

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-LD5-15SE-N-UNV-L840-ED1-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-LD5-15SE-N-UNV-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

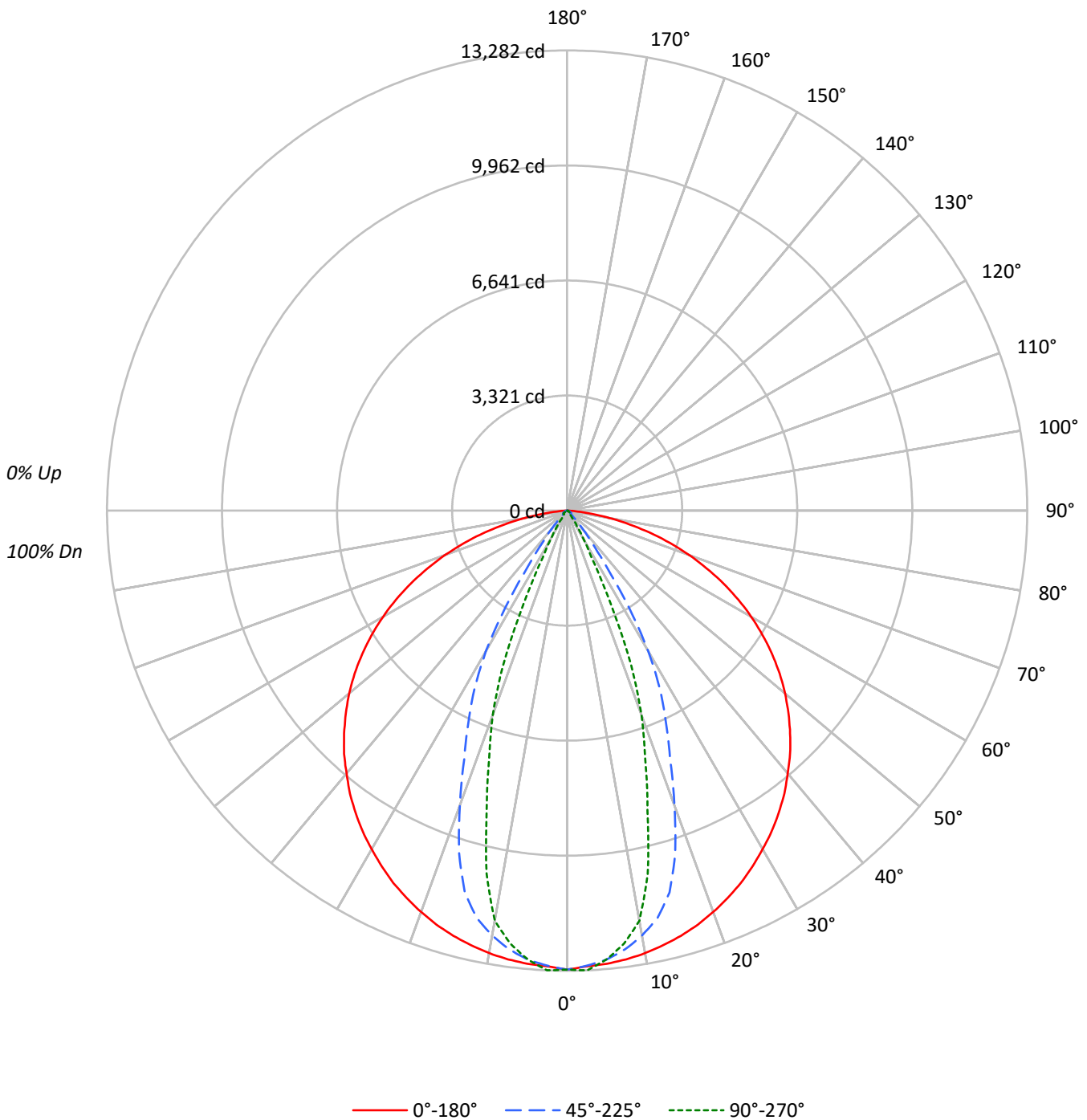
Lumens per Lamp: N/A
Luminaire Lumens: 14083.0 lumens
Efficiency: N/A
Efficacy: 147.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 95.2
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	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	17828	17828	17828
5°	17732	17576	17568
10°	17721	17012	16416
15°	17696	15894	12493
20°	17655	12957	8993
25°	17610	10018	4430
30°	17532	7281	1437
35°	17491	3230	370
40°	17399	1312	249
45°	17321	368	265
50°	17186	261	294
55°	16939	311	126
60°	16521	346	76
65°	15841	221	90
70°	14717	196	112
75°	12874	148	154
80°	9627	181	220
85°	4769	233	292



