

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-CL-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 (P23762)
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-CL-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

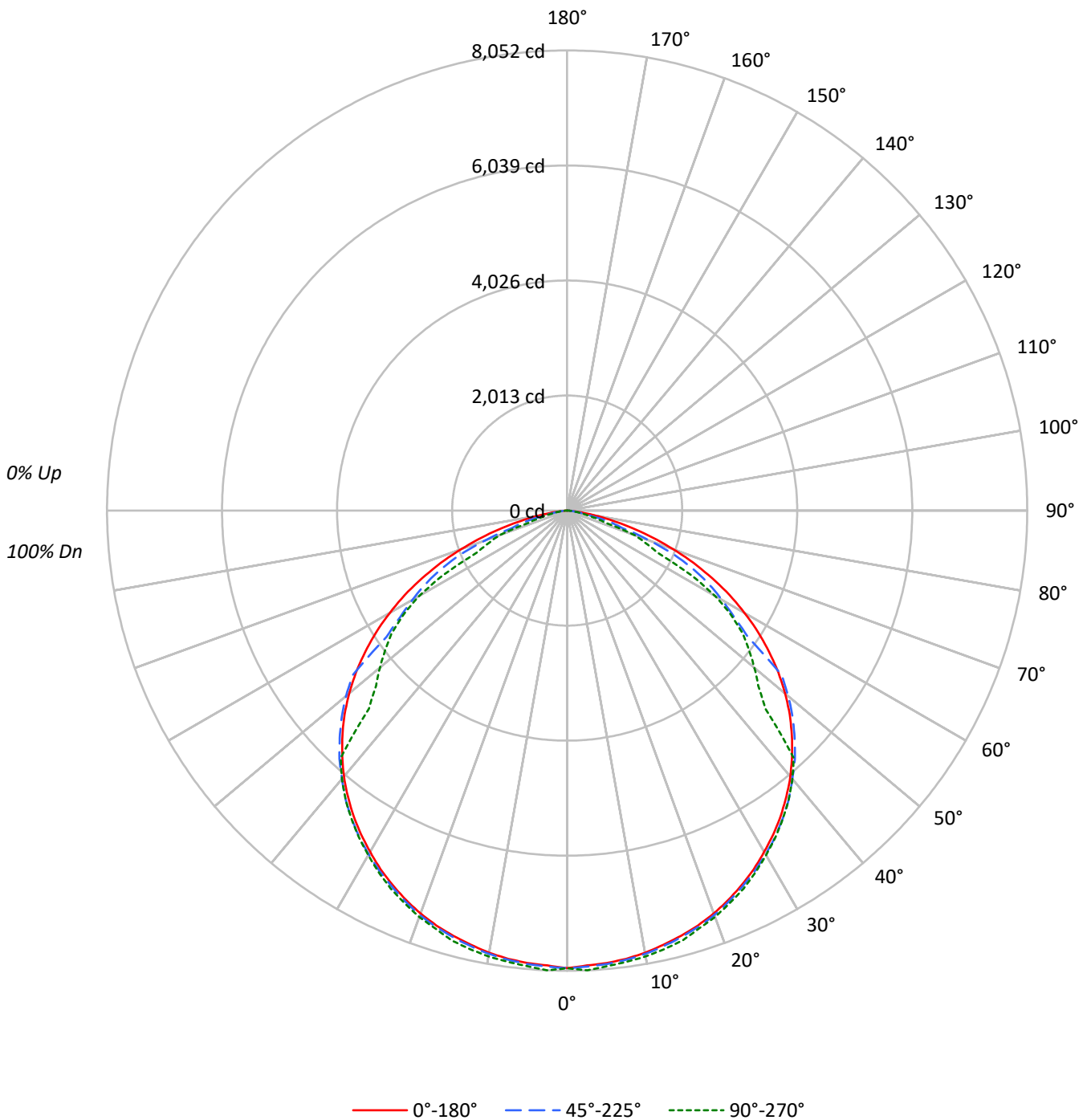
Lumens per Lamp: N/A
Luminaire Lumens: 21643.0 lumens
Efficiency: N/A
Efficacy: 147.9 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	40	33	28	40	33	28	39	32	28	38	32	28	26

