

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: P731186

Luminaire Tested: **HBLED-LD5-60SE-W-FLI-UNV-L735**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731186
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-L735
Description: 60000 LUMEN, SE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 53670.0 lumens
Efficiency: N/A
Efficacy: 146.2 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

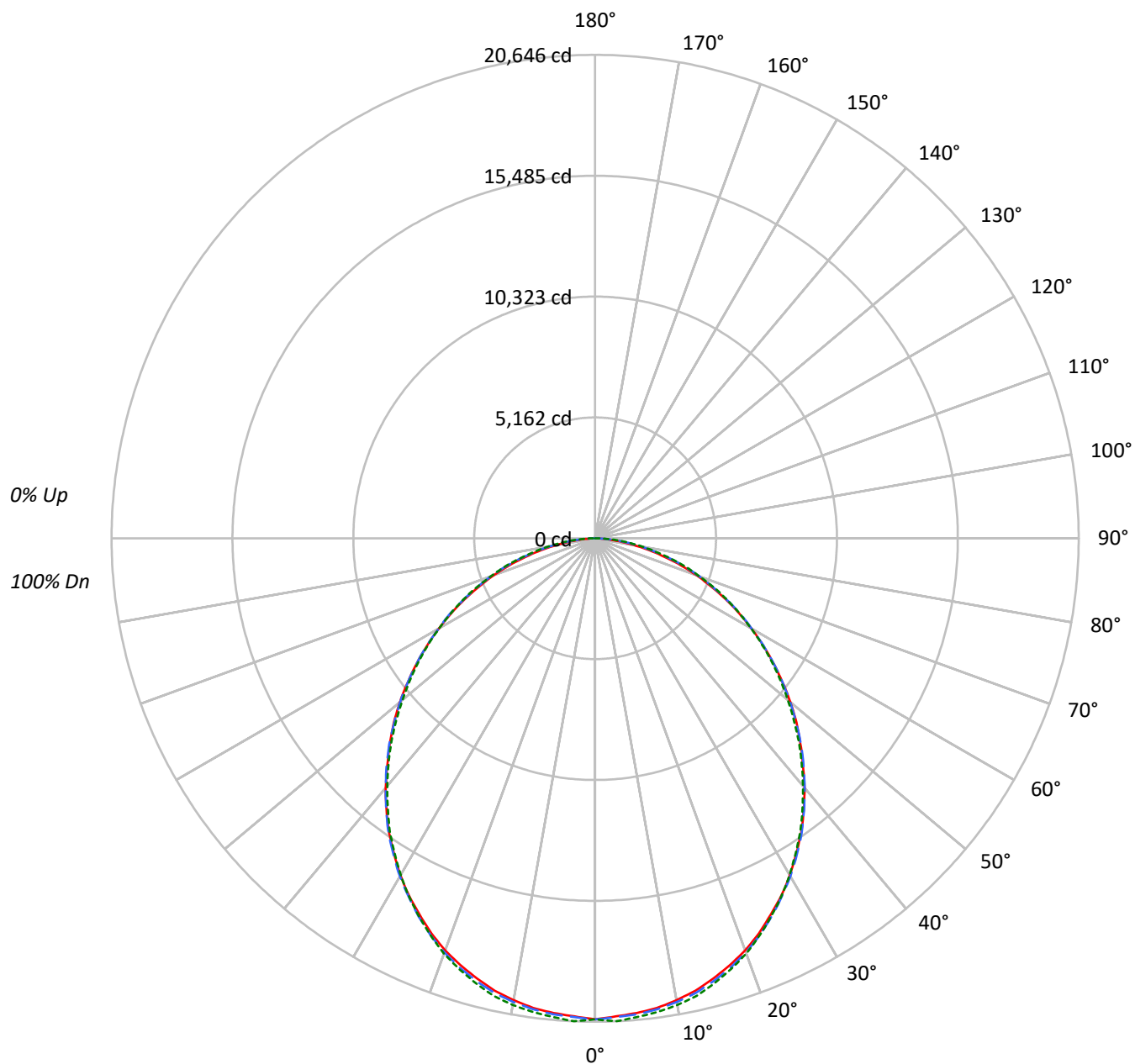
Input Watts (W): 367
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



