

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-CLI-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 (P23769)
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-CLI-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

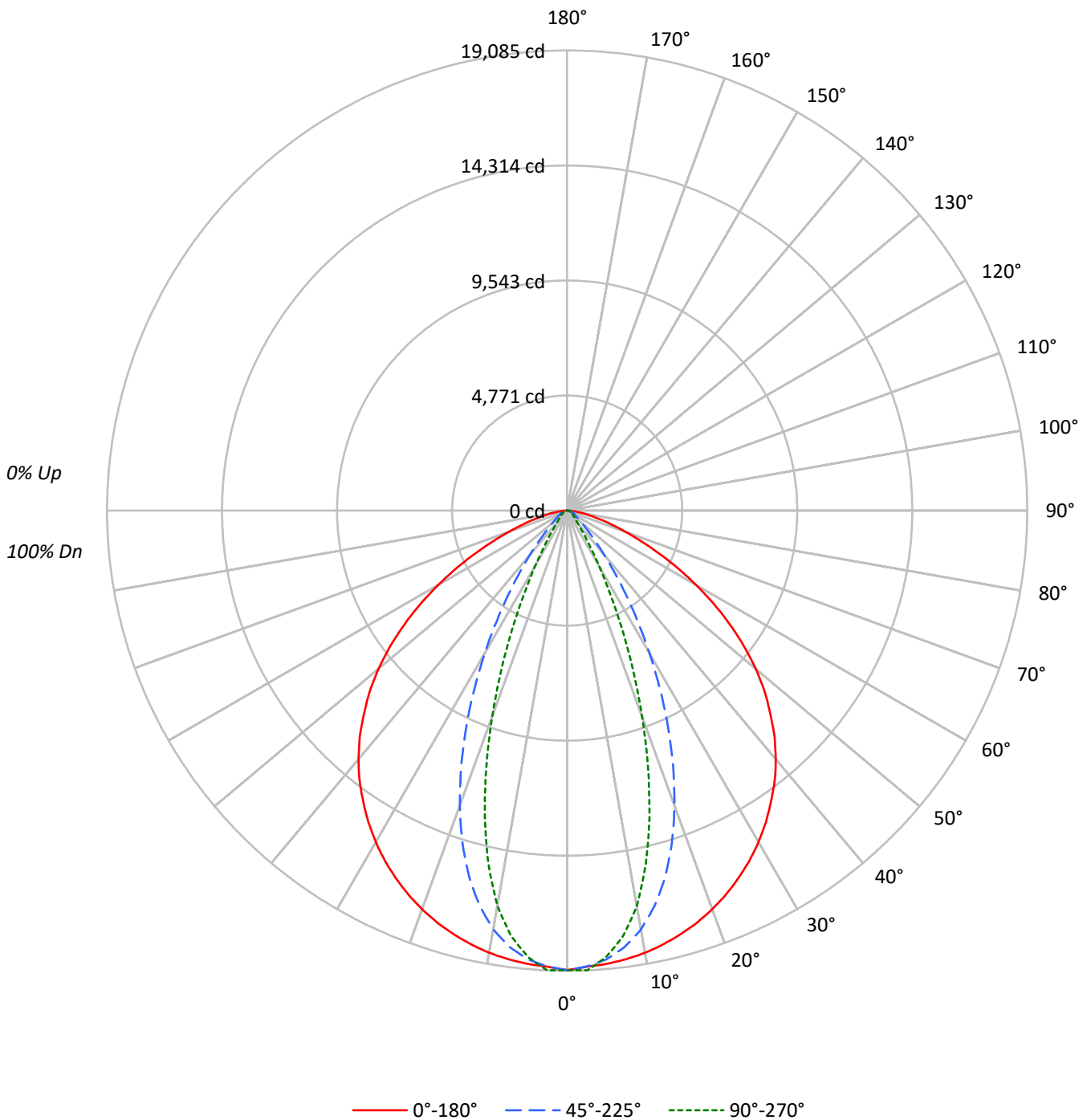
Lumens per Lamp: N/A
Luminaire Lumens: 20865.0 lumens
Efficiency: N/A
Efficacy: 142.6 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	25643	25643	25643
5°	25489	25235	25103
10°	25446	24093	22735
15°	25344	21900	18361
20°	25192	18635	13014
25°	24966	14694	7863
30°	24663	10605	4041
35°	24218	6933	2018
40°	23644	4164	1178
45°	22661	2487	881
50°	21374	1626	740
55°	19344	1234	645
60°	16624	1051	589
65°	13372	959	556
70°	10074	1027	553
75°	7410	976	569
80°	5422	972	622
85°	4060	1178	806



