

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-LD5-24SE-W-CL-UNV-L850-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-LD5-24SE-W-CL-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

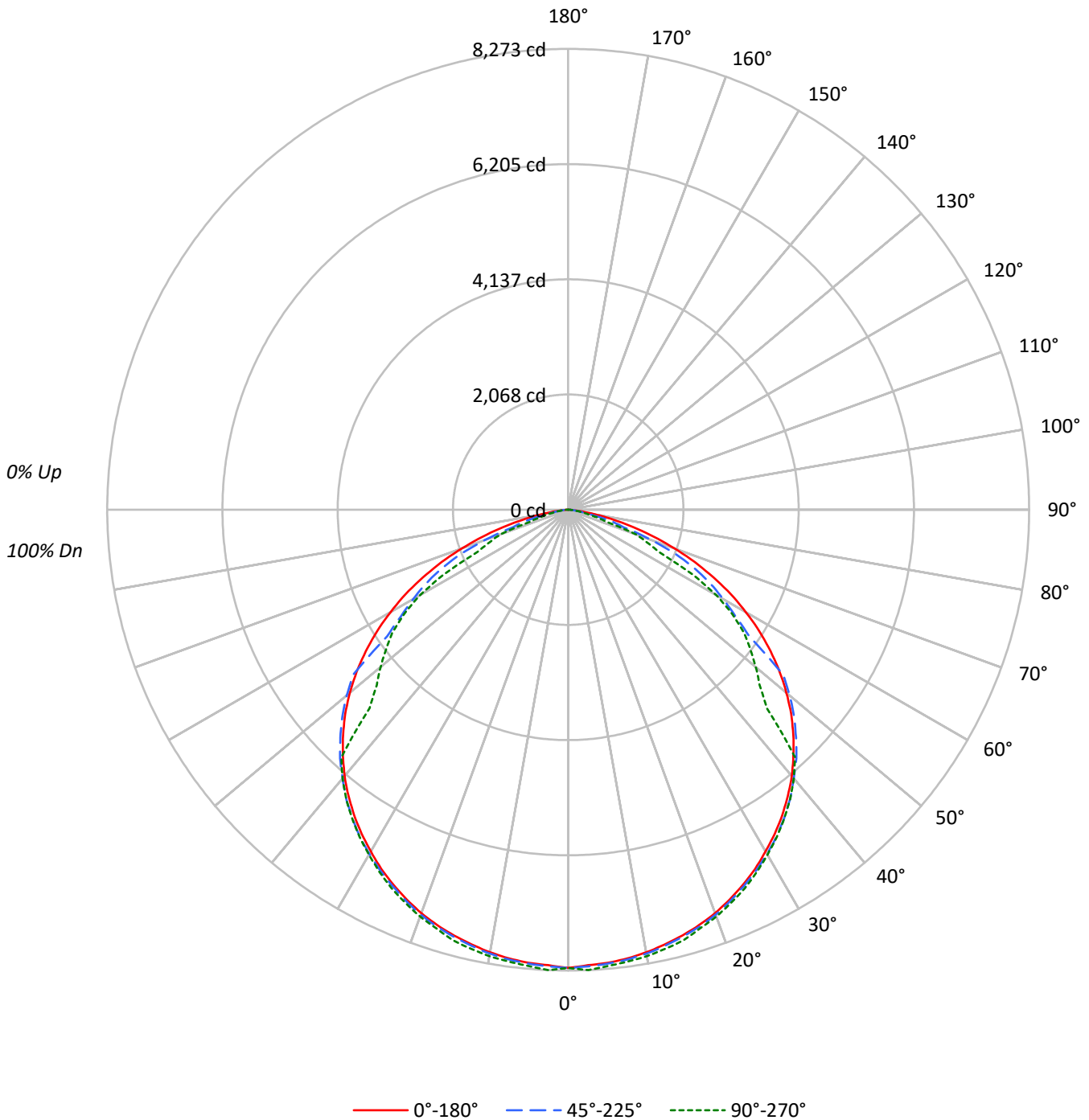
Lumens per Lamp: N/A
Luminaire Lumens: 22235.0 lumens
Efficiency: N/A
Efficacy: 144.4 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 154
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°	11066	11066	11066
5°	11026	11050	11104
10°	11025	11056	11121
15°	11024	11058	11147
20°	11038	11080	11131
25°	11025	11067	11134
30°	11004	11085	11110
35°	10999	11100	11108
40°	10965	11062	11062
45°	10871	11002	9587
50°	10703	10864	9198
55°	10400	9300	9035
60°	9911	8645	8254
65°	9166	8025	5716
70°	7982	6244	5094
75°	6304	4191	2738
80°	4058	2002	1707
85°	1670	1221	1345



