

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-CL-UNV-L850-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-LD5-24HE-N-CL-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

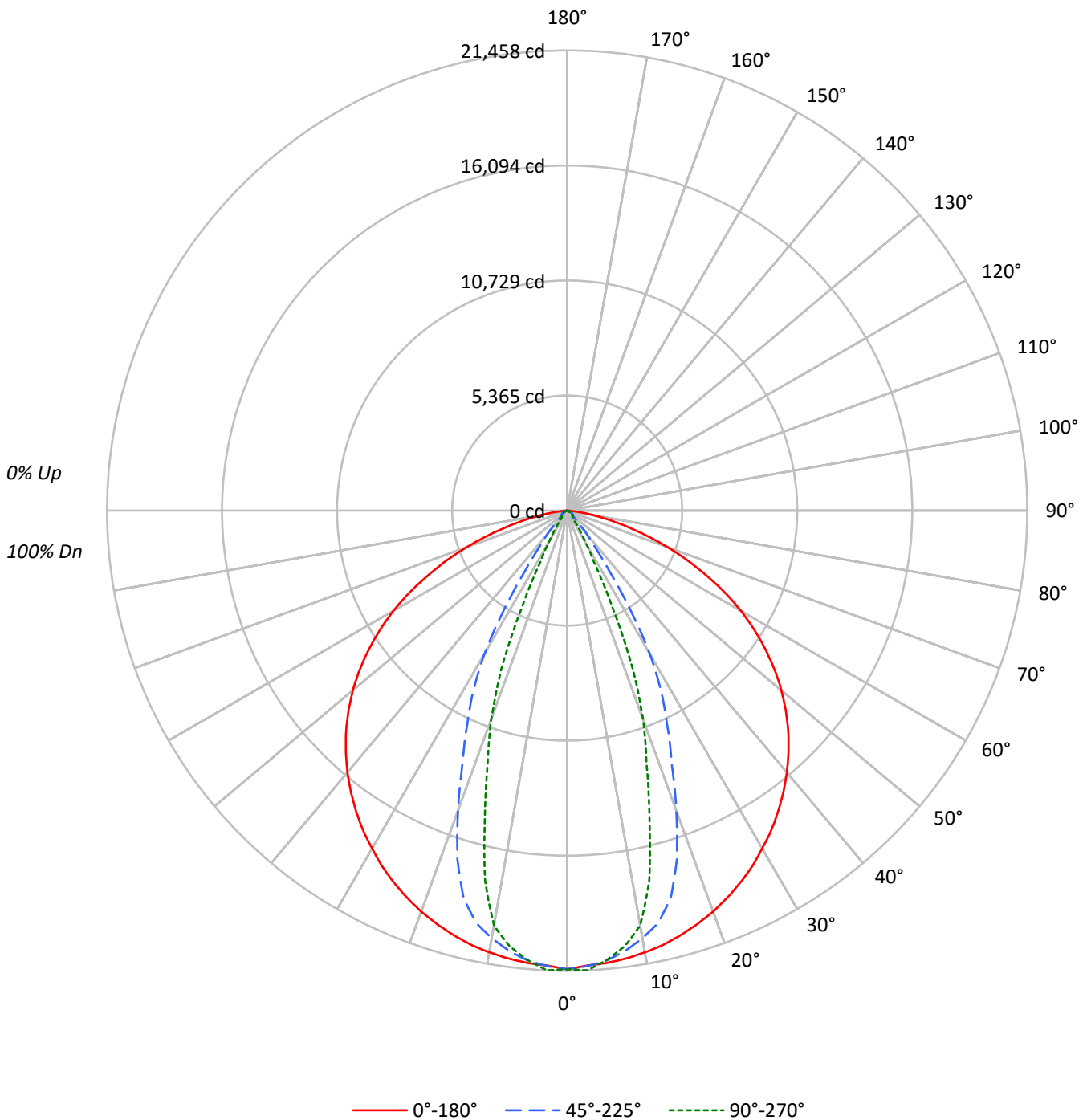
Lumens per Lamp: N/A
Luminaire Lumens: 22873.0 lumens
Efficiency: N/A
Efficacy: 156.3 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
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°	28776	28776	28776
5°	28599	28450	28429
10°	28580	27663	26847
15°	28547	26013	20643
20°	28491	21288	14807
25°	28402	16402	7524
30°	28268	11970	2738
35°	28167	5497	953
40°	27993	2495	657
45°	27744	931	666
50°	27302	676	701
55°	26494	711	534
60°	25177	760	471
65°	22832	578	383
70°	19577	418	353
75°	14963	370	336
80°	9362	348	365
85°	2956	406	489



