

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

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

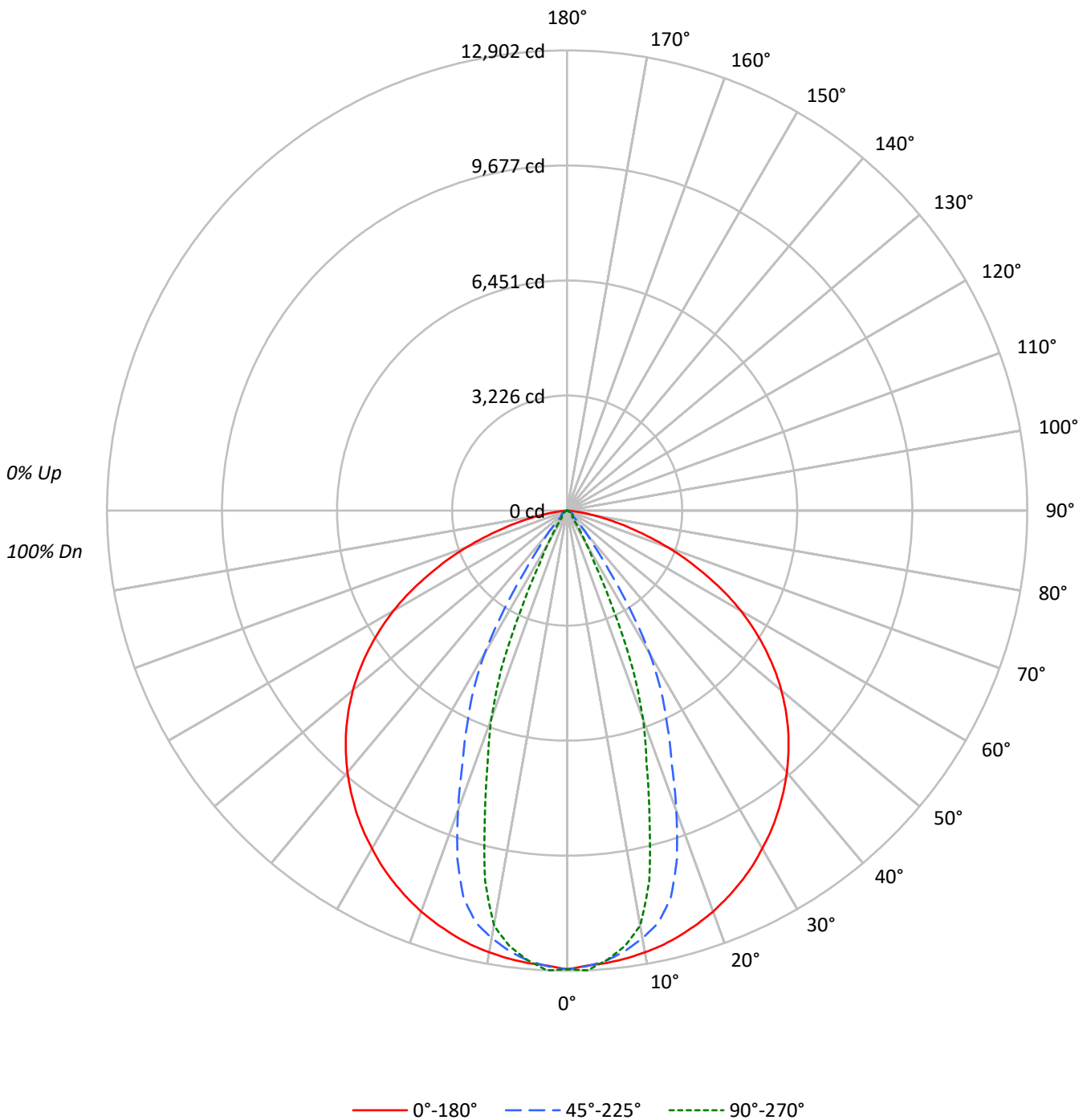
Lumens per Lamp: N/A  
Luminaire Lumens: 13753.0 lumens  
Efficiency: N/A  
Efficacy: 149.8 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 91.8  
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	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°	17302	17302	17302
5°	17196	17106	17094
10°	17184	16633	16142
15°	17165	15641	12412
20°	17131	12800	8903
25°	17077	9862	4524
30°	16997	7197	1646
35°	16936	3305	573
40°	16832	1500	395
45°	16682	560	401
50°	16416	406	422
55°	15930	428	321
60°	15138	457	283
65°	13728	348	230
70°	11771	251	212
75°	8997	222	202
80°	5629	209	219
85°	1778	244	295



