

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

Luminaire Equipment: Sample No. Condition Description

Summary

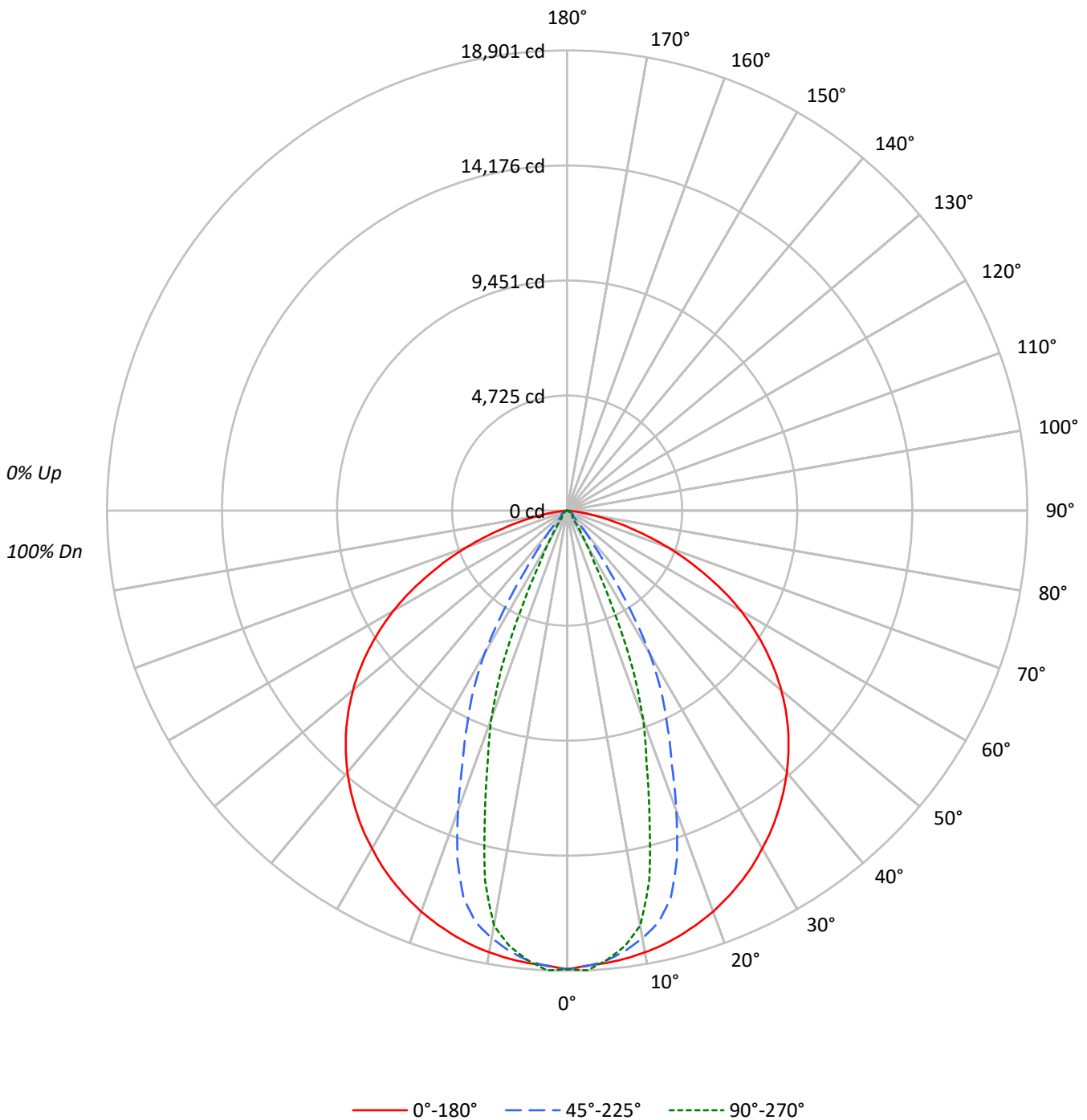
Lumens per Lamp: N/A
Luminaire Lumens: 20147.0 lumens
Efficiency: N/A
Efficacy: 130.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25346	25346	25346
5°	25191	25059	25041
10°	25174	24366	23647
15°	25145	22913	18182
20°	25096	18751	13042
25°	25017	14447	6627
30°	24899	10544	2411
35°	24810	4842	839
40°	24657	2198	579
45°	24438	820	587
50°	24048	595	617
55°	23336	626	470
60°	22176	669	415
65°	20111	509	337
70°	17243	368	311
75°	13180	326	296
80°	8246	306	322
85°	2604	357	432