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1991.1	8.7
10°-20°	5015.8	21.9
20°-30°	5462.4	23.9
30°-40°	4086.1	17.9
40°-50°	2938.0	12.8
50°-60°	1804.4	7.9
60°-70°	1038.3	4.5
70°-80°	463.4	2.0
80°-90°	73.5	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°	12469.2	54.5
0°-40°	16555.4	72.4
0°-60°	21297.8	93.1
0°-90°	22873.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22873.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	21387	21387	21387	21387	21387	
5°	21174	21274	21064	21084	21049	###
15°	20494	20101	18675	16038	14819	5785
25°	19131	17759	11048	7088	5068	8819
35°	17148	12299	3347	984	580	10727
45°	14581	6910	489	362	350	11233
55°	11294	1436	303	293	228	10070
65°	7172	158	182	151	120	7099
75°	2878	95	71	73	65	3123
85°	192	19	26	34	32	382
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	21386.9	21386.9	21386.9	21386.9	21386.9
2.5°	21238.0	21377.0	21259.9	21365.0	21458.0
5°	21174.5	21274.1	21064.0	21083.7	21048.7
7.5°	21065.1	21089.2	20709.4	20562.8	20491.6
10°	20918.5	20853.9	20247.6	19898.5	19650.0
12.5°	20733.5	20520.1	19673.0	18426.5	17683.4
15°	20493.8	20100.9	18674.9	16038.5	14819.3
17.5°	20208.2	19663.2	17022.4	13367.1	12312.1
20°	19898.5	19179.4	14867.5	11365.4	10341.0
22.5°	19532.9	18561.1	12742.2	9452.4	8046.1
25°	19131.3	17758.9	11048.0	7088.5	5068.2
27.5°	18697.9	16700.6	9479.7	4347.0	2740.4
30°	18194.5	15412.5	7704.6	2439.4	1762.0
32.5°	17703.1	13911.0	5503.8	1625.2	1126.1
35°	17148.2	12298.9	3346.7	983.9	580.0
37.5°	16560.5	10833.5	2094.7	535.2	400.6
40°	15937.8	9443.6	1420.5	379.8	374.3
42.5°	15272.4	8186.1	889.8	361.2	373.2
45°	14580.8	6910.1	489.2	362.2	350.2
47.5°	13830.0	5524.6	341.5	342.5	341.5
50°	13043.1	3962.8	322.8	338.2	334.9
52.5°	12195.0	2460.2	323.9	330.5	296.6
55°	11294.3	1435.9	303.2	293.3	227.6
57.5°	10347.6	895.2	296.6	241.9	204.7
60°	9356.1	472.8	282.4	217.8	175.1
62.5°	8300.0	233.1	226.5	186.0	143.4
65°	7171.6	157.6	181.7	151.0	120.4
67.5°	6081.6	142.3	136.8	123.7	105.1
70°	4976.3	130.2	106.2	108.3	89.7
72.5°	3891.7	118.2	85.4	93.0	75.5
75°	2878.3	95.2	71.1	73.3	64.6
77.5°	2002.8	74.4	55.8	62.4	60.2
80°	1208.2	47.1	44.9	51.4	47.1
82.5°	585.5	30.6	35.0	40.5	37.2
85°	191.5	18.6	26.3	33.9	31.7
87.5°	24.1	10.9	21.9	29.5	27.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)