

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-AWG-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 (P23764)  
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-AWG-UNV-L840-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

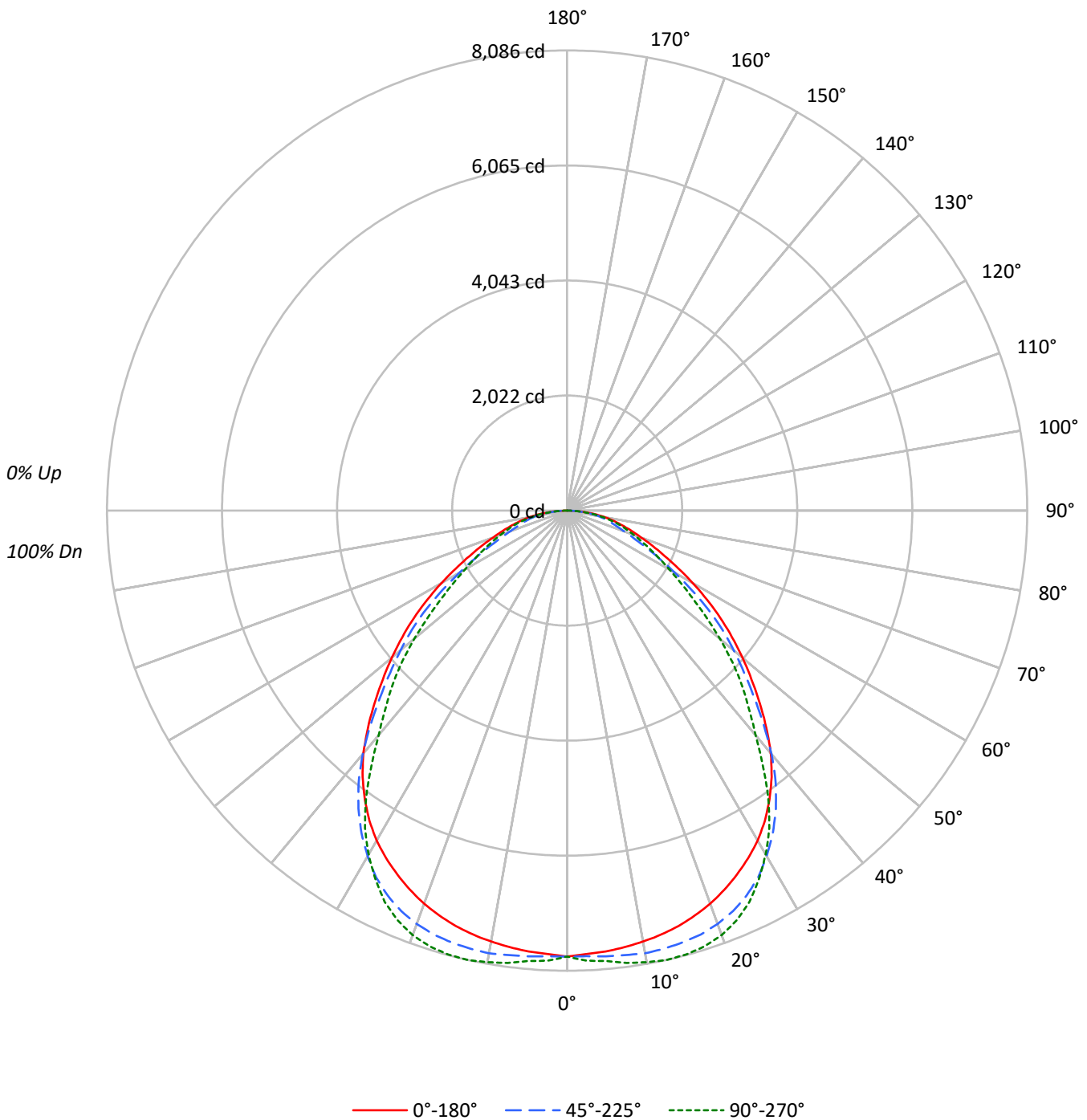
Lumens per Lamp: N/A  
Luminaire Lumens: 19427.0 lumens  
Efficiency: N/A  
Efficacy: 126.1 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	85	81	88	83	79	85	81	77	82	78	75	73
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	54	49	44	42
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	10544	10544	10544
5°	10503	10621	10729
10°	10506	10791	11009
15°	10526	10941	11249
20°	10524	11066	11364
25°	10479	11081	11260
30°	10401	10896	10839
35°	10180	10502	10120
40°	9782	9810	9047
45°	9105	8845	8271
50°	8416	7998	7329
55°	7705	7088	6324
60°	6870	5883	5585
65°	6025	4842	5131
70°	5440	4170	4886
75°	5200	4088	4872
80°	5242	4328	4754
85°	4644	3964	4150