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10772	10772	10772
5°	10732	10756	10809
10°	10731	10762	10824
15°	10731	10763	10850
20°	10744	10784	10835
25°	10732	10772	10837
30°	10711	10790	10814
35°	10706	10804	10812
40°	10673	10767	10767
45°	10582	10709	9331
50°	10418	10575	8953
55°	10123	9053	8794
60°	9647	8415	8034
65°	8922	7811	5564
70°	7769	6078	4958
75°	6136	4079	2665
80°	3950	1949	1661
85°	1626	1189	1309



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	759.4	3.5
10°-20°	2188.9	10.1
20°-30°	3355.9	15.5
30°-40°	4113.1	19.0
40°-50°	4228.6	19.5
50°-60°	3608.9	16.7
60°-70°	2385.9	11.0
70°-80°	884.0	4.1
80°-90°	118.2	0.5
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°	6304.2	29.1
0°-40°	10417.3	48.1
0°-60°	18254.9	84.3
0°-90°	21643.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21643.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8006	8006	8006	8006	8006	
5°	7946	8002	7964	7995	8003	756
15°	7704	7750	7727	7785	7789	2176
25°	7229	7267	7256	7321	7300	3333
35°	6518	6563	6578	6619	6582	4077
45°	5561	5616	5628	5620	4904	4286
55°	4315	4394	3859	3747	3749	3850
65°	2802	2826	2454	2018	1748	2763
75°	1180	1034	785	527	513	1266
85°	105	75	77	84	85	174
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8005.7	8005.7	8005.7	8005.7	8005.7
2.5°	7966.7	8016.4	7987.1	8024.2	8052.5
5°	7946.2	8001.8	7963.7	7994.9	8002.7
7.5°	7911.1	7962.8	7927.7	7968.6	7962.8
10°	7854.6	7901.4	7877.0	7919.9	7922.8
12.5°	7782.4	7829.2	7806.8	7859.5	7858.5
15°	7703.5	7750.3	7726.9	7785.4	7789.3
17.5°	7610.9	7653.8	7636.2	7689.8	7668.4
20°	7503.7	7540.7	7531.9	7582.6	7567.0
22.5°	7372.1	7410.1	7401.3	7459.8	7436.4
25°	7228.8	7266.8	7256.1	7321.4	7299.9
27.5°	7073.8	7109.9	7108.9	7170.3	7137.2
30°	6894.4	6942.2	6945.1	6999.7	6960.7
32.5°	6717.0	6761.9	6774.5	6814.5	6781.4
35°	6518.2	6563.0	6577.6	6618.6	6582.5
37.5°	6303.7	6341.8	6368.1	6398.3	6370.0
40°	6076.6	6110.7	6130.2	6167.3	6130.2
42.5°	5823.2	5871.9	5899.2	5925.5	5865.1
45°	5561.0	5616.5	5628.2	5619.5	4904.0
47.5°	5283.2	5343.6	5350.4	4666.2	4534.6
50°	4977.1	5053.1	5052.2	4312.3	4277.2
52.5°	4658.4	4731.5	4728.5	4035.5	4012.1
55°	4315.2	4394.2	3859.1	3747.0	3748.9
57.5°	3965.3	4021.8	3462.3	3467.2	3402.9
60°	3585.1	3638.8	3127.0	3096.8	2985.7
62.5°	3204.0	3226.4	2802.4	2655.2	2443.7
65°	2802.4	2825.8	2453.5	2017.7	1747.7
67.5°	2390.1	2413.5	2036.3	1501.1	1480.7
70°	1974.9	1783.8	1545.0	1250.6	1260.4
72.5°	1565.5	1370.5	1009.8	968.9	699.9
75°	1180.4	1034.2	784.7	527.3	512.7
77.5°	821.7	712.5	420.1	359.7	336.3
80°	509.8	357.7	251.5	223.2	214.4
82.5°	258.3	205.7	136.5	136.5	136.5
85°	105.3	75.1	77.0	83.8	84.8
87.5°	22.4	30.2	37.0	38.0	37.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)