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1753.8	8.7
10°-20°	4418.0	21.9
20°-30°	4811.4	23.9
30°-40°	3599.1	17.9
40°-50°	2587.9	12.8
50°-60°	1589.3	7.9
60°-70°	914.5	4.5
70°-80°	408.2	2.0
80°-90°	64.7	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°	10983.1	54.5
0°-40°	14582.3	72.4
0°-60°	18759.5	93.1
0°-90°	20147.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20147.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18838	18838	18838	18838	18838	
5°	18651	18739	18554	18571	18540	###
15°	18051	17705	16449	14127	13053	5096
25°	16851	15642	9731	6244	4464	7768
35°	15104	10833	2948	867	511	9448
45°	12843	6086	431	319	308	9894
55°	9948	1265	267	258	200	8870
65°	6317	139	160	133	106	6253
75°	2535	84	63	65	57	2751
85°	169	16	23	30	28	336
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18838.0	18838.0	18838.0	18838.0	18838.0
2.5°	18706.9	18829.3	18726.2	18818.7	18900.6
5°	18651.0	18738.7	18553.6	18571.0	18540.1
7.5°	18554.6	18575.8	18241.3	18112.1	18049.4
10°	18425.4	18368.5	17834.5	17527.0	17308.2
12.5°	18262.5	18074.5	17328.4	16230.4	15575.9
15°	18051.4	17705.3	16449.3	14127.0	13053.2
17.5°	17799.8	17319.7	14993.7	11774.0	10844.7
20°	17527.0	16893.6	13095.6	10010.9	9108.6
22.5°	17205.0	16349.0	11223.5	8325.8	7087.1
25°	16851.2	15642.4	9731.3	6243.7	4464.2
27.5°	16469.5	14710.2	8349.9	3828.9	2413.8
30°	16026.1	13575.6	6786.4	2148.7	1552.0
32.5°	15593.2	12253.1	4847.8	1431.5	991.9
35°	15104.5	10833.1	2947.8	866.6	510.9
37.5°	14586.9	9542.4	1845.0	471.4	352.8
40°	14038.4	8318.1	1251.2	334.5	329.7
42.5°	13452.3	7210.5	783.7	318.1	328.7
45°	12843.0	6086.5	430.9	319.1	308.5
47.5°	12181.7	4866.1	300.8	301.7	300.8
50°	11488.6	3490.5	284.4	297.9	295.0
52.5°	10741.6	2167.0	285.3	291.1	261.2
55°	9948.2	1264.7	267.0	258.3	200.5
57.5°	9114.4	788.5	261.2	213.0	180.3
60°	8241.0	416.4	248.7	191.8	154.2
62.5°	7310.8	205.3	199.5	163.9	126.3
65°	6316.9	138.8	160.0	133.0	106.0
67.5°	5356.8	125.3	120.5	108.9	92.5
70°	4383.2	114.7	93.5	95.4	79.0
72.5°	3427.9	104.1	75.2	81.9	66.5
75°	2535.3	83.9	62.7	64.6	56.9
77.5°	1764.1	65.6	49.2	54.9	53.0
80°	1064.2	41.5	39.5	45.3	41.5
82.5°	515.7	27.0	30.8	35.7	32.8
85°	168.7	16.4	23.1	29.9	28.0
87.5°	21.2	9.6	19.3	26.0	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)