

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-CLWG-UNV-L735-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 (P33344)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24SE-N-CLWG-UNV-L735-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
NARROW DISTRIBUTION WITH CLEAR LENS, WIREGUARD & DOORFRAME  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

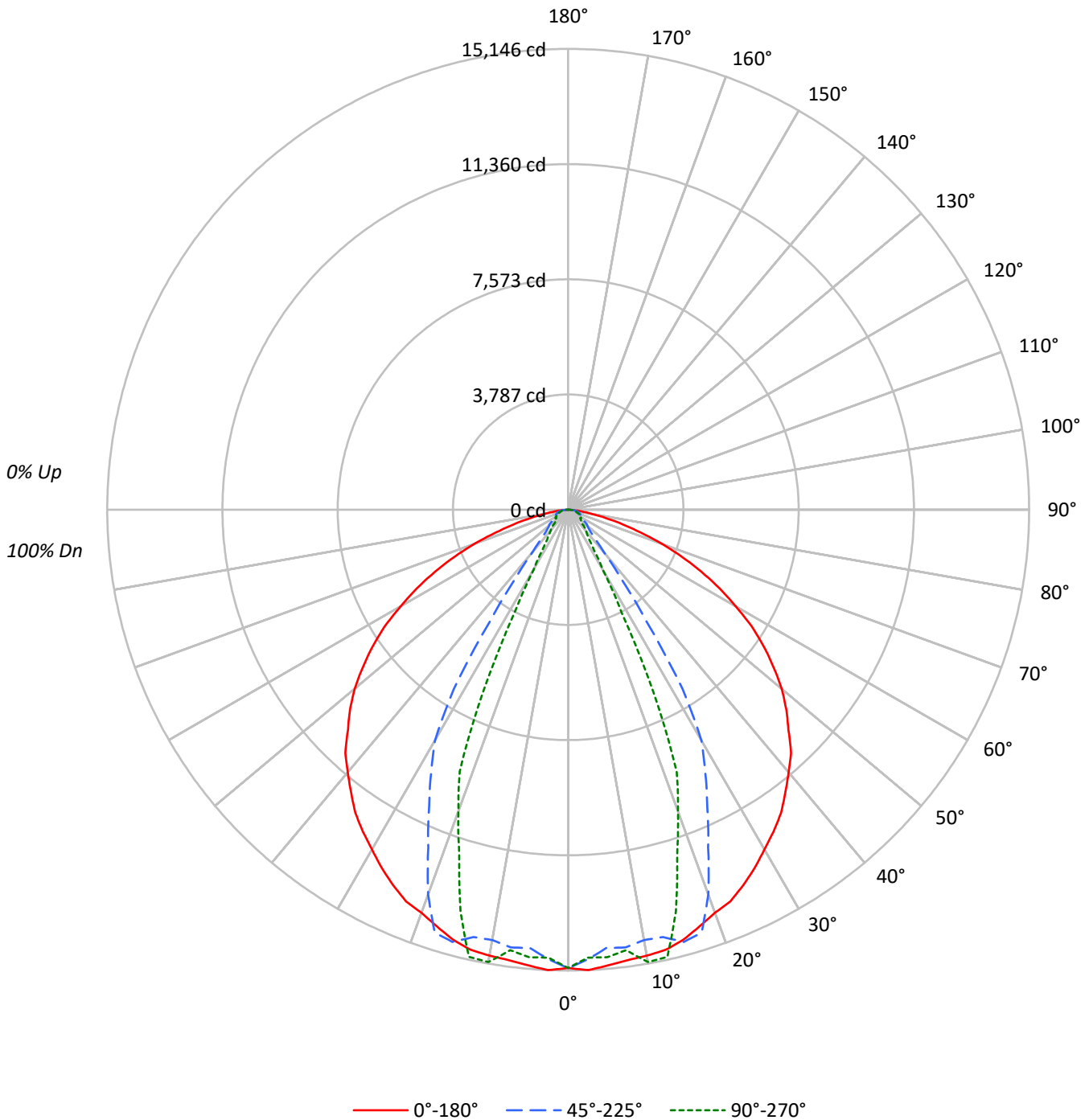
Lumens per Lamp: N/A  
Luminaire Lumens: 20251.0 lumens  
Efficiency: N/A  
Efficacy: 131.5 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 154  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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	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					100			
1	111	108	104	101	109	105	103	100	101	99	97	98	96	94	94	92	91	89					89			
2	104	97	92	88	101	96	91	87	92	88	85	89	86	83	86	84	81	79					79			
3	97	89	82	77	95	87	81	76	84	79	75	82	77	74	79	76	73	71					71			
4	90	81	74	68	88	80	73	68	77	72	67	75	70	66	73	69	65	64					64			
5	85	74	67	62	83	73	66	61	71	65	61	69	64	60	68	63	59	58					58			
6	79	68	61	56	78	68	61	56	66	60	55	64	59	55	63	58	54	53					53			
7	75	63	56	51	73	63	56	51	61	55	50	60	54	50	59	54	50	48					48			
8	70	59	52	47	69	58	51	47	57	51	46	56	50	46	55	50	46	44					44			
9	66	55	48	43	65	54	48	43	53	47	43	52	47	43	52	46	43	41					41			
10	63	52	45	40	62	51	45	40	50	44	40	49	44	40	48	43	40	38					38			

