

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-N-CLWG-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 (P33344)  
Test Lab: INNOVATION CENTER-P3  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24HE-N-CLWG-UNV-L835-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**

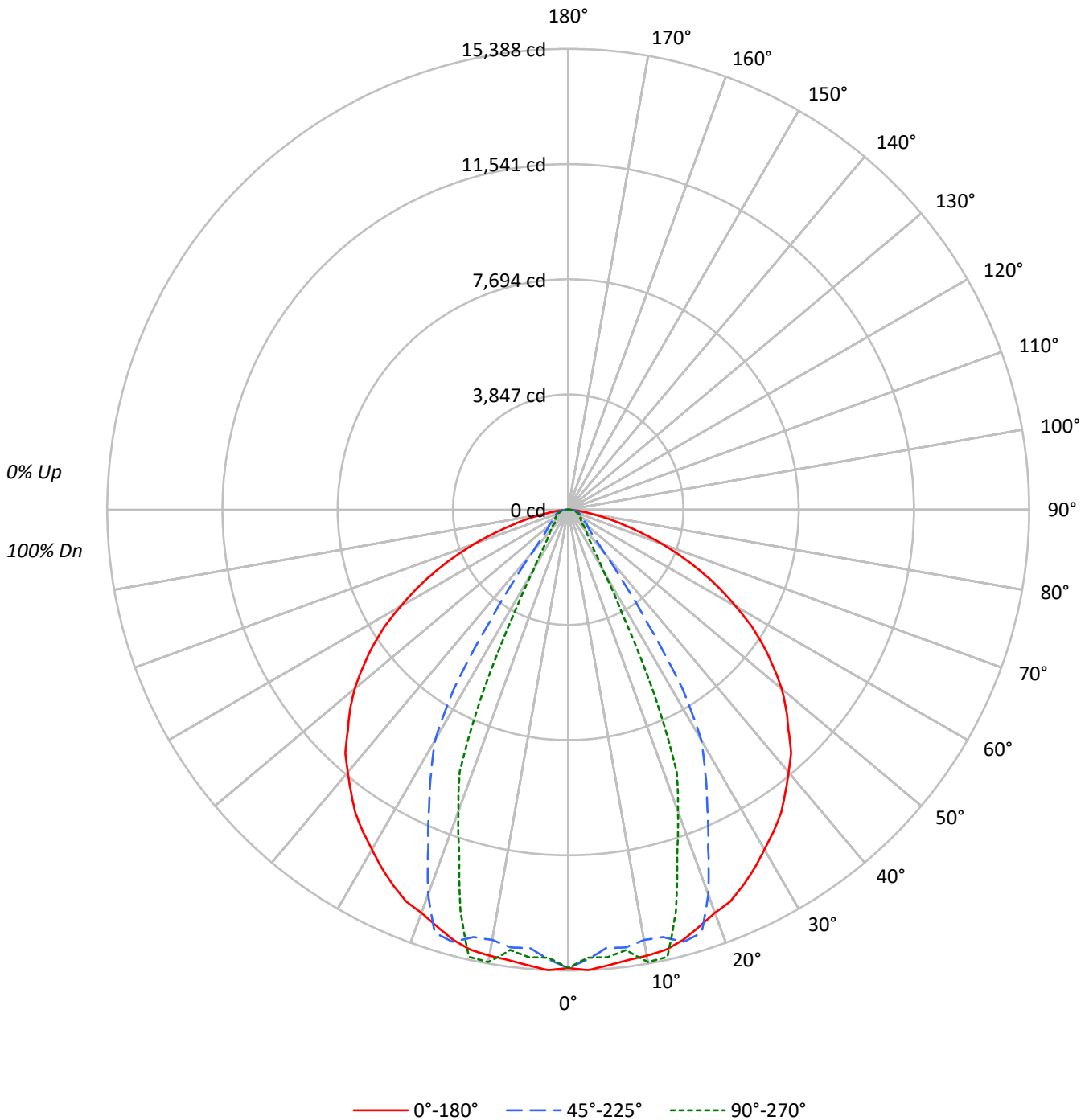
Lumens per Lamp: N/A  
Luminaire Lumens: 20574.0 lumens  
Efficiency: N/A  
Efficacy: 140.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.81 / 0.91  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 146.3  
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°	20591	20591	20591
5°	20625	19840	20258
10°	20655	19935	20958
15°	20701	20809	19341
20°	20505	19572	15351
25°	20535	16316	10028
30°	20351	13823	3602
35°	20329	7488	2026
40°	20099	3264	1587
45°	19788	2018	1244
50°	19480	1757	1175
55°	18714	1524	1149
60°	17364	1366	1235
65°	15607	1543	1350
70°	13089	1659	1392
75°	9785	1893	1507
80°	6145	2197	1719
85°	4093	2754	2516



