

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

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

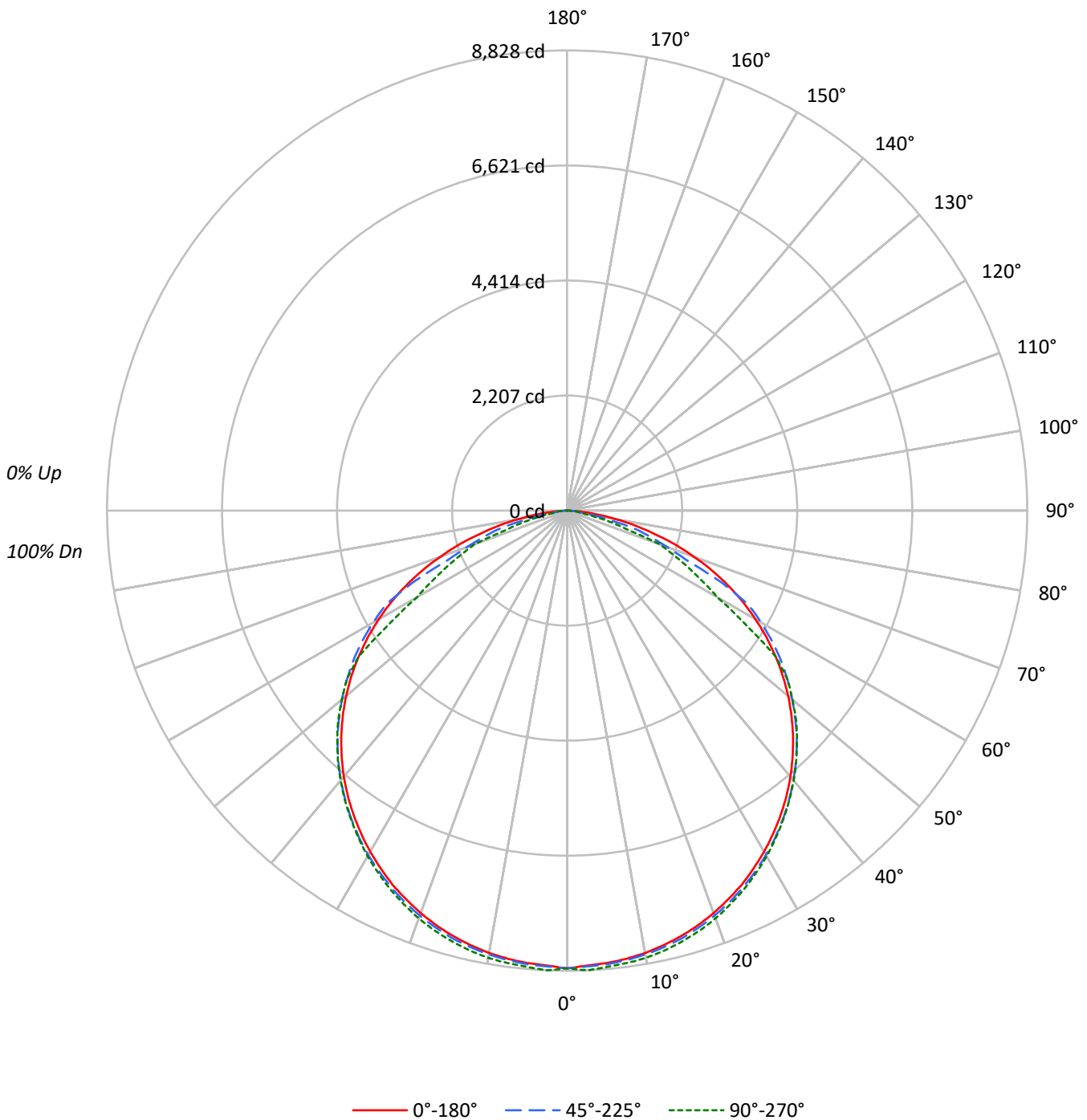
Lumens per Lamp: N/A  
Luminaire Lumens: 25352.0 lumens  
Efficiency: N/A  
Efficacy: 173.3 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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°	11816	11816	11816
5°	11767	11800	11866
10°	11774	11815	11905
15°	11771	11834	11916
20°	11764	11840	11923
25°	11760	11845	11910
30°	11740	11854	11898
35°	11725	11860	11875
40°	11704	11859	11878
45°	11659	11854	11868
50°	11590	11804	11801
55°	11455	11741	11450
60°	11242	11568	8959
65°	10867	10411	8071
70°	10181	8010	7439
75°	9014	6984	4636
80°	7424	4111	2072
85°	4892	2519	2714



