

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-N-CL-UNV-L835-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 (P23768)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24SE-N-CL-UNV-L835-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

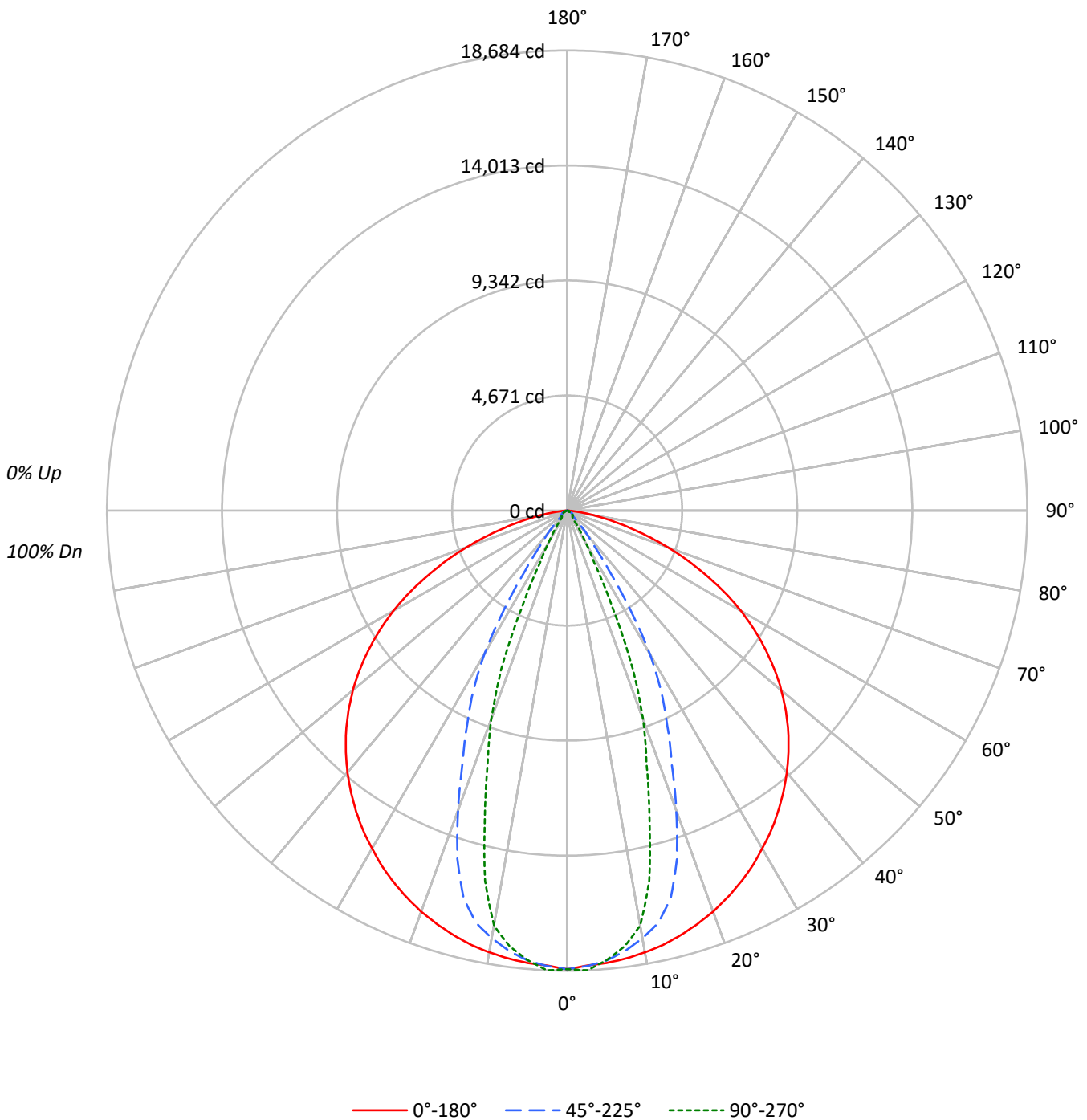
Lumens per Lamp: N/A  
Luminaire Lumens: 19916.0 lumens  
Efficiency: N/A  
Efficacy: 129.3 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41

