

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-CL-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 (P23768)
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-CL-UNV-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

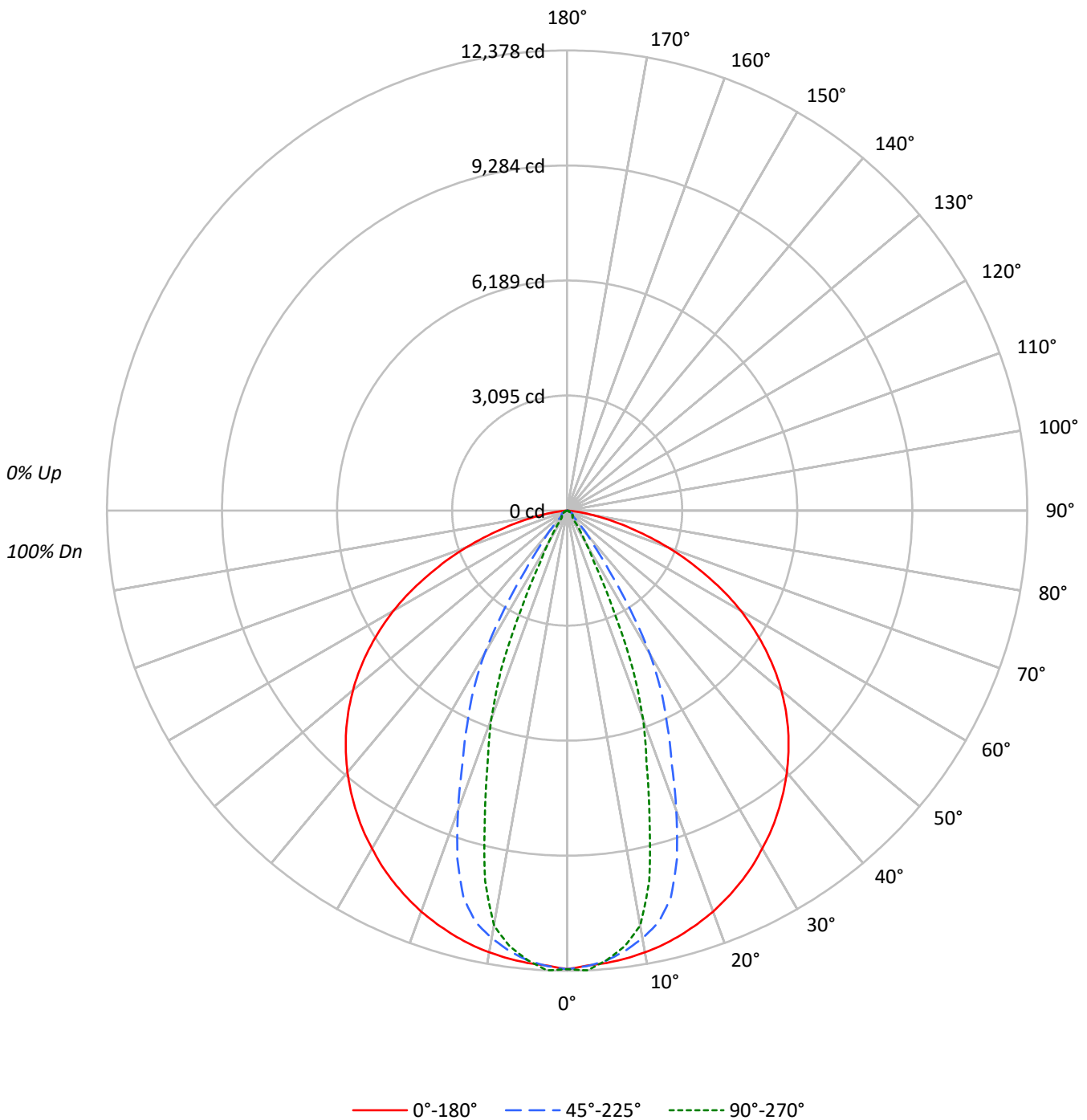
Lumens per Lamp: N/A
Luminaire Lumens: 13194.0 lumens
Efficiency: N/A
Efficacy: 138.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	0	
RCR																						
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100				
1	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90				
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81				
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73				
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66				
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60				
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55				
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51				
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47				
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44				
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41				

