

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-State
Lighting Products

Test Report Prepared for

Cooper Lighting Solutions

(formerly Eaton)

Brand: METALUX

Report Number: P731189

Luminaire Tested: **HBLED-LD5-60SE-W-FLI-UNV-L835**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731189
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P26703)
Test Lab: INNOVATION CENTER
Issue Date: 11/13/2023
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-60SE-W-FLI-UNV-L835
Description: 60000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 51304.0 lumens
Efficiency: N/A
Efficacy: 139.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 1.67' x L: 4' x H: 0')
CIE Type: Direct

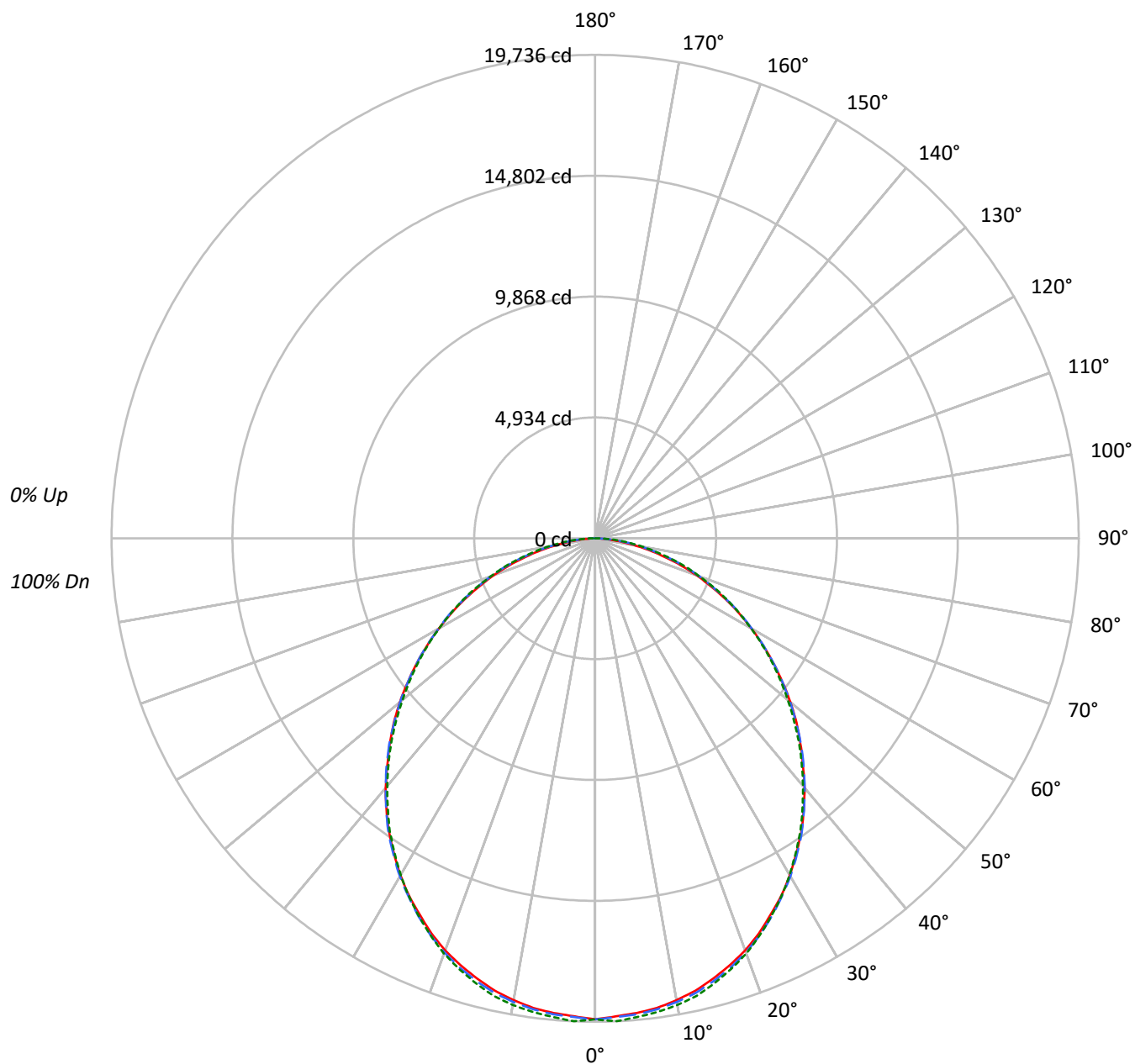
Input Watts (W): 367
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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Luminous Intensity Polar Plot





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COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:

