

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: P#

Luminaire Tested: **HBLED-LD5-24HE-W-UNV-L840-ED2-U**

Issue Date: 3/3/2020

This test was performed under the Supervised Manufacturer's Testing Program. The results of this test have not been influenced by sources from within Cooper Lighting Solutions or from external interests.

Test Information

Test Method: LM-79-08
Report Number: P#
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P23760)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-W-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

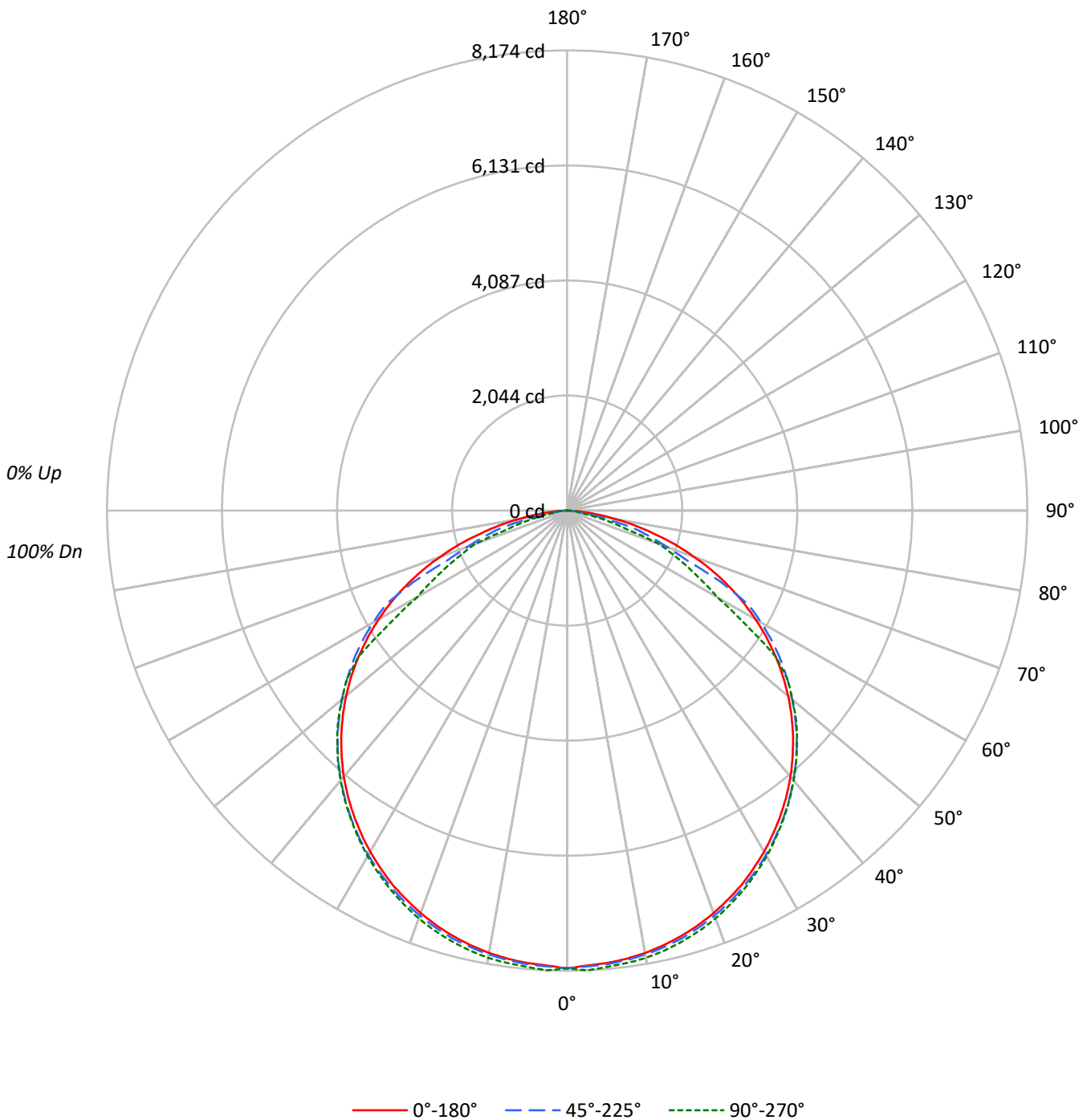
Lumens per Lamp: N/A
Luminaire Lumens: 23474.0 lumens
Efficiency: N/A
Efficacy: 160.5 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
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	0		
RW	70	50	30	10	70	50	30	10	50	30	10		50	30	10		50	30	10	0
RCR																				
0	119	119	119	119	116	116	116	116	111	111	111		106	106	106		102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92		94	92	89		91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76		83	78	75		80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64		73	68	63		70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55		65	59	54		63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47		58	52	47		56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41		53	46	41		51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36		48	41	36		46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32		44	37	32		43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29		40	34	29		39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26		37	31	26		36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10940	10940	10940
5°	10895	10926	10988
10°	10901	10940	11023
15°	10899	10957	11033
20°	10893	10963	11039
25°	10889	10967	11028
30°	10870	10976	11017
35°	10856	10981	10996
40°	10837	10981	10998
45°	10796	10976	10989
50°	10731	10929	10927
55°	10606	10871	10602
60°	10409	10711	8295
65°	10062	9640	7473
70°	9427	7417	6888
75°	8347	6467	4292
80°	6874	3807	1918
85°	4529	2333	2513



