

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-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 (P23760)
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-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

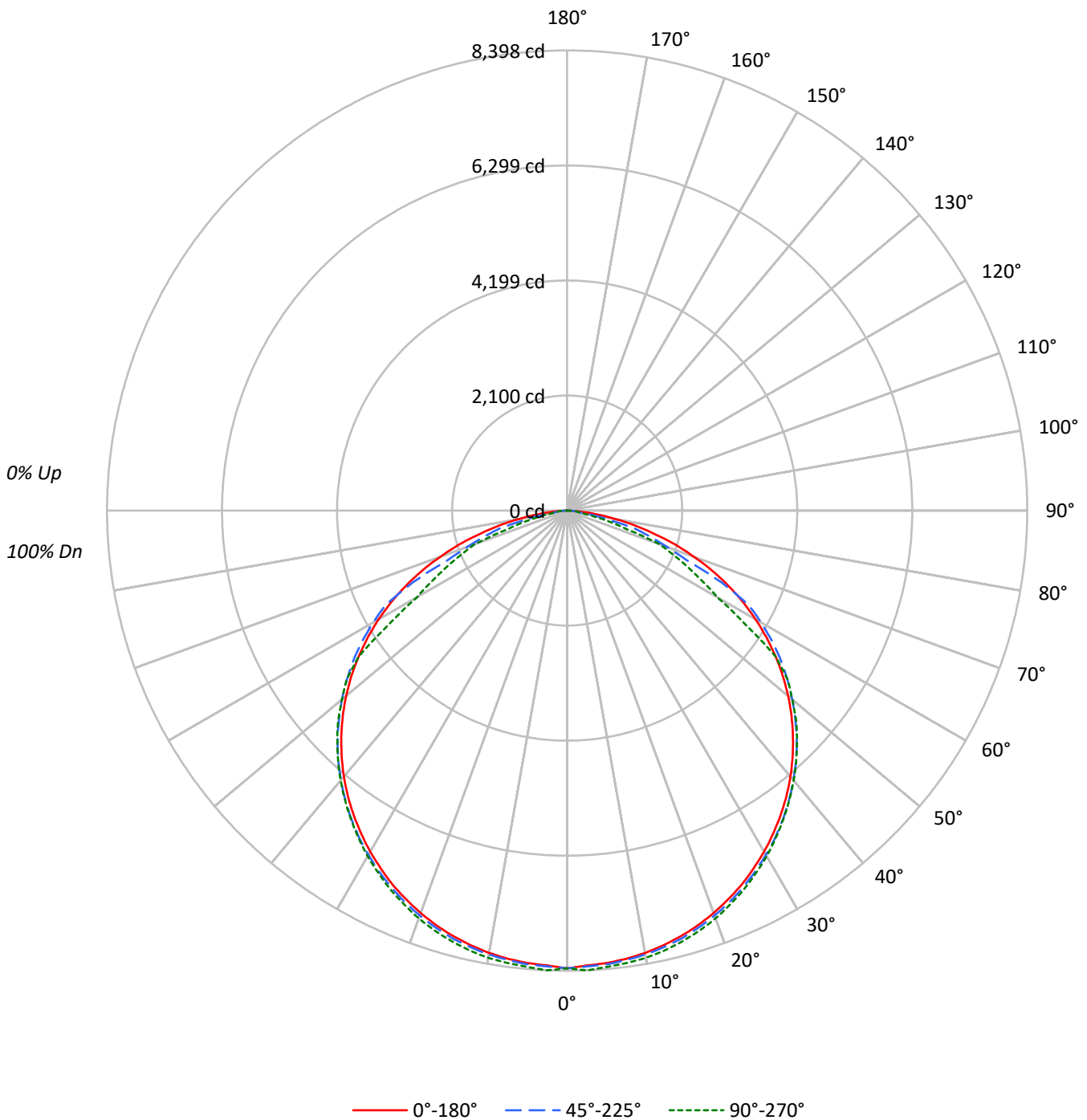
Lumens per Lamp: N/A
Luminaire Lumens: 24116.0 lumens
Efficiency: N/A
Efficacy: 156.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	11240	11240	11240
5°	11193	11224	11288
10°	11200	11239	11324
15°	11197	11257	11335
20°	11191	11263	11341
25°	11187	11267	11330
30°	11167	11276	11318
35°	11153	11281	11296
40°	11133	11281	11298
45°	11091	11276	11289
50°	11025	11228	11226
55°	10896	11169	10891
60°	10694	11004	8522
65°	10337	9904	7678
70°	9684	7620	7076
75°	8575	6643	4410
80°	7062	3911	1971
85°	4654	2396	2583



