

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-LD5-36HE-N-UNV-L840-ED3-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 (P23767)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-36HE-N-UNV-L840-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

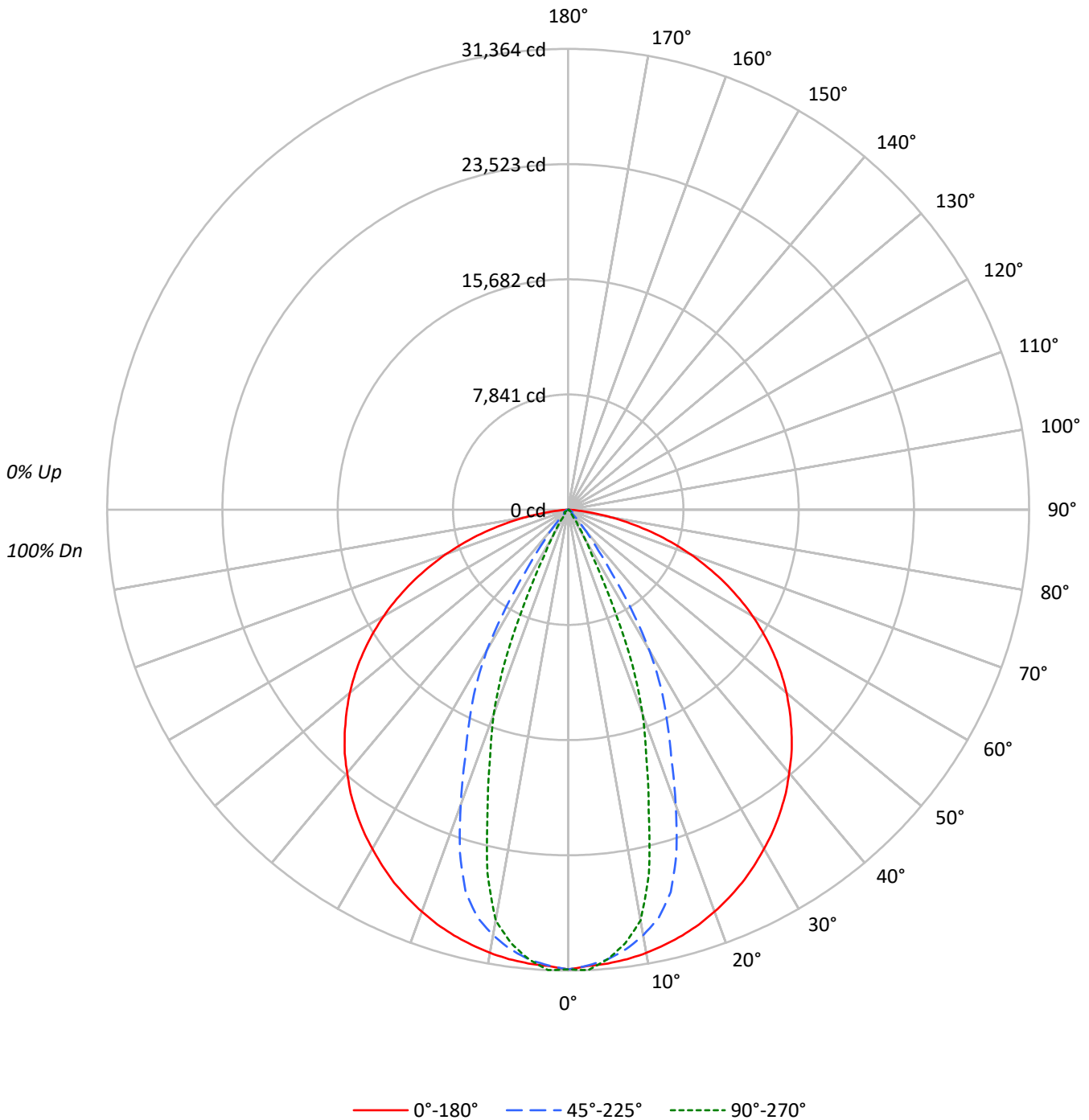
Lumens per Lamp: N/A
Luminaire Lumens: 33255.0 lumens
Efficiency: N/A
Efficacy: 157.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 211.3
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	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	76	81	77	74	73																												
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66																												
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60																												
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55																												
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51																												
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47																												
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44																												
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41																												