RF	20				20					20					20					20
RC	80				70					50					30					10
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100		
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84		
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71		
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60		
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51		
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45		
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39		
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35		
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31		
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28		
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25		

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	31711	31711	31711
5°	31531	31620	31800
10°	31388	31515	31720
15°	31112	31281	31434
20°	30760	30908	30998
25°	30190	30362	30317
30°	29634	29713	29592
35°	28900	28974	28789
40°	28031	28031	27815
45°	27051	27125	26848
50°	26121	26077	25751
55°	24991	24994	24769
60°	23781	23808	23716
65°	22413	22637	22694
70°	20701	21268	21291
75°	18295	19480	19783
80°	15005	17059	18024
85°	10413	14324	16197



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1857.5	3.6
10°-20°	5284.2	10.3
20°-30°	7852.7	15.3
30°-40°	9181.9	17.9
40°-50°	9154.5	17.8
50°-60°	7942.8	15.5
60°-70°	5866.7	11.4
70°-80°	3284.7	6.4
80°-90°	876.4	1.7
90°-100°	2.6	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-30°	14994.4	29.2
0°-40°	24176.3	47.1
0°-60°	41273.6	80.4
0°-90°	51301.4	100.0
90°-120°	2.6	0.0
90°-150°	2.6	0.0
90°-180°	3.0	0.0
0°-180°	51304.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19641	19641	19641	19641	19641	
5°	19454	19577	19509	19596	19621	###
15°	18613	18743	18714	18804	18805	5249
25°	16946	17083	17043	17080	17018	7813
35°	14662	14791	14700	14697	14606	9159
45°	11847	11973	11879	11830	11758	9145
55°	8878	8939	8879	8864	8799	7939
65°	5866	5924	5925	5955	5940	5802
75°	2933	3020	3123	3145	3171	3123
85°	562	680	773	842	874	683
90°	0	12	15	34	31	23
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19640.6	19640.6	19640.6	19640.6	19640.6
2.5°	19533.3	19649.5	19568.2	19645.7	19735.7
5°	19454.5	19577.1	19509.4	19595.6	19620.6
7.5°	19339.7	19458.4	19393.4	19479.6	19505.8
10°	19144.7	19273.5	19222.2	19319.7	19347.2
12.5°	18917.5	19038.6	19004.9	19118.5	19137.3
15°	18612.7	18742.7	18713.8	18803.9	18805.1
17.5°	18275.5	18397.8	18376.6	18446.7	18444.0
20°	17902.1	18033.1	17988.3	18064.4	18040.6
22.5°	17460.0	17599.8	17543.5	17607.3	17547.3
25°	16946.5	17082.7	17042.8	17080.1	17017.8
27.5°	16449.4	16574.4	16491.8	16536.8	16470.6
30°	15894.8	16001.0	15937.4	15952.3	15872.4
32.5°	15271.6	15397.7	15320.2	15317.8	15232.8
35°	14662.1	14790.6	14699.6	14697.0	14606.0
37.5°	13987.6	14107.5	14000.1	14006.4	13900.2
40°	13299.4	13403.1	13299.4	13294.3	13197.1
42.5°	12552.4	12689.9	12595.1	12606.1	12476.4
45°	11846.9	11973.0	11879.4	11830.5	11758.1
47.5°	11143.8	11198.7	11121.1	11108.6	11006.3
50°	10399.2	10440.4	10381.7	10366.7	10251.9
52.5°	9629.9	9701.2	9626.0	9606.1	9530.0
55°	8877.9	8939.0	8879.1	8864.2	8799.2
57.5°	8121.1	8201.0	8139.9	8124.7	8072.5
60°	7364.3	7387.9	7372.9	7395.3	7344.3
62.5°	6612.3	6667.1	6684.7	6678.5	6638.5
65°	5866.5	5924.1	5925.3	5955.3	5940.2
67.5°	5103.4	5178.3	5199.7	5230.8	5244.5
70°	4385.1	4442.7	4505.3	4523.8	4510.1
72.5°	3662.0	3754.5	3824.5	3840.6	3899.4
75°	2932.7	3020.0	3122.6	3145.0	3171.2
77.5°	2255.8	2371.8	2464.2	2494.3	2526.8
80°	1613.8	1742.3	1834.7	1875.9	1938.5
82.5°	1059.2	1190.3	1284.0	1325.1	1401.5
85°	562.1	679.5	773.2	841.8	874.3
87.5°	166.1	266.0	319.7	339.7	368.5
90°	0.0	12.5	14.9	33.7	31.3
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC





— 0°-180° - - 45°-225° - - - 90°-270°







107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



(END OF REPORT)