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1755.2	8.4
10°-20°	4366.6	20.9
20°-30°	4836.6	23.2
30°-40°	3875.0	18.6
40°-50°	2766.2	13.3
50°-60°	1776.8	8.5
60°-70°	962.9	4.6
70°-80°	411.6	2.0
80°-90°	114.1	0.5
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°	10958.4	52.5
0°-40°	14833.4	71.1
0°-60°	19376.4	92.9
0°-90°	20865.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20865.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19059	19059	19059	19059	19059	
5°	18872	18942	18684	18625	18586	###
15°	18194	17625	15722	13894	13181	5134
25°	16817	14828	9898	6449	5296	7747
35°	14744	10665	4221	1702	1229	9219
45°	11909	6156	1307	556	463	9180
55°	8246	2752	526	323	275	7349
65°	4200	1130	301	208	175	4206
75°	1425	414	188	130	109	1584
85°	263	109	76	63	52	321
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19058.7	19058.7	19058.7	19058.7	19058.7
2.5°	18933.2	19051.6	18924.2	19003.5	19084.8
5°	18872.0	18942.2	18684.2	18625.0	18585.9
7.5°	18765.6	18745.5	18260.6	17946.4	17794.9
10°	18625.0	18462.4	17634.2	16943.6	16640.4
12.5°	18424.3	18089.0	16786.0	15573.4	15059.4
15°	18194.4	17625.2	15721.9	13894.0	13181.3
17.5°	17919.3	17083.1	14450.1	12093.1	11152.5
20°	17594.1	16428.6	13014.6	10179.8	9088.7
22.5°	17230.7	15673.8	11477.8	8272.5	7102.1
25°	16817.1	14828.5	9897.7	6448.6	5296.2
27.5°	16370.4	13890.0	8326.7	4818.4	3767.4
30°	15874.5	12874.1	6826.0	3474.2	2600.9
32.5°	15333.5	11794.0	5431.7	2443.3	1778.8
35°	14744.2	10664.7	4221.1	1702.5	1228.7
37.5°	14140.9	9512.3	3188.2	1203.6	881.4
40°	13461.3	8363.9	2371.0	881.4	670.6
42.5°	12731.5	7237.6	1754.7	678.6	543.1
45°	11909.4	6156.5	1307.0	556.1	462.8
47.5°	11112.4	5148.6	992.8	473.8	402.5
50°	10210.9	4239.2	777.0	413.6	353.3
52.5°	9254.3	3439.1	630.4	364.4	311.2
55°	8246.4	2752.5	526.0	323.2	275.0
57.5°	7225.6	2180.3	449.7	288.1	244.9
60°	6177.6	1743.6	390.5	258.0	218.8
62.5°	5154.7	1394.3	341.3	231.9	195.7
65°	4200.0	1130.3	301.1	207.8	174.7
67.5°	3317.7	893.4	281.1	186.7	157.6
70°	2560.8	695.7	261.0	166.6	140.5
72.5°	1940.4	534.0	230.9	148.6	124.5
75°	1425.4	413.6	187.7	130.5	109.4
77.5°	1019.9	318.2	152.6	113.4	94.4
80°	699.7	236.9	125.5	97.4	80.3
82.5°	454.7	167.6	101.4	80.3	66.3
85°	263.0	109.4	76.3	63.2	52.2
87.5°	113.4	60.2	52.2	47.2	40.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)