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	42097	42097	42097
5°	41872	41502	41484
10°	41846	40172	38763
15°	41787	37531	29501
20°	41690	30595	21235
25°	41584	23657	10461
30°	41400	17193	3392
35°	41302	7628	873
40°	41086	3098	588
45°	40902	869	626
50°	40583	617	695
55°	39999	733	297
60°	39011	817	180
65°	37407	521	213
70°	34751	463	264
75°	30401	348	364
80°	22731	427	519
85°	11259	551	690



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2903.5	8.7
10°-20°	7260.3	21.8
20°-30°	7864.0	23.6
30°-40°	5823.7	17.5
40°-50°	4194.6	12.6
50°-60°	2597.2	7.8
60°-70°	1597.3	4.8
70°-80°	842.0	2.5
80°-90°	172.3	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°	18027.9	54.2
0°-40°	23851.6	71.7
0°-60°	30643.4	92.1
0°-90°	33255.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	33255.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	31288	31288	31288	31288	31288	
5°	31002	31117	30728	30750	30715	###
15°	29999	29302	26943	22912	21179	8468
25°	28010	25657	15935	10024	7046	12906
35°	25145	17727	4644	1092	531	15731
45°	21496	9987	457	330	329	16577
55°	17051	2057	313	283	126	15222
65°	11750	217	164	104	67	11593
75°	5848	51	67	88	70	6177
85°	729	19	36	54	45	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	31287.8	31287.8	31287.8	31287.8	<i>31287.8</i>
2.5°	<i>31086.9</i>	<i>31284.8</i>	<i>31051.2</i>	<i>31225.3</i>	<i>31363.7</i>
5°	31002.0	31116.6	30728.2	30750.5	<i>30714.8</i>
7.5°	30853.2	30826.4	30173.0	29887.2	<i>29762.2</i>
10°	30628.5	30451.3	29403.5	28806.6	<i>28372.0</i>
12.5°	30338.2	29942.3	28443.5	26545.7	<i>25366.9</i>
15°	29998.9	29302.3	26943.2	22912.5	<i>21178.6</i>
17.5°	29594.0	28607.2	24490.3	19203.4	<i>17655.5</i>
20°	29116.2	27831.7	21367.6	16338.2	<i>14830.5</i>
22.5°	28583.4	26888.1	18334.2	13578.7	<i>11428.0</i>
25°	28010.3	25657.2	15934.9	10024.4	<i>7046.1</i>
27.5°	27348.0	24075.0	13684.4	5904.5	<i>3596.0</i>
30°	26647.0	22169.8	11066.3	3176.3	<i>2183.5</i>
32.5°	25940.0	20010.2	7830.5	1984.0	<i>1238.4</i>
35°	25145.2	17726.9	4643.8	1092.5	<i>531.4</i>
37.5°	24316.1	15634.2	2744.6	497.1	<i>340.8</i>
40°	23391.8	13721.6	1763.8	330.4	<i>334.9</i>
42.5°	22498.8	11938.5	992.8	326.0	<i>331.9</i>
45°	21495.6	9987.2	456.9	330.4	<i>328.9</i>
47.5°	20458.2	7964.5	296.2	333.4	<i>333.4</i>
50°	19388.0	5694.6	294.7	340.8	<i>331.9</i>
52.5°	18258.3	3552.8	306.6	339.4	<i>272.4</i>
55°	17051.2	2057.0	312.6	282.8	<i>126.5</i>
57.5°	15800.9	1213.1	315.5	162.2	<i>71.4</i>
60°	14497.1	671.3	303.6	120.6	<i>67.0</i>
62.5°	13153.1	320.0	239.6	113.1	<i>65.5</i>
65°	11749.5	217.3	163.7	104.2	<i>67.0</i>
67.5°	10292.3	168.2	129.5	98.2	<i>68.5</i>
70°	8833.7	125.0	117.6	98.2	<i>67.0</i>
72.5°	7351.2	84.8	98.2	99.7	<i>67.0</i>
75°	5848.0	50.6	67.0	87.8	<i>70.0</i>
77.5°	4358.1	31.3	52.1	90.8	<i>84.8</i>
80°	2933.7	26.8	55.1	84.8	<i>67.0</i>
82.5°	1722.1	23.8	53.6	65.5	<i>53.6</i>
85°	729.3	19.3	35.7	53.6	<i>44.7</i>
87.5°	136.9	16.4	28.3	43.2	<i>38.7</i>
90°	0.0	0.0	0.0	0.0	<i>0.0</i>

(END OF REPORT)