

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-LD5-36SE-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-LD5-36SE-N-UNV-L840-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

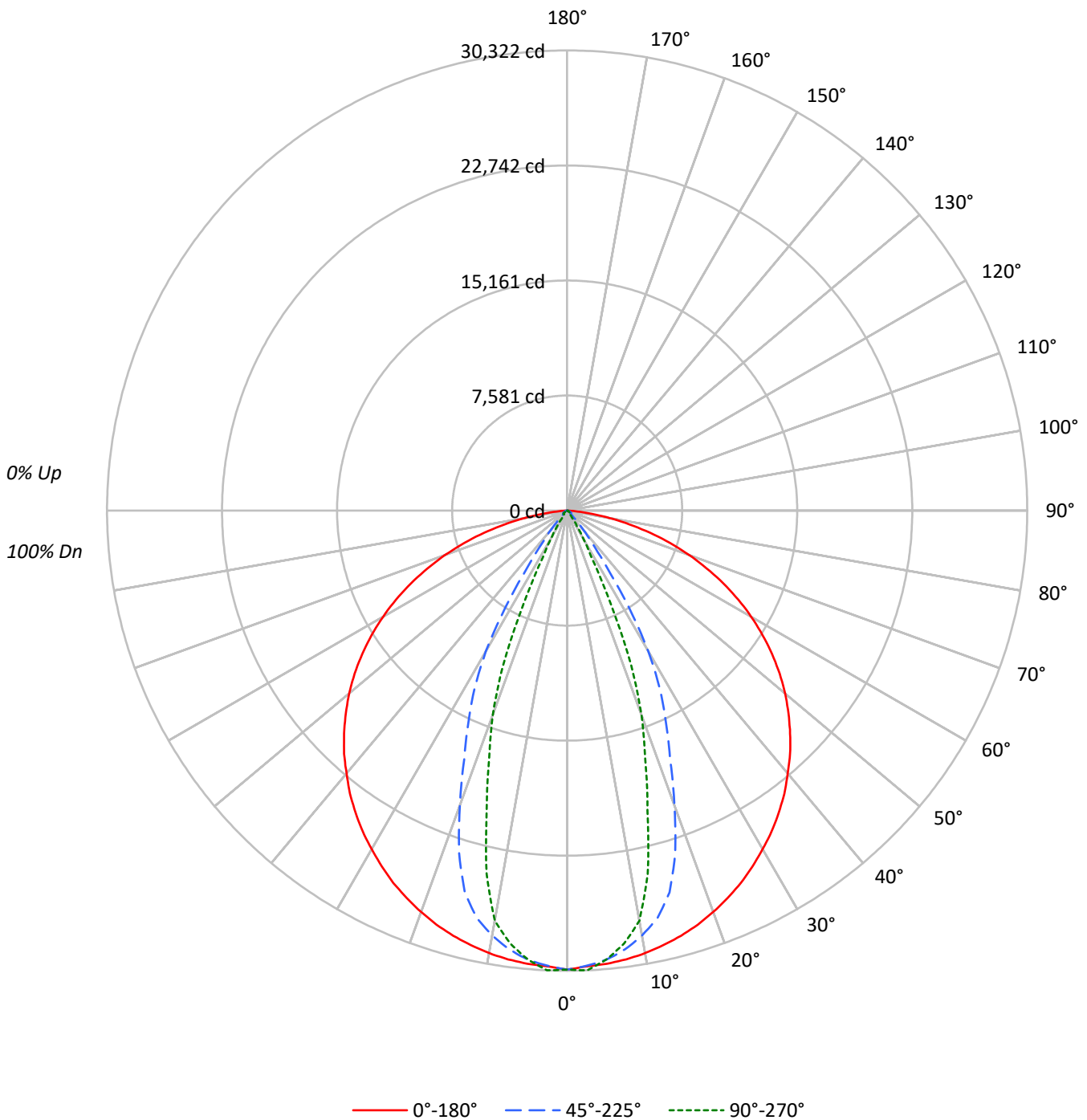
Lumens per Lamp: N/A
Luminaire Lumens: 32151.0 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 232
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	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°	40700	40700	40700
5°	40482	40125	40107
10°	40457	38839	37476
15°	40400	36285	28521
20°	40306	29579	20530
25°	40203	22871	10113
30°	40025	16622	3280
35°	39931	7375	844
40°	39722	2995	569
45°	39544	841	605
50°	39236	596	672
55°	38671	709	287
60°	37716	790	174
65°	36165	504	206
70°	33597	447	255
75°	29392	337	351
80°	21977	412	502
85°	10885	533	667



