15	15	15	15	15	15	15	15	15	15	15	15	15
	75	12	12	12	12	12	12	12	12	12	12	12	12	12	12	12
	80	8	8	8	8	8	8	8	8	8	8	8	8	8	8	8
	85	6	6	6	6	6	6	6	6	6	6	6	6	6	6	6
	90	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
	95	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5
	100	7	7	7	7	7	7	7	7	7	7	7	7	7	7	7
	105	10	10	10	10	10	10	10	10	10	10	10	10	10	10	10
	110	13	13	13	13	13	13	13	13	13	13	13	13	13	13	13
	115	16	16	16	16	16	16	16	16	16	16	16	16	16	16	16
	120	20	20	20	20	20	20	20	20	20	20	20	20	20	20	20
	125	24	24	24	24	24	24	24	24	24	24	24	24	24	24	24
	130	29	29	29	29	29	29	29	29	29	29	29	29	29	29	29
	135	36	36	36	36	36	36	36	36	36	36	36	36	36	36	36
	140	49	49	49	49	49	49	49	49	49	49	49	49	49	49	49
	145	101	101	101	101	101	101	101	101	101	101	101	101	101	101	101
	150	284	284	284	284	284	284	284	284	284	284	284	284	284	284	284
	155	660	660	660	660	660	660	660	660	660	660	660	660	660	660	660
	160	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140	1140
	165	1771	1771	1771	1771	1771	1771	1771	1771	1771	1771	1771	1771	1771	1771	1771
	170	2488	2488	2488	2488	2488	2488	2488	2488	2488	2488	2488	2488	2488	2488	2488
	175	3068	3068	3068	3068	3068	3068	3068	3068	3068	3068	3068	3068	3068	3068	3068
	180	3295	3295	3295	3295	3295	3295	3295	3295	3295	3295	3295	3295	3295	3295	3295

Average Luminance (cd/m²)
Horizontal Angle (Degrees)

Vertical Angle (Degrees)	0	45	90
	0	336000	336000
	45	4646	4646
	55	4237	4237
	65	4260	4260
	75	4410	4410
	85	6302	6302



Coefficients of Utilization - 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 percent of total lumen output delivered to the task surface **																	
0	107	107	107	107	99	99	99	99	84	84	84	70	70	70	57	57	57	51
1	101	97	94	92	93	90	88	86	77	76	74	66	64	64	55	54	53	48
2	94	89	84	80	88	83	79	76	72	69	67	62	60	58	52	51	50	46
3	89	82	76	72	82	76	72	68	67	64	61	58	56	54	50	48	47	43
4	83	75	69	65	78	71	66	62	63	59	56	55	52	50	48	46	45	41
5	79	70	64	59	74	66	61	57	59	55	52	52	49	47	46	44	42	40
6	74	65	59	55	70	62	56	52	55	51	48	49	46	44	44	42	40	38
7	71	61	55	51	66	58	53	49	52	48	45	47	44	42	42	40	38	36
8	67	57	51	47	63	55	49	46	50	46	43	45	42	40	40	38	37	35
9	64	54	48	44	60	52	47	43	47	43	40	43	40	38	39	37	35	34
10	61	51	46	42	58	49	44	41	45	41	38	41	38	36	38	35	34	32

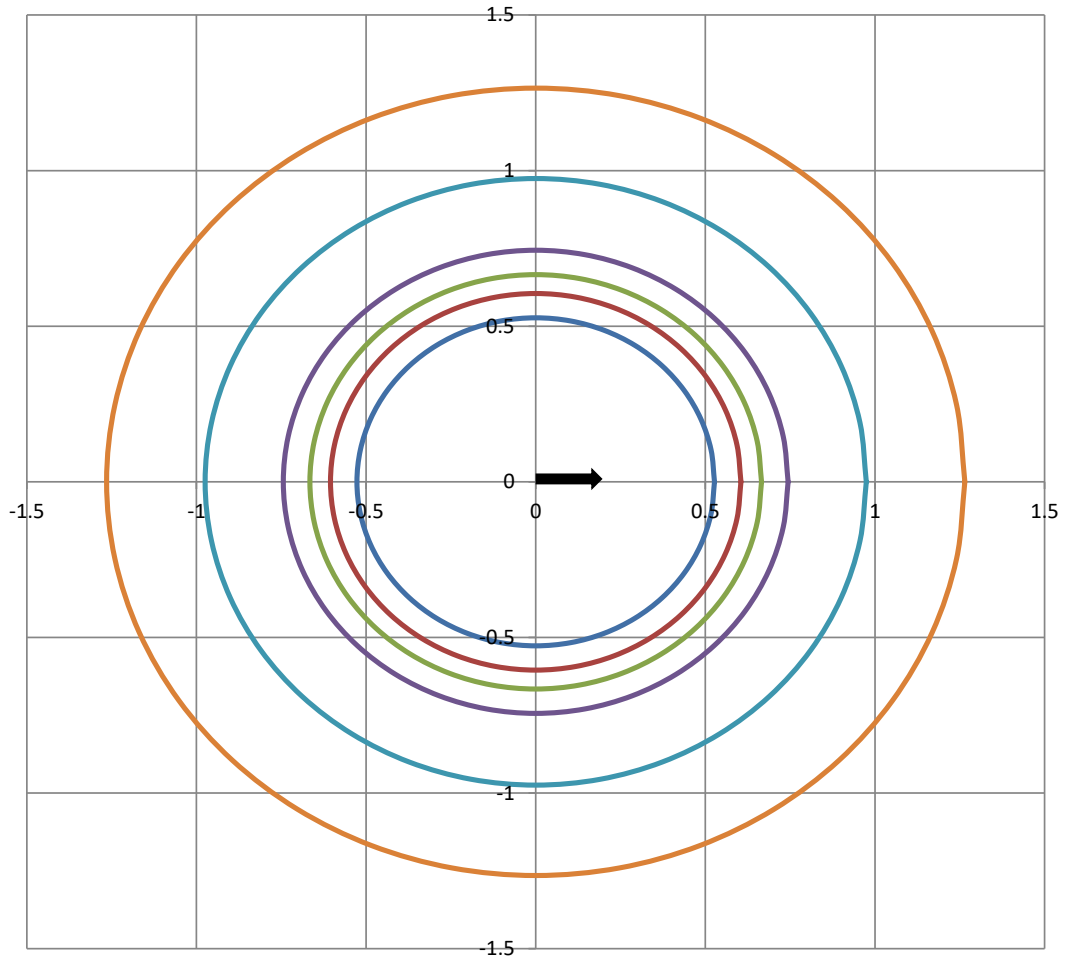
Beam and Field Information	
CIE Type:	Direct/Indirect
Center Beam Intensity:	3447 Candela
Central Cone Intensity:	3365 Candela
Beam Flux:	1143.0 Lumens
Beam Angle (0-180):	32.0 Degrees
Beam Angle (90-270):	32.0 Degrees
Field Angle (0-180):	58.2 Degrees
Field Angle (90-270):	58.2 Degrees

Cone of Light Tabulation			
Mounting Height (Feet)		Footcandles at Nadir	Diameter (Feet)
4.00		215	2.11
6.00		95.8	3.16
8.00		53.9	4.21
10.0		34.5	5.26
12.0		23.9	6.32
14.0		17.6	7.37
16.0		13.5	8.42



ISOFootcandle Plot

Mounting Height - 8 Feet



Grid Lines in Units of Mounting Height