TEST NUMBER: P731186

CATALOG NUMBER: HBLED-LD5-60SE-W-FLI-UNV-L735

Luminous Intensity Polar Plot





TEST NUMBER: P731186

CATALOG NUMBER: HBLED-LD5-60SE-W-FLI-UNV-L735

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°	33174	33174	33174
5°	32985	33078	33267
10°	32835	32968	33182
15°	32547	32724	32883
20°	32178	32333	32427
25°	31582	31762	31715
30°	31000	31083	30957
35°	30233	30310	30117
40°	29324	29324	29098
45°	28299	28376	28086
50°	27326	27280	26939
55°	26143	26147	25912
60°	24877	24907	24810
65°	23446	23681	23741
70°	21656	22249	22273
75°	19138	20378	20696
80°	15697	17847	18855
85°	10893	14983	16943



TEST NUMBER: P731186

CATALOG NUMBER: HBLED-LD5-60SE-W-FLI-UNV-L735

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1943.2	3.6
10°-20°	5527.9	10.3
20°-30°	8214.8	15.3
30°-40°	9605.3	17.9
40°-50°	9576.7	17.8
50°-60°	8309.1	15.5
60°-70°	6137.2	11.4
70°-80°	3436.1	6.4
80°-90°	916.8	1.7
90°-100°	2.8	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°	15685.9	29.2
0°-40°	25291.2	47.1
0°-60°	43177.0	80.4
0°-90°	53667.3	100.0
90°-120°	2.8	0.0
90°-150°	2.8	0.0
90°-180°	3.0	0.0
0°-180°	53670.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	20546	20546	20546	20546	20546	
5°	20352	20480	20409	20499	20526	###
15°	19471	19607	19577	19671	19672	5491
25°	17728	17871	17829	17868	17803	8173
35°	15338	15473	15378	15375	15280	9581
45°	12393	12525	12427	12376	12300	9567
55°	9287	9351	9289	9273	9205	8305
65°	6137	6197	6198	6230	6214	6070
75°	3068	3159	3267	3290	3318	3267
85°	588	711	809	881	915	714
90°	0	13	16	35	33	24
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	



TEST NUMBER: P731186

CATALOG NUMBER: HBLED-LD5-60SE-W-FLI-UNV-L735

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	20546.4	20546.4	20546.4	20546.4	20546.4
2.5°	20434.1	20555.7	20470.6	20551.7	20645.9
5°	20351.7	20479.9	20409.1	20499.3	20525.5
7.5°	20231.6	20355.8	20287.8	20377.9	20405.4
10°	20027.6	20162.4	20108.7	20210.7	20239.4
12.5°	19789.9	19916.6	19881.3	20000.2	20019.8
15°	19471.1	19607.1	19576.9	19671.1	19672.3
17.5°	19118.3	19246.2	19224.1	19297.4	19294.6
20°	18727.7	18864.7	18817.9	18897.5	18872.5
22.5°	18265.2	18411.5	18352.5	18419.3	18356.6
25°	17728.0	17870.6	17828.8	17867.8	17802.6
27.5°	17208.0	17338.7	17252.3	17299.4	17230.2
30°	16627.8	16738.9	16672.4	16688.0	16604.4
32.5°	15975.9	16107.8	16026.7	16024.2	15935.3
35°	15338.3	15472.7	15377.6	15374.8	15279.6
37.5°	14632.7	14758.1	14645.8	14652.3	14541.3
40°	13912.7	14021.3	13912.7	13907.4	13805.7
42.5°	13131.3	13275.1	13175.9	13187.5	13051.8
45°	12393.3	12525.2	12427.2	12376.1	12300.3
47.5°	11657.7	11715.1	11634.0	11620.9	11513.9
50°	10878.8	10921.9	10860.4	10844.8	10724.7
52.5°	10074.0	10148.5	10070.0	10049.1	9969.5
55°	9287.3	9351.3	9288.6	9273.0	9205.0
57.5°	8495.6	8579.2	8515.2	8499.4	8444.7
60°	7703.9	7728.6	7713.0	7736.4	7683.0
62.5°	6917.2	6974.6	6993.0	6986.5	6944.7
65°	6137.1	6197.3	6198.5	6230.0	6214.1
67.5°	5338.8	5417.1	5439.5	5472.0	5486.4
70°	4587.4	4647.6	4713.0	4732.4	4718.1
72.5°	3830.9	3927.6	4000.9	4017.8	4079.2
75°	3067.9	3159.3	3266.6	3290.0	3317.5
77.5°	2359.8	2481.2	2577.9	2609.3	2643.3
80°	1688.2	1822.7	1919.4	1962.4	2027.9
82.5°	1108.0	1245.2	1343.2	1386.3	1466.1
85°	588.0	710.9	808.8	880.6	914.6
87.5°	173.8	278.3	334.4	355.3	385.5
90°	0.0	13.1	15.6	35.3	32.7
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



TEST NUMBER: P731186

CATALOG NUMBER: HBLED-LD5-60SE-W-FLI-UNV-L735

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)