

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-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 (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-L835-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

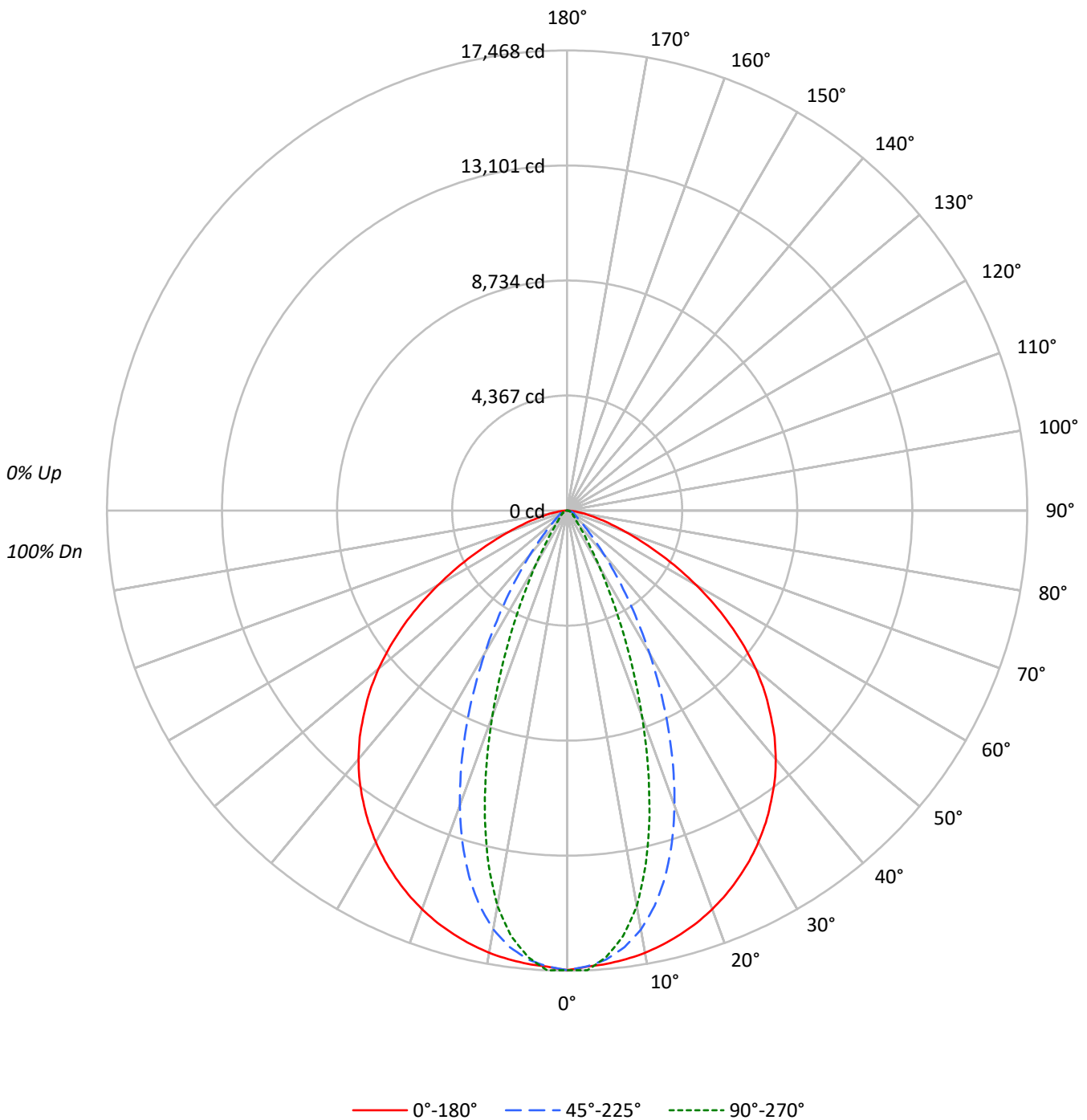
Lumens per Lamp: N/A
Luminaire Lumens: 19098.0 lumens
Efficiency: N/A
Efficacy: 130.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	23472	23472	23472
5°	23330	23098	22977
10°	23291	22052	20810
15°	23198	20045	16806
20°	23058	17057	11911
25°	22852	13450	7197
30°	22575	9707	3699
35°	22167	6346	1847
40°	21641	3812	1078
45°	20742	2276	806
50°	19564	1489	677
55°	17706	1129	591
60°	15216	962	539
65°	12239	877	509
70°	9221	940	506
75°	6783	893	521
80°	4962	890	570
85°	3716	1078	738



