

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: P731155

Luminaire Tested: **HBLED-LD5-60HE-W-FLI-UNV-L850**

Issue Date: 11/13/2023

Test Information

Test Method: LM-79-08
Report Number: P731155
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-L850
Description: 60000 LUMEN, HE HBLED WITH WIDE DISTRIBUTION AND FROSTED LENS INSERT
Light Source: -
Ballast/Driver: -

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 56315.0 lumens
Efficiency: N/A
Efficacy: 158.6 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

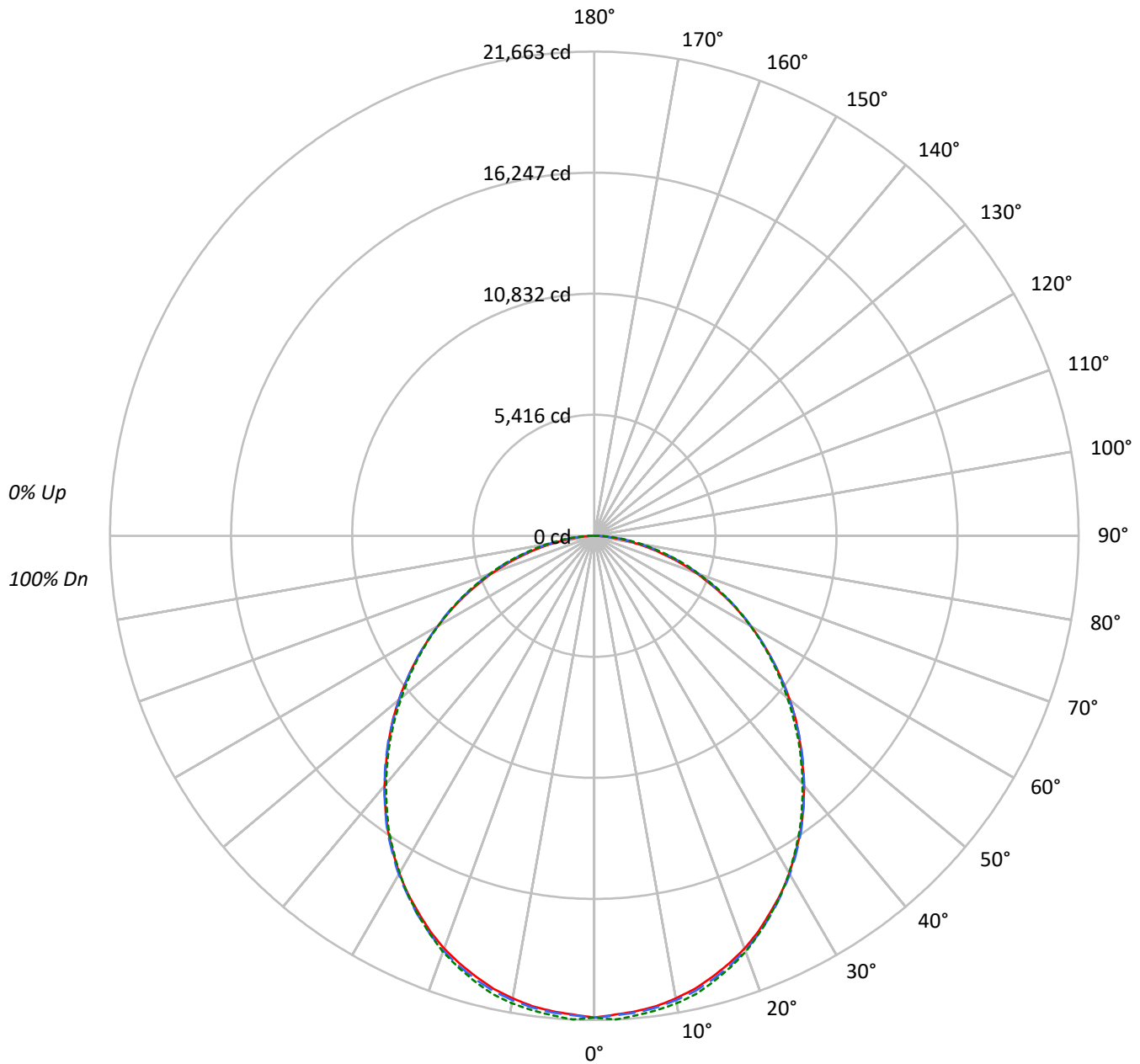
Input Watts (W): 355
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 25 FT