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	16599	16599	16599
5°	16497	16411	16399
10°	16486	15957	15486
15°	16467	15005	11907
20°	16435	12280	8541
25°	16383	9461	4340
30°	16306	6905	1579
35°	16248	3171	550
40°	16148	1439	379
45°	16004	537	384
50°	15749	390	404
55°	15283	410	308
60°	14523	438	272
65°	13171	334	221
70°	11292	241	204
75°	8631	213	193
80°	5400	201	210
85°	1706	235	283



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1148.5	8.7
10°-20°	2893.3	21.9
20°-30°	3150.9	23.9
30°-40°	2357.0	17.9
40°-50°	1694.8	12.8
50°-60°	1040.9	7.9
60°-70°	598.9	4.5
70°-80°	267.3	2.0
80°-90°	42.4	0.3
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°	7192.7	54.5
0°-40°	9549.8	72.4
0°-60°	12285.4	93.1
0°-90°	13194.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13194.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12337	12337	12337	12337	12337	
5°	12214	12272	12150	12162	12142	###
15°	11822	11595	10772	9252	8548	3337
25°	11036	10244	6373	4089	2924	5087
35°	9892	7094	1930	568	335	6188
45°	8411	3986	282	209	202	6479
55°	6515	828	175	169	131	5809
65°	4137	91	105	87	69	4095
75°	1660	55	41	42	37	1802
85°	110	11	15	20	18	220
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12336.7	12336.7	12336.7	12336.7	12336.7
2.5°	12250.9	12331.1	12263.5	12324.1	12377.8
5°	12214.3	12271.7	12150.5	12161.9	12141.7
7.5°	12151.1	12165.0	11946.0	11861.4	11820.3
10°	12066.5	12029.3	11679.6	11478.2	11334.9
12.5°	11959.9	11836.8	11348.1	10629.1	10200.4
15°	11821.6	11595.0	10772.4	9251.6	8548.3
17.5°	11656.8	11342.5	9819.1	7710.6	7102.1
20°	11478.2	11063.4	8576.1	6556.0	5965.1
22.5°	11267.3	10706.7	7350.2	5452.5	4641.3
25°	11035.6	10244.0	6372.9	4088.9	2923.5
27.5°	10785.7	9633.5	5468.3	2507.5	1580.8
30°	10495.3	8890.5	4444.3	1407.2	1016.4
32.5°	10211.8	8024.4	3174.8	937.5	649.6
35°	9891.7	7094.5	1930.5	567.5	334.6
37.5°	9552.7	6249.2	1208.3	308.7	231.1
40°	9193.5	5447.4	819.4	219.1	215.9
42.5°	8809.7	4722.1	513.2	208.3	215.3
45°	8410.7	3986.0	282.2	209.0	202.0
47.5°	7977.7	3186.8	197.0	197.6	197.0
50°	7523.8	2285.9	186.2	195.1	193.2
52.5°	7034.5	1419.1	186.9	190.7	171.1
55°	6514.9	828.3	174.9	169.2	131.3
57.5°	5968.9	516.4	171.1	139.5	118.1
60°	5396.9	272.7	162.9	125.6	101.0
62.5°	4787.7	134.5	130.7	107.3	82.7
65°	4136.9	90.9	104.8	87.1	69.4
67.5°	3508.1	82.1	78.9	71.3	60.6
70°	2870.5	75.1	61.2	62.5	51.8
72.5°	2244.9	68.2	49.2	53.7	43.6
75°	1660.3	54.9	41.0	42.3	37.2
77.5°	1155.3	42.9	32.2	36.0	34.7
80°	696.9	27.1	25.9	29.7	27.1
82.5°	337.7	17.7	20.2	23.4	21.5
85°	110.5	10.7	15.2	19.6	18.3
87.5°	13.9	6.3	12.6	17.0	15.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)