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

	0°	45°	90°
0°	20268	20268	20268
5°	20302	19528	19940
10°	20331	19622	20629
15°	20376	20482	19037
20°	20184	19265	15110
25°	20213	16060	9870
30°	20031	13606	3546
35°	20010	7370	1994
40°	19784	3213	1562
45°	19478	1986	1225
50°	19174	1730	1156
55°	18421	1500	1131
60°	17091	1344	1216
65°	15362	1519	1329
70°	12884	1633	1370
75°	9632	1863	1483
80°	6049	2163	1691
85°	4028	2711	2476



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1396.2	6.9
10°-20°	3942.6	19.5
20°-30°	4827.8	23.8
30°-40°	3791.3	18.7
40°-50°	2811.4	13.9
50°-60°	1711.6	8.5
60°-70°	1025.2	5.1
70°-80°	562.5	2.8
80°-90°	182.4	0.9
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°	10166.5	50.2
0°-40°	13957.8	68.9
0°-60°	18480.8	91.3
0°-90°	20251.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20251.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15064	15064	15064	15064	15064	
5°	15031	14622	14459	14618	14763	###
15°	14628	14227	14704	14110	13667	4119
25°	13615	13658	10818	8485	6649	6267
35°	12182	11082	4487	1502	1214	7602
45°	10236	7350	1044	791	644	7916
55°	7853	2025	640	541	482	6988
65°	4825	597	477	449	417	4767
75°	1853	377	358	312	285	2006
85°	261	205	176	161	160	318
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15063.7	15063.7	15063.7	15063.7	15063.7
2.5°	15145.9	14941.9	14785.5	14698.2	14733.8
5°	15031.2	14622.1	14458.6	14618.0	14763.2
7.5°	14931.7	14323.6	14508.4	14522.6	14598.7
10°	14881.0	14295.2	14362.2	14677.9	15099.2
12.5°	14814.0	14361.2	14384.5	14815.0	15052.5
15°	14628.2	14227.2	14704.3	14110.4	13666.8
17.5°	14357.1	13914.5	14570.3	12500.3	11897.3
20°	14096.2	13574.4	13454.6	11134.8	10553.1
22.5°	13927.7	13522.6	12019.1	9921.7	9320.7
25°	13615.0	13657.6	10818.1	8485.1	6648.6
27.5°	13270.8	13339.9	9756.2	5658.8	3809.1
30°	12893.2	12972.4	8757.2	3344.1	2282.2
32.5°	12551.1	12104.4	6993.8	2086.3	1586.8
35°	12182.5	11082.0	4487.2	1501.5	1214.2
37.5°	11718.6	10008.0	2840.6	1187.8	1019.3
40°	11263.8	9043.5	1829.4	1014.2	889.3
42.5°	10838.4	8248.6	1330.9	886.3	803.0
45°	10236.4	7350.1	1043.6	790.8	643.6
47.5°	9715.6	6296.3	912.7	669.0	555.3
50°	9160.3	4814.1	826.4	594.9	552.3
52.5°	8501.4	3149.2	763.4	569.5	515.7
55°	7852.7	2025.3	639.6	541.1	482.2
57.5°	7152.2	1284.2	564.5	524.9	503.5
60°	6351.2	866.0	499.5	497.5	451.8
62.5°	5610.1	711.7	482.2	477.1	427.4
65°	4825.3	596.9	477.1	448.7	417.3
67.5°	4041.6	511.7	431.5	410.1	382.7
70°	3275.1	468.0	415.2	406.1	348.2
72.5°	2487.3	385.8	368.5	344.2	289.3
75°	1852.8	376.6	358.4	311.7	285.3
77.5°	1253.8	347.2	325.9	279.2	257.9
80°	780.7	318.8	279.2	244.7	218.3
82.5°	464.0	266.0	229.4	202.0	184.8
85°	260.9	205.1	175.6	161.4	160.4
87.5°	55.8	74.1	58.9	55.8	39.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)