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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°	34809	34809	34809
5°	34611	34708	34906
10°	34453	34593	34818
15°	34151	34336	34504
20°	33764	33927	34025
25°	33139	33327	33278
30°	32528	32615	32482
35°	31722	31804	31601
40°	30769	30769	30532
45°	29693	29774	29470
50°	28673	28624	28266
55°	27432	27435	27188
60°	26103	26134	26032
65°	24602	24848	24911
70°	22723	23345	23370
75°	20082	21382	21715
80°	16471	18726	19784
85°	11430	15722	17779



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2038.9	3.6
10°-20°	5800.3	10.3
20°-30°	8619.7	15.3
30°-40°	10078.7	17.9
40°-50°	10048.7	17.8
50°-60°	8718.6	15.5
60°-70°	6439.7	11.4
70°-80°	3605.5	6.4
80°-90°	962.0	1.7
90°-100°	2.9	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°	16459.0	29.2
0°-40°	26537.7	47.1
0°-60°	45304.9	80.4
0°-90°	56312.1	100.0
90°-120°	2.9	0.0
90°-150°	2.9	0.0
90°-180°	3.0	0.0
0°-180°	56315.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	21559	21559	21559	21559	21559	
5°	21355	21489	21415	21510	21537	###
15°	20431	20573	20542	20640	20642	5762
25°	18602	18751	18707	18748	18680	8576
35°	16094	16235	16135	16132	16033	10053
45°	13004	13142	13040	12986	12906	10039
55°	9745	9812	9746	9730	9659	8714
65°	6440	6503	6504	6537	6520	6369
75°	3219	3315	3428	3452	3481	3428
85°	617	746	849	924	960	749
90°	0	14	16	37	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°	21559.0	21559.0	21559.0	21559.0	21559.0
2.5°	21441.1	21568.7	21479.4	21564.5	21663.3
5°	21354.7	21489.2	21415.0	21509.6	21537.0
7.5°	21228.7	21358.9	21287.6	21382.2	21411.0
10°	21014.7	21156.0	21099.7	21206.7	21236.9
12.5°	20765.2	20898.1	20861.1	20985.8	21006.5
15°	20430.7	20573.4	20541.7	20640.5	20641.8
17.5°	20060.5	20194.7	20171.5	20248.4	20245.5
20°	19650.7	19794.4	19745.3	19828.8	19802.6
22.5°	19165.3	19318.8	19257.0	19327.0	19261.2
25°	18601.7	18751.3	18707.4	18748.4	18679.9
27.5°	18056.1	18193.2	18102.6	18152.0	18079.3
30°	17447.3	17563.8	17494.1	17510.4	17422.7
32.5°	16763.2	16901.7	16816.6	16813.9	16720.7
35°	16094.2	16235.3	16135.4	16132.5	16032.6
37.5°	15353.8	15485.4	15367.6	15374.4	15257.9
40°	14598.4	14712.3	14598.4	14592.8	14486.1
42.5°	13778.5	13929.4	13825.2	13837.4	13695.0
45°	13004.0	13142.5	13039.7	12986.1	12906.5
47.5°	12232.2	12292.5	12207.4	12193.6	12081.3
50°	11415.0	11460.1	11395.7	11379.3	11253.2
52.5°	10570.5	10648.7	10566.2	10544.3	10460.8
55°	9745.0	9812.1	9746.3	9730.0	9658.6
57.5°	8914.3	9002.0	8934.9	8918.3	8860.9
60°	8083.6	8109.4	8093.1	8117.6	8061.6
62.5°	7258.1	7318.3	7337.6	7330.8	7286.9
65°	6439.5	6502.7	6504.0	6537.0	6520.4
67.5°	5601.9	5684.1	5707.6	5741.7	5756.8
70°	4813.5	4876.6	4945.3	4965.7	4950.6
72.5°	4019.7	4121.2	4198.1	4215.8	4280.2
75°	3219.1	3315.0	3427.6	3452.2	3481.0
77.5°	2476.1	2603.4	2704.9	2737.9	2773.6
80°	1771.4	1912.5	2014.0	2059.1	2127.8
82.5°	1162.6	1306.6	1409.4	1454.6	1538.3
85°	617.0	745.9	848.7	924.0	959.7
87.5°	182.3	292.0	350.9	372.8	404.5
90°	0.0	13.7	16.4	37.0	34.3
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)