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	833.3	3.3
10°-20°	2404.3	9.5
20°-30°	3686.0	14.5
30°-40°	4520.5	17.8
40°-50°	4800.1	18.9
50°-60°	4384.3	17.3
60°-70°	3053.2	12.0
70°-80°	1424.0	5.6
80°-90°	246.4	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°	6923.6	27.3
0°-40°	11444.1	45.1
0°-60°	20628.5	81.4
0°-90°	25352.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	25352.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8782	8782	8782	8782	8782	
5°	8712	8773	8736	8778	8786	829
15°	8450	8509	8495	8547	8554	2386
25°	7922	7991	7978	8037	8023	3651
35°	7138	7220	7220	7269	7230	4467
45°	6128	6220	6230	6270	6237	4726
55°	4883	4981	5005	5014	4881	4361
65°	3413	3519	3270	2600	2535	3368
75°	1734	1844	1343	931	892	1854
85°	317	208	163	175	176	409
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8781.7	8781.7	8781.7	8781.7	8781.7
2.5°	8735.4	8791.2	8754.3	8794.3	8828.0
5°	8712.2	8773.3	8736.4	8778.5	8785.9
7.5°	8674.3	8732.2	8698.5	8744.9	8756.4
10°	8617.5	8674.3	8648.0	8702.7	8713.3
12.5°	8540.6	8598.5	8578.5	8638.5	8645.9
15°	8450.1	8509.0	8495.3	8546.9	8554.3
17.5°	8343.7	8404.8	8389.0	8443.7	8449.0
20°	8216.3	8282.7	8269.0	8333.2	8326.9
22.5°	8073.1	8143.7	8133.2	8197.4	8178.4
25°	7921.5	7991.0	7978.4	8037.3	8022.6
27.5°	7743.6	7820.5	7808.9	7865.7	7842.6
30°	7556.2	7634.1	7629.9	7681.5	7658.3
32.5°	7354.1	7437.2	7433.0	7483.6	7447.8
35°	7138.2	7220.3	7220.3	7268.8	7229.8
37.5°	6909.8	6992.9	6994.0	7040.3	7003.5
40°	6663.4	6746.6	6751.8	6796.1	6762.4
42.5°	6404.4	6494.9	6499.2	6539.2	6507.6
45°	6127.5	6220.2	6229.6	6269.6	6237.0
47.5°	5838.0	5931.7	5940.1	5983.3	5960.1
50°	5536.9	5627.4	5639.0	5674.8	5637.9
52.5°	5218.9	5311.6	5327.3	5349.5	5332.6
55°	4883.1	4981.0	5005.2	5013.6	4880.9
57.5°	4535.6	4635.6	4658.8	4465.1	4038.7
60°	4177.7	4276.6	4298.7	3632.3	3329.1
62.5°	3804.9	3901.8	3926.0	3010.1	2913.2
65°	3413.3	3518.6	3270.1	2600.5	2535.2
67.5°	3011.1	3119.6	2473.1	2228.9	2189.9
70°	2587.9	2697.4	2036.2	1900.4	1890.9
72.5°	2181.5	2262.5	1670.9	1440.3	1212.9
75°	1734.0	1843.5	1343.4	930.7	891.8
77.5°	1344.5	1162.3	810.7	682.2	538.0
80°	958.1	777.0	530.6	283.2	267.4
82.5°	607.5	507.5	208.5	213.7	223.2
85°	316.9	208.5	163.2	174.8	175.8
87.5°	102.1	89.5	97.9	96.9	95.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)