

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: P731154

Luminaire Tested: **HBLED-LD5-60HE-W-FLI-UNV-L840**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731154
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-LD5-60HE-W-FLI-UNV-L840
Description: 60000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 55232.0 lumens
Efficiency: N/A
Efficacy: 155.6 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

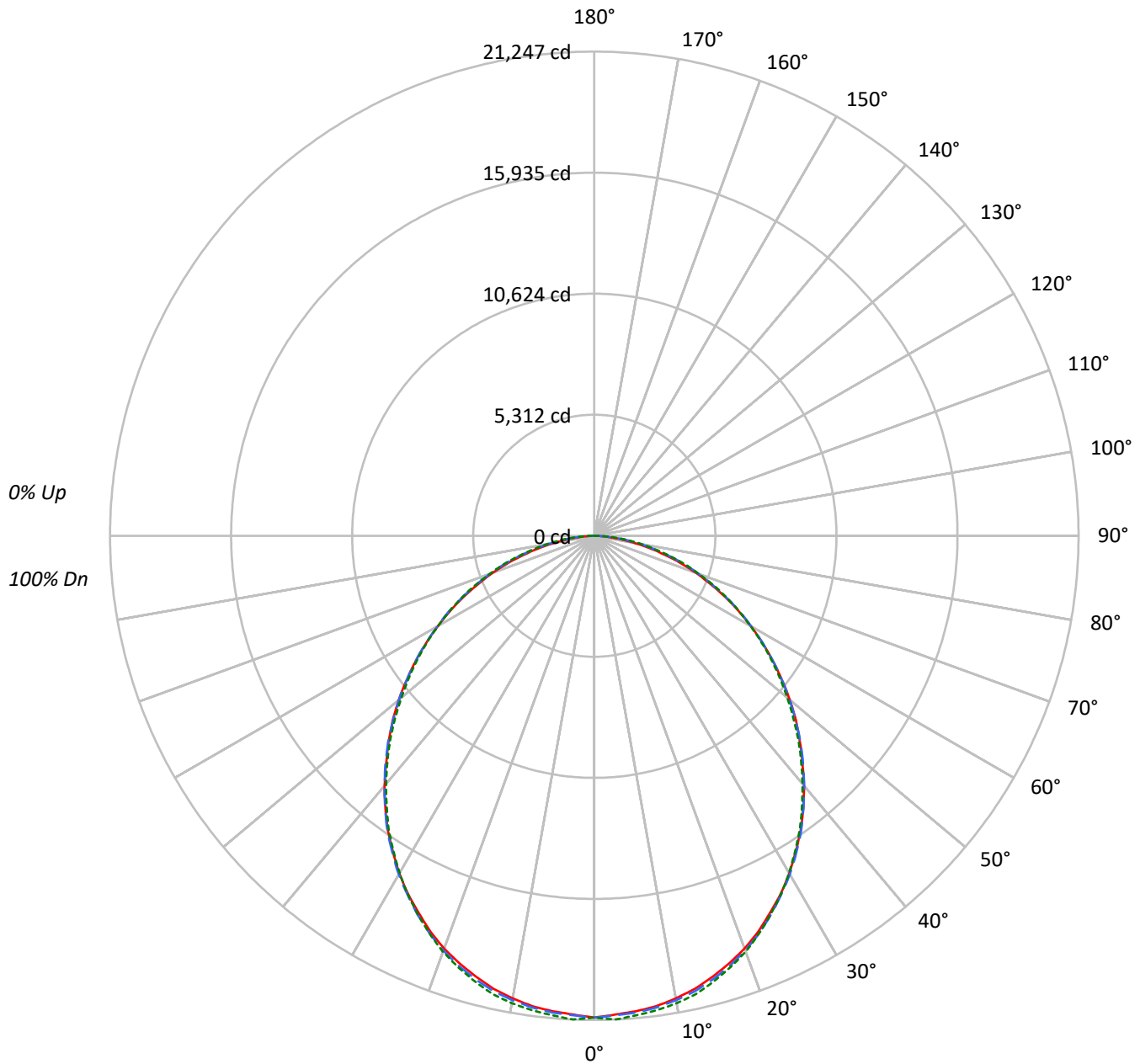
Input Watts (W): 355
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	34139	34139	34139
5°	33945	34041	34235
10°	33791	33928	34148
15°	33494	33676	33840
20°	33115	33274	33371
25°	32502	32686	32638
30°	31903	31988	31858
35°	31112	31192	30993
40°	30177	30177	29945
45°	29122	29202	28904
50°	28121	28074	27723
55°	26904	26908	26666
60°	25601	25631	25532
65°	24129	24370	24432
70°	22286	22897	22921
75°	19696	20971	21298
80°	16153	18365	19404
85°	11210	15420	17436