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	2807.2	8.7
10°-20°	7019.3	21.8
20°-30°	7603.0	23.6
30°-40°	5630.3	17.5
40°-50°	4055.3	12.6
50°-60°	2511.0	7.8
60°-70°	1544.3	4.8
70°-80°	814.1	2.5
80°-90°	166.6	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°	17429.4	54.2
0°-40°	23059.8	71.7
0°-60°	29626.1	92.1
0°-90°	32151.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	32151.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	30249	30249	30249	30249	30249	
5°	29973	30084	29708	29730	29695	###
15°	29003	28330	26049	22152	20476	8187
25°	27080	24805	15406	9692	6812	12478
35°	24310	17138	4490	1056	514	15209
45°	20782	9656	442	320	318	16027
55°	16485	1989	302	273	122	14716
65°	11359	210	158	101	65	11208
75°	5654	49	65	85	68	5972
85°	705	19	34	52	43	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	30249.1	30249.1	30249.1	30249.1	30249.1
2.5°	30054.9	30246.2	30020.3	30188.7	30322.5
5°	29972.8	30083.6	29708.1	29729.6	29695.1
7.5°	29828.9	29803.0	29171.3	28895.0	28774.2
10°	29611.6	29440.4	28427.4	27850.3	27430.1
12.5°	29331.0	28948.3	27499.2	25664.5	24524.8
15°	29003.0	28329.5	26048.7	22151.9	20475.5
17.5°	28611.5	27657.5	23677.2	18565.9	17069.4
20°	28149.6	26907.8	20658.2	15795.9	14338.1
22.5°	27634.5	25995.5	17725.5	13128.0	11048.6
25°	27080.5	24805.4	15405.9	9691.6	6812.2
27.5°	26440.1	23275.7	13230.1	5708.5	3476.6
30°	25762.3	21433.8	10698.9	3070.8	2111.0
32.5°	25078.8	19345.9	7570.6	1918.2	1197.2
35°	24310.4	17138.4	4489.7	1056.2	513.7
37.5°	23508.9	15115.2	2653.5	480.6	329.5
40°	22615.3	13266.1	1705.2	319.5	323.8
42.5°	21751.9	11542.2	959.8	315.1	320.9
45°	20782.0	9655.7	441.8	319.5	318.0
47.5°	19779.0	7700.1	286.4	322.3	322.3
50°	18744.4	5505.6	284.9	329.5	320.9
52.5°	17652.2	3434.9	296.4	328.1	263.3
55°	16485.1	1988.7	302.2	273.4	122.3
57.5°	15276.4	1172.8	305.1	156.9	69.1
60°	14015.8	649.0	293.6	116.6	64.8
62.5°	12716.4	309.4	231.7	109.4	63.3
65°	11359.4	210.1	158.3	100.7	64.8
67.5°	9950.7	162.6	125.2	95.0	66.2
70°	8540.4	120.9	113.7	95.0	64.8
72.5°	7107.2	82.0	95.0	96.4	64.8
75°	5653.8	48.9	64.8	84.9	67.6
77.5°	4213.4	30.2	50.4	87.8	82.0
80°	2836.3	25.9	53.2	82.0	64.8
82.5°	1664.9	23.0	51.8	63.3	51.8
85°	705.1	18.7	34.5	51.8	43.2
87.5°	132.4	15.8	27.3	41.7	37.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)