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

	0°	45°	90°
0°	25056	25056	25056
5°	24902	24772	24754
10°	24885	24087	23376
15°	24856	22650	17974
20°	24808	18536	12893
25°	24730	14281	6551
30°	24613	10423	2384
35°	24525	4786	829
40°	24374	2173	572
45°	24158	811	580
50°	23772	588	610
55°	23069	619	465
60°	21922	662	410
65°	19881	504	334
70°	17045	363	307
75°	13029	322	292
80°	8151	303	318
85°	2575	354	426



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1733.7	8.7
10°-20°	4367.3	21.9
20°-30°	4756.2	23.9
30°-40°	3557.9	17.9
40°-50°	2558.2	12.8
50°-60°	1571.1	7.9
60°-70°	904.1	4.5
70°-80°	403.5	2.0
80°-90°	64.0	0.3
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°	10857.2	54.5
0°-40°	14415.1	72.4
0°-60°	18544.4	93.1
0°-90°	19916.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19916.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	18622	18622	18622	18622	18622	
5°	18437	18524	18341	18358	18328	###
15°	17844	17502	16261	13965	12904	5037
25°	16658	15463	9620	6172	4413	7679
35°	14931	10709	2914	857	505	9340
45°	12696	6017	426	315	305	9780
55°	9834	1250	264	255	198	8768
65°	6244	137	158	132	105	6181
75°	2506	83	62	64	56	2720
85°	167	16	23	30	28	332
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	18622.0	18622.0	18622.0	18622.0	18622.0
2.5°	18492.4	18613.4	18511.4	18602.9	18683.9
5°	18437.1	18523.8	18340.9	18358.0	18327.5
7.5°	18341.8	18362.8	18032.1	17904.4	17842.5
10°	18214.1	18157.9	17630.0	17326.0	17109.7
12.5°	18053.1	17867.3	17129.7	16044.3	15397.3
15°	17844.4	17502.3	16260.6	13965.1	12903.5
17.5°	17595.7	17121.1	14821.7	11639.0	10720.4
20°	17326.0	16699.9	12945.4	9896.1	9004.2
22.5°	17007.7	16161.5	11094.9	8230.4	7005.9
25°	16658.0	15463.1	9619.7	6172.1	4413.0
27.5°	16280.7	14541.6	8254.2	3785.0	2386.1
30°	15842.3	13420.0	6708.6	2124.1	1534.2
32.5°	15414.5	12112.6	4792.2	1415.1	980.6
35°	14931.3	10708.9	2914.0	856.7	505.0
37.5°	14419.6	9433.0	1823.9	466.0	348.8
40°	13877.4	8222.8	1236.9	330.7	325.9
42.5°	13298.0	7127.9	774.7	314.5	324.9
45°	12695.8	6016.7	426.0	315.4	304.9
47.5°	12042.1	4810.3	297.3	298.3	297.3
50°	11356.9	3450.5	281.1	294.5	291.6
52.5°	10618.4	2142.2	282.1	287.8	258.2
55°	9834.1	1250.2	264.0	255.4	198.2
57.5°	9009.9	779.5	258.2	210.6	178.2
60°	8146.5	411.7	245.9	189.6	152.5
62.5°	7227.0	203.0	197.3	162.0	124.8
65°	6244.5	137.2	158.2	131.5	104.8
67.5°	5295.4	123.9	119.1	107.7	91.5
70°	4332.9	113.4	92.4	94.3	78.1
72.5°	3388.6	102.9	74.3	81.0	65.8
75°	2506.2	82.9	61.9	63.8	56.2
77.5°	1743.8	64.8	48.6	54.3	52.4
80°	1052.0	41.0	39.1	44.8	41.0
82.5°	509.8	26.7	30.5	35.3	32.4
85°	166.8	16.2	22.9	29.5	27.6
87.5°	21.0	9.5	19.1	25.7	23.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)