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1197.2	8.7
10°-20°	3015.9	21.9
20°-30°	3284.4	23.9
30°-40°	2456.9	17.9
40°-50°	1766.6	12.8
50°-60°	1084.9	7.9
60°-70°	624.3	4.5
70°-80°	278.6	2.0
80°-90°	44.2	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°	7497.5	54.5
0°-40°	9954.4	72.4
0°-60°	12805.9	93.1
0°-90°	13753.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13753.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	12859	12859	12859	12859	12859	
5°	12732	12792	12665	12677	12656	###
15°	12322	12086	11229	9644	8910	3478
25°	11503	10678	6643	4262	3047	5303
35°	10311	7395	2012	592	349	6450
45°	8767	4155	294	218	211	6754
55°	6791	863	182	176	137	6055
65°	4312	95	109	91	72	4268
75°	1731	57	43	44	39	1878
85°	115	11	16	20	19	230
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	12859.4	12859.4	12859.4	12859.4	12859.4
2.5°	12769.9	12853.5	12783.1	12846.3	12902.2
5°	12731.8	12791.6	12665.3	12677.1	12656.1
7.5°	12666.0	12680.4	12452.1	12363.9	12321.1
10°	12577.8	12539.0	12174.4	11964.5	11815.1
12.5°	12466.6	12338.3	11828.9	11079.4	10632.6
15°	12322.5	12086.2	11228.8	9643.6	8910.5
17.5°	12150.7	11823.0	10235.2	8037.3	7403.0
20°	11964.5	11532.2	8939.5	6833.7	6217.8
22.5°	11744.7	11160.4	7661.6	5683.5	4837.9
25°	11503.2	10678.0	6642.9	4262.1	3047.4
27.5°	11242.6	10041.7	5699.9	2613.7	1647.7
30°	10939.9	9267.2	4632.6	1466.8	1059.4
32.5°	10644.5	8364.3	3309.3	977.2	677.1
35°	10310.8	7395.1	2012.3	591.6	348.8
37.5°	9957.5	6513.9	1259.5	321.8	240.8
40°	9583.0	5678.2	854.1	228.3	225.0
42.5°	9182.9	4922.1	535.0	217.2	224.4
45°	8767.1	4154.9	294.1	217.8	210.6
47.5°	8315.7	3321.8	205.3	206.0	205.3
50°	7842.5	2382.8	194.1	203.3	201.4
52.5°	7332.5	1479.3	194.8	198.7	178.3
55°	6791.0	863.3	182.3	176.4	136.9
57.5°	6221.8	538.3	178.3	145.4	123.1
60°	5625.6	284.3	169.8	130.9	105.3
62.5°	4990.6	140.2	136.2	111.9	86.2
65°	4312.1	94.8	109.2	90.8	72.4
67.5°	3656.7	85.5	82.3	74.4	63.2
70°	2992.1	78.3	63.8	65.1	54.0
72.5°	2340.0	71.1	51.3	55.9	45.4
75°	1730.6	57.2	42.8	44.1	38.8
77.5°	1204.2	44.7	33.6	37.5	36.2
80°	726.5	28.3	27.0	30.9	28.3
82.5°	352.1	18.4	21.1	24.3	22.4
85°	115.2	11.2	15.8	20.4	19.1
87.5°	14.5	6.6	13.2	17.8	16.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)