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1418.5	6.9
10°-20°	4005.4	19.5
20°-30°	4904.8	23.8
30°-40°	3851.7	18.7
40°-50°	2856.3	13.9
50°-60°	1738.9	8.5
60°-70°	1041.6	5.1
70°-80°	571.5	2.8
80°-90°	185.3	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°	10328.7	50.2
0°-40°	14180.4	68.9
0°-60°	18775.6	91.3
0°-90°	20574.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20574.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15304	15304	15304	15304	15304	
5°	15271	14855	14689	14851	14999	###
15°	14862	14454	14939	14336	13885	4184
25°	13832	13876	10991	8620	6755	6367
35°	12377	11259	4559	1525	1234	7723
45°	10400	7467	1060	804	654	8042
55°	7978	2058	650	550	490	7100
65°	4902	606	485	456	424	4843
75°	1882	383	364	317	290	2038
85°	265	208	178	164	163	323
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15304.0	15304.0	15304.0	15304.0	15304.0
2.5°	15387.5	15180.2	15021.4	14932.7	14968.8
5°	15271.0	14855.3	14689.3	14851.2	14998.7
7.5°	15169.9	14552.1	14739.8	14754.2	14831.6
10°	15118.3	14523.2	14591.3	14912.0	15340.1
12.5°	15050.2	14590.2	14614.0	15051.3	15292.6
15°	14861.5	14454.1	14938.9	14335.5	13884.8
17.5°	14586.1	14136.4	14802.7	12699.7	12087.0
20°	14321.0	13790.9	13669.2	11312.4	10721.4
22.5°	14149.8	13738.3	12210.8	10079.9	9469.3
25°	13832.2	13875.5	10990.6	8620.5	6754.7
27.5°	13482.5	13552.6	9911.8	5749.0	3869.8
30°	13098.8	13179.3	8896.9	3397.4	2318.6
32.5°	12751.2	12297.4	7105.3	2119.5	1612.1
35°	12376.8	11258.8	4558.8	1525.4	1233.6
37.5°	11905.5	10167.6	2885.9	1206.7	1035.5
40°	11443.4	9187.7	1858.6	1030.4	903.5
42.5°	11011.3	8380.2	1352.2	900.4	815.8
45°	10399.6	7467.4	1060.3	803.5	653.9
47.5°	9870.5	6396.8	927.2	679.7	564.2
50°	9306.4	4890.9	839.6	604.4	561.1
52.5°	8637.0	3199.4	775.6	578.6	524.0
55°	7977.9	2057.7	649.8	549.7	489.9
57.5°	7266.2	1304.7	573.5	533.2	511.6
60°	6452.5	879.8	507.5	505.4	459.0
62.5°	5699.5	723.0	489.9	484.8	434.2
65°	4902.3	606.5	484.8	455.9	423.9
67.5°	4106.0	519.8	438.3	416.7	388.8
70°	3327.3	475.5	421.8	412.6	353.8
72.5°	2526.9	391.9	374.4	349.6	294.0
75°	1882.3	382.7	364.1	316.6	289.8
77.5°	1273.8	352.7	331.1	283.6	262.0
80°	793.1	323.9	283.6	248.6	221.8
82.5°	471.4	270.2	233.1	205.2	187.7
85°	265.1	208.3	178.4	164.0	163.0
87.5°	56.7	75.3	59.8	56.7	40.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)