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	792.7	3.3
10°-20°	2287.0	9.5
20°-30°	3506.3	14.5
30°-40°	4300.1	17.8
40°-50°	4566.0	18.9
50°-60°	4170.5	17.3
60°-70°	2904.3	12.0
70°-80°	1354.6	5.6
80°-90°	234.3	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°	6586.1	27.3
0°-40°	10886.2	45.1
0°-60°	19622.7	81.4
0°-90°	24116.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	24116.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8354	8354	8354	8354	8354	
5°	8288	8346	8310	8351	8358	788
15°	8038	8094	8081	8130	8137	2270
25°	7535	7601	7589	7646	7632	3473
35°	6790	6868	6868	6914	6877	4249
45°	5829	5917	5926	5964	5933	4495
55°	4645	4738	4761	4769	4643	4148
65°	3247	3347	3111	2474	2412	3204
75°	1650	1754	1278	885	848	1763
85°	302	198	155	166	167	389
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8353.6	8353.6	8353.6	8353.6	8353.6
2.5°	8309.5	8362.6	8327.5	8365.6	8397.6
5°	8287.5	8345.6	8310.5	8350.6	8357.6
7.5°	8251.4	8306.5	8274.4	8318.5	8329.5
10°	8197.3	8251.4	8226.4	8278.4	8288.5
12.5°	8124.2	8179.3	8160.3	8217.4	8224.4
15°	8038.1	8094.2	8081.2	8130.2	8137.2
17.5°	7936.9	7995.0	7980.0	8032.1	8037.1
20°	7815.8	7878.8	7865.8	7926.9	7920.9
22.5°	7679.5	7746.7	7736.6	7797.7	7779.7
25°	7535.3	7601.4	7589.4	7645.5	7631.5
27.5°	7366.1	7439.2	7428.2	7482.3	7460.2
30°	7187.8	7261.9	7257.9	7307.0	7285.0
32.5°	6995.5	7074.6	7070.6	7118.7	7084.7
35°	6790.2	6868.3	6868.3	6914.4	6877.3
37.5°	6572.9	6652.0	6653.0	6697.1	6662.0
40°	6338.5	6417.7	6422.7	6464.7	6432.7
42.5°	6092.2	6178.3	6182.3	6220.4	6190.3
45°	5828.8	5916.9	5925.9	5964.0	5932.9
47.5°	5553.4	5642.5	5650.5	5691.6	5669.5
50°	5266.9	5353.1	5364.1	5398.1	5363.1
52.5°	4964.5	5052.6	5067.6	5088.7	5072.6
55°	4645.0	4738.1	4761.2	4769.2	4643.0
57.5°	4314.5	4409.6	4431.7	4247.4	3841.8
60°	3974.0	4068.1	4089.1	3455.2	3166.8
62.5°	3619.4	3711.6	3734.6	2863.3	2771.2
65°	3246.9	3347.0	3110.7	2473.7	2411.6
67.5°	2864.3	2967.5	2352.5	2120.2	2083.1
70°	2461.7	2565.9	1936.9	1807.7	1798.7
72.5°	2075.1	2152.2	1589.4	1370.1	1153.7
75°	1649.5	1753.6	1277.9	885.3	848.3
77.5°	1278.9	1105.7	771.2	649.0	511.8
80°	911.4	739.1	504.8	269.4	254.4
82.5°	577.9	482.7	198.3	203.3	212.3
85°	301.5	198.3	155.2	166.3	167.3
87.5°	97.1	85.1	93.1	92.1	91.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)