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1229.6	8.7
10°-20°	3074.6	21.8
20°-30°	3330.3	23.6
30°-40°	2466.2	17.5
40°-50°	1776.3	12.6
50°-60°	1099.9	7.8
60°-70°	676.4	4.8
70°-80°	356.6	2.5
80°-90°	73.0	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°	7634.6	54.2
0°-40°	10100.8	71.7
0°-60°	12977.0	92.1
0°-90°	14083.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14083.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13250	13250	13250	13250	13250	
5°	13129	13177	13013	13022	13007	###
15°	12704	12409	11410	9703	8969	3586
25°	11862	10865	6748	4245	2984	5466
35°	10649	7507	1967	463	225	6662
45°	9103	4229	194	140	139	7020
55°	7221	871	132	120	54	6446
65°	4976	92	69	44	28	4909
75°	2476	21	28	37	30	2616
85°	309	8	15	23	19	467
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13249.9	13249.9	13249.9	13249.9	13249.9
2.5°	13164.8	13248.7	13149.7	13223.5	13282.1
5°	13128.9	13177.4	13012.9	13022.4	13007.3
7.5°	13065.9	13054.5	12777.8	12656.8	12603.8
10°	12970.7	12895.7	12451.9	12199.2	12015.1
12.5°	12847.8	12680.1	12045.4	11241.7	10742.5
15°	12704.1	12409.1	11410.0	9703.1	8968.8
17.5°	12532.6	12114.7	10371.3	8132.4	7476.8
20°	12330.3	11786.3	9048.9	6919.0	6280.5
22.5°	12104.6	11386.7	7764.3	5750.4	4839.6
25°	11862.0	10865.4	6748.2	4245.2	2983.9
27.5°	11581.5	10195.4	5795.1	2500.5	1522.8
30°	11284.6	9388.6	4686.4	1345.1	924.7
32.5°	10985.2	8474.0	3316.1	840.2	524.4
35°	10648.6	7507.1	1966.6	462.7	225.0
37.5°	10297.5	6620.9	1162.3	210.5	144.3
40°	9906.1	5810.9	746.9	139.9	141.8
42.5°	9527.9	5055.8	420.4	138.0	140.6
45°	9103.1	4229.4	193.5	139.9	139.3
47.5°	8663.7	3372.8	125.4	141.2	141.2
50°	8210.5	2411.6	124.8	144.3	140.6
52.5°	7732.1	1504.6	129.8	143.7	115.3
55°	7220.9	871.1	132.4	119.8	53.6
57.5°	6691.5	513.7	133.6	68.7	30.3
60°	6139.3	284.3	128.6	51.1	28.4
62.5°	5570.1	135.5	101.5	47.9	27.7
65°	4975.7	92.0	69.3	44.1	28.4
67.5°	4358.7	71.2	54.8	41.6	29.0
70°	3740.9	52.9	49.8	41.6	28.4
72.5°	3113.1	35.9	41.6	42.2	28.4
75°	2476.5	21.4	28.4	37.2	29.6
77.5°	1845.6	13.2	22.1	38.4	35.9
80°	1242.4	11.3	23.3	35.9	28.4
82.5°	729.3	10.1	22.7	27.7	22.7
85°	308.9	8.2	15.1	22.7	18.9
87.5°	58.0	6.9	12.0	18.3	16.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)