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	771.6	3.3
10°-20°	2226.2	9.5
20°-30°	3413.0	14.5
30°-40°	4185.7	17.8
40°-50°	4444.5	18.9
50°-60°	4059.5	17.3
60°-70°	2827.0	12.0
70°-80°	1318.5	5.6
80°-90°	228.1	1.0
90°-100°	0.0	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°	6410.7	27.3
0°-40°	10596.4	45.1
0°-60°	19100.4	81.4
0°-90°	23474.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23474.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8131	8131	8131	8131	8131	
5°	8067	8123	8089	8128	8135	767
15°	7824	7879	7866	7914	7921	2209
25°	7335	7399	7387	7442	7428	3380
35°	6609	6686	6686	6730	6694	4136
45°	5674	5759	5768	5805	5775	4376
55°	4521	4612	4634	4642	4519	4038
65°	3160	3258	3028	2408	2347	3118
75°	1606	1707	1244	862	826	1716
85°	293	193	151	162	163	379
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8131.2	8131.2	8131.2	8131.2	8131.2
2.5°	8088.3	8140.0	8105.8	8142.9	8174.1
5°	8066.8	8123.4	8089.3	8128.3	8135.1
7.5°	8031.7	8085.4	8054.2	8097.1	8107.8
10°	7979.1	8031.7	8007.4	8058.1	8067.8
12.5°	7907.9	7961.6	7943.0	7998.6	8005.4
15°	7824.1	7878.7	7866.0	7913.8	7920.6
17.5°	7725.6	7782.2	7767.6	7818.3	7823.1
20°	7607.7	7669.1	7656.4	7715.9	7710.0
22.5°	7475.1	7540.4	7530.7	7590.1	7572.6
25°	7334.7	7399.1	7387.4	7442.0	7428.3
27.5°	7170.0	7241.1	7230.4	7283.1	7261.6
30°	6996.5	7068.6	7064.7	7112.5	7091.0
32.5°	6809.3	6886.3	6882.4	6929.2	6896.1
35°	6609.4	6685.5	6685.5	6730.3	6694.3
37.5°	6397.9	6474.9	6475.9	6518.8	6484.7
40°	6169.8	6246.8	6251.7	6292.6	6261.4
42.5°	5930.0	6013.8	6017.7	6054.8	6025.5
45°	5673.6	5759.4	5768.2	5805.2	5775.0
47.5°	5405.5	5492.3	5500.1	5540.0	5518.6
50°	5126.7	5210.5	5221.3	5254.4	5220.3
52.5°	4832.3	4918.1	4932.7	4953.2	4937.6
55°	4521.3	4612.0	4634.4	4642.2	4519.4
57.5°	4199.6	4292.2	4313.7	4134.3	3739.5
60°	3868.2	3959.8	3980.3	3363.2	3082.5
62.5°	3523.1	3612.8	3635.2	2787.1	2697.4
65°	3160.4	3257.9	3027.9	2407.9	2347.4
67.5°	2788.1	2888.5	2289.9	2063.7	2027.7
70°	2396.2	2497.6	1885.3	1759.6	1750.8
72.5°	2019.9	2094.9	1547.1	1333.6	1123.0
75°	1605.6	1707.0	1243.9	861.8	825.7
77.5°	1244.9	1076.2	750.6	631.7	498.1
80°	887.1	719.4	491.3	262.2	247.6
82.5°	562.5	469.9	193.0	197.9	206.7
85°	293.4	193.0	151.1	161.8	162.8
87.5°	94.6	82.9	90.7	89.7	88.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)