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1606.6	8.4
10°-20°	3996.8	20.9
20°-30°	4427.0	23.2
30°-40°	3546.8	18.6
40°-50°	2532.0	13.3
50°-60°	1626.3	8.5
60°-70°	881.3	4.6
70°-80°	376.7	2.0
80°-90°	104.5	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°	10030.3	52.5
0°-40°	13577.2	71.1
0°-60°	17735.5	92.9
0°-90°	19098.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19098.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17445	17445	17445	17445	17445	
5°	17274	17338	17102	17048	17012	###
15°	16654	16133	14390	12717	12065	4699
25°	15393	13573	9060	5902	4848	7091
35°	13496	9762	3864	1558	1125	8438
45°	10901	5635	1196	509	424	8402
55°	7548	2519	482	296	252	6727
65°	3844	1035	276	190	160	3850
75°	1305	379	172	119	100	1450
85°	241	100	70	58	48	294
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17444.6	17444.6	17444.6	17444.6	17444.6
2.5°	17329.8	17438.2	17321.5	17394.1	17468.5
5°	17273.7	17338.1	17101.9	17047.7	17011.9
7.5°	17176.3	17158.0	16714.2	16426.6	16287.9
10°	17047.7	16898.9	16140.8	15508.7	15231.2
12.5°	16864.0	16557.1	15364.4	14254.5	13784.1
15°	16653.5	16132.6	14390.5	12717.3	12065.0
17.5°	16401.8	15636.4	13226.4	11069.0	10208.0
20°	16104.1	15037.3	11912.5	9317.7	8319.0
22.5°	15771.5	14346.4	10505.7	7572.0	6500.6
25°	15392.9	13572.8	9059.5	5902.5	4847.7
27.5°	14984.1	12713.7	7621.6	4410.3	3448.3
30°	14530.2	11783.8	6247.9	3180.0	2380.7
32.5°	14034.9	10795.2	4971.7	2236.4	1628.1
35°	13495.6	9761.5	3863.6	1558.3	1124.6
37.5°	12943.4	8706.7	2918.2	1101.7	806.7
40°	12321.3	7655.6	2170.2	806.7	613.8
42.5°	11653.3	6624.7	1606.1	621.1	497.1
45°	10900.8	5635.1	1196.3	509.0	423.6
47.5°	10171.3	4712.6	908.7	433.7	368.4
50°	9346.2	3880.2	711.2	378.6	323.4
52.5°	8470.6	3147.9	577.0	333.5	284.8
55°	7548.1	2519.4	481.5	295.9	251.8
57.5°	6613.6	1995.7	411.6	263.7	224.2
60°	5654.4	1596.0	357.4	236.1	200.3
62.5°	4718.1	1276.2	312.4	212.2	179.2
65°	3844.3	1034.6	275.6	190.2	159.9
67.5°	3036.7	817.7	257.3	170.9	144.3
70°	2343.9	636.7	238.9	152.5	128.6
72.5°	1776.1	488.8	211.3	136.0	113.9
75°	1304.7	378.6	171.8	119.4	100.2
77.5°	933.5	291.3	139.7	103.8	86.4
80°	640.4	216.8	114.9	89.1	73.5
82.5°	416.2	153.4	92.8	73.5	60.6
85°	240.7	100.2	69.8	57.9	47.8
87.5°	103.8	55.1	47.8	43.2	36.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)