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	752.8	3.9
10°-20°	2218.5	11.4
20°-30°	3402.8	17.5
30°-40°	3913.7	20.1
40°-50°	3569.6	18.4
50°-60°	2675.4	13.8
60°-70°	1645.7	8.5
70°-80°	943.1	4.9
80°-90°	305.3	1.6
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°	6374.1	32.8
0°-40°	10287.8	53.0
0°-60°	16532.9	85.1
0°-90°	19427.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19427.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	7837	7837	7837	7837	7837	
5°	7777	7856	7864	7929	7944	740
15°	7557	7725	7855	8022	8076	2133
25°	7058	7261	7464	7579	7585	3252
35°	6198	6319	6394	6289	6161	3865
45°	4785	4889	4648	4408	4346	3693
55°	3284	3162	3022	2755	2696	2934
65°	1892	1693	1521	1568	1612	1903
75°	1000	896	786	900	937	1070
85°	301	284	257	271	269	336
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	7836.7	7836.7	7836.7	7836.7	7836.7
2.5°	7799.7	7855.7	7837.7	7883.7	7917.6
5°	7776.7	7855.7	7863.7	7928.6	7943.6
7.5°	7737.8	7840.7	7876.7	7991.6	8017.5
10°	7689.8	7813.7	7898.6	8022.5	8057.5
12.5°	7631.9	7775.7	7883.7	8036.5	8086.5
15°	7556.9	7724.8	7854.7	8022.5	8075.5
17.5°	7462.0	7656.8	7808.7	7973.6	8028.5
20°	7350.1	7555.9	7728.8	7897.6	7936.6
22.5°	7215.2	7422.0	7618.9	7770.7	7791.7
25°	7058.3	7261.2	7464.0	7578.9	7584.9
27.5°	6887.5	7076.3	7266.2	7328.1	7301.1
30°	6694.6	6863.5	7013.4	7026.3	6976.4
32.5°	6465.8	6617.7	6724.6	6696.6	6612.7
35°	6198.0	6318.9	6393.9	6288.9	6161.0
37.5°	5904.2	5995.2	6020.2	5792.3	5646.5
40°	5569.5	5647.5	5585.5	5268.8	5150.9
42.5°	5183.8	5273.8	5114.9	4802.1	4730.2
45°	4785.1	4889.1	4648.3	4408.5	4346.5
47.5°	4394.5	4489.4	4216.6	4023.8	3931.8
50°	4020.8	4061.7	3820.9	3603.1	3501.2
52.5°	3653.1	3612.1	3441.2	3170.4	3080.5
55°	3284.4	3162.5	3021.6	2754.8	2695.8
57.5°	2914.7	2744.8	2590.9	2386.1	2363.1
60°	2552.9	2344.1	2186.2	2064.3	2075.3
62.5°	2208.2	1995.4	1826.5	1787.6	1829.5
65°	1892.5	1692.6	1520.8	1567.7	1611.7
67.5°	1629.7	1437.8	1263.0	1382.9	1417.9
70°	1382.9	1228.0	1060.1	1215.0	1242.0
72.5°	1186.0	1054.2	908.3	1059.1	1082.1
75°	1000.2	896.3	786.4	900.3	937.2
77.5°	838.3	752.4	677.5	744.4	784.4
80°	676.5	603.5	558.6	588.5	613.5
82.5°	495.6	448.6	415.7	428.7	432.7
85°	300.8	283.8	256.8	270.8	268.8
87.5°	98.9	112.9	118.9	106.9	100.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)