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	780.2	3.5
10°-20°	2248.8	10.1
20°-30°	3447.7	15.5
30°-40°	4225.7	19.0
40°-50°	4344.3	19.5
50°-60°	3707.6	16.7
60°-70°	2451.2	11.0
70°-80°	908.1	4.1
80°-90°	121.4	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°	6476.6	29.1
0°-40°	10702.3	48.1
0°-60°	18754.2	84.3
0°-90°	22235.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22235.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8225	8225	8225	8225	8225	
5°	8164	8221	8182	8214	8222	776
15°	7914	7962	7938	7998	8002	2235
25°	7426	7466	7455	7522	7500	3424
35°	6696	6742	6758	6800	6763	4189
45°	5713	5770	5782	5773	5038	4403
55°	4433	4514	3965	3849	3852	3956
65°	2879	2903	2521	2073	1796	2839
75°	1213	1062	806	542	527	1301
85°	108	77	79	86	87	179
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8224.6	8224.6	8224.6	8224.6	8224.6
2.5°	8184.6	8235.7	8205.6	8243.7	8272.7
5°	8163.6	8220.6	8181.6	8213.6	8221.6
7.5°	8127.5	8180.6	8144.5	8186.6	8180.6
10°	8069.4	8117.5	8092.5	8136.5	8139.5
12.5°	7995.3	8043.4	8020.4	8074.4	8073.4
15°	7914.2	7962.3	7938.2	7998.3	8002.3
17.5°	7819.1	7863.1	7845.1	7900.2	7878.2
20°	7708.9	7747.0	7738.0	7790.0	7774.0
22.5°	7573.7	7612.8	7603.8	7663.8	7639.8
25°	7426.5	7465.6	7454.6	7521.6	7499.6
27.5°	7267.3	7304.3	7303.3	7366.4	7332.4
30°	7083.0	7132.1	7135.1	7191.2	7151.1
32.5°	6900.8	6946.8	6959.9	7000.9	6966.9
35°	6696.5	6742.5	6757.6	6799.6	6762.6
37.5°	6476.2	6515.2	6542.3	6573.3	6544.3
40°	6242.8	6277.9	6297.9	6336.0	6297.9
42.5°	5982.5	6032.5	6060.6	6087.6	6025.5
45°	5713.1	5770.2	5782.2	5773.2	5038.1
47.5°	5427.7	5489.8	5496.8	4793.8	4658.6
50°	5113.2	5191.3	5190.3	4430.3	4394.2
52.5°	4785.8	4860.9	4857.9	4145.9	4121.8
55°	4433.3	4514.4	3964.6	3849.4	3851.5
57.5°	4073.8	4131.8	3557.0	3562.0	3495.9
60°	3683.2	3738.3	3212.5	3181.5	3067.3
62.5°	3291.7	3314.7	2879.1	2727.9	2510.6
65°	2879.1	2903.1	2520.6	2072.9	1795.5
67.5°	2455.5	2479.5	2092.0	1542.2	1521.2
70°	2028.9	1832.6	1587.2	1284.8	1294.8
72.5°	1608.3	1408.0	1037.5	995.4	719.0
75°	1212.7	1062.5	806.1	541.8	526.7
77.5°	844.2	732.0	431.6	369.5	345.5
80°	523.7	367.5	258.4	229.3	220.3
82.5°	265.4	211.3	140.2	140.2	140.2
85°	108.2	77.1	79.1	86.1	87.1
87.5°	23.0	31.0	38.1	39.1	38.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)