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1999.7	3.6
10°-20°	5688.8	10.3
20°-30°	8453.9	15.3
30°-40°	9884.9	17.9
40°-50°	9855.4	17.8
50°-60°	8550.9	15.5
60°-70°	6315.8	11.4
70°-80°	3536.1	6.4
80°-90°	943.5	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°	16142.5	29.2
0°-40°	26027.3	47.1
0°-60°	44433.6	80.4
0°-90°	55229.1	100.0
90°-120°	2.8	0.0
90°-150°	2.8	0.0
90°-180°	3.0	0.0
0°-180°	55232.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	21144	21144	21144	21144	21144	
5°	20944	21076	21003	21096	21123	###
15°	20038	20178	20147	20244	20245	5651
25°	18244	18391	18348	18388	18321	8411
35°	15785	15923	15825	15822	15724	9860
45°	12754	12890	12789	12736	12658	9846
55°	9558	9623	9559	9543	9473	8547
65°	6316	6378	6379	6411	6395	6246
75°	3157	3251	3362	3386	3414	3362
85°	605	732	832	906	941	735
90°	0	14	16	36	34	25
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°	21144.4	21144.4	21144.4	21144.4	21144.4
2.5°	21028.8	21153.9	21066.4	21149.8	21246.7
5°	20944.0	21075.9	21003.1	21095.9	21122.8
7.5°	20820.4	20948.2	20878.2	20971.0	20999.2
10°	20610.5	20749.2	20694.0	20798.9	20828.5
12.5°	20365.9	20496.2	20460.0	20582.3	20602.5
15°	20037.8	20177.7	20146.6	20243.6	20244.9
17.5°	19674.7	19806.4	19783.6	19859.0	19856.1
20°	19272.8	19413.8	19365.6	19447.5	19421.8
22.5°	18796.7	18947.3	18886.7	18955.3	18890.8
25°	18244.0	18390.7	18347.6	18387.8	18320.7
27.5°	17708.8	17843.3	17754.5	17802.9	17731.6
30°	17111.8	17226.0	17157.6	17173.7	17087.7
32.5°	16440.8	16576.6	16493.2	16490.6	16399.1
35°	15784.7	15923.1	15825.1	15822.2	15724.3
37.5°	15058.5	15187.6	15072.0	15078.8	14964.5
40°	14317.6	14429.3	14317.6	14312.2	14207.5
42.5°	13513.5	13661.5	13559.4	13571.3	13431.6
45°	12753.9	12889.7	12788.9	12736.3	12658.3
47.5°	11997.0	12056.1	11972.6	11959.1	11849.0
50°	11195.4	11239.7	11176.5	11160.4	11036.8
52.5°	10367.2	10443.9	10363.0	10341.5	10259.6
55°	9557.6	9623.4	9558.9	9542.8	9472.9
57.5°	8742.9	8828.9	8763.1	8746.7	8690.5
60°	7928.1	7953.5	7937.4	7961.5	7906.6
62.5°	7118.5	7177.6	7196.5	7189.8	7146.8
65°	6315.7	6377.6	6378.9	6411.3	6395.0
67.5°	5494.2	5574.8	5597.8	5631.3	5646.0
70°	4720.9	4782.8	4850.2	4870.2	4855.4
72.5°	3942.4	4041.9	4117.3	4134.7	4197.9
75°	3157.2	3251.3	3361.7	3385.8	3414.0
77.5°	2428.5	2553.4	2652.9	2685.3	2720.3
80°	1737.3	1875.7	1975.2	2019.5	2086.9
82.5°	1140.2	1281.5	1382.3	1426.6	1508.8
85°	605.1	731.6	832.4	906.2	941.2
87.5°	178.8	286.4	344.1	365.7	396.8
90°	0.0	13.5	16.1	36.3	33.7
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



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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)