

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-CLI-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 (P23769)  
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-CLI-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

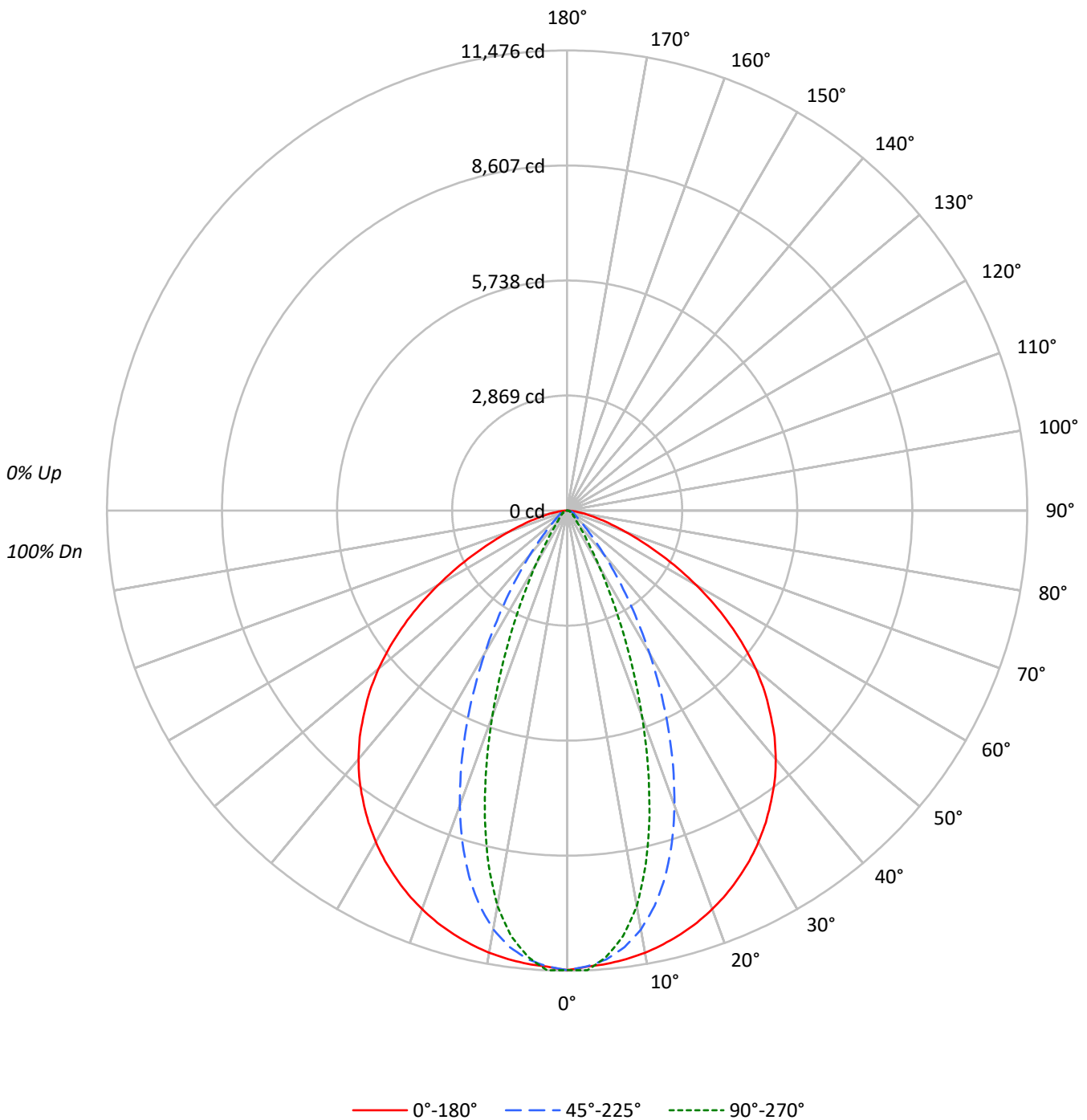
Lumens per Lamp: N/A  
Luminaire Lumens: 12546.0 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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	75	81	77	74	72
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	15419	15419	15419
5°	15326	15174	15094
10°	15301	14487	13670
15°	15239	13168	11040
20°	15148	11205	7825
25°	15012	8835	4728
30°	14830	6377	2430
35°	14562	4169	1214
40°	14217	2504	708
45°	13626	1495	530
50°	12852	978	445
55°	11632	742	388
60°	9996	632	354
65°	8040	577	334
70°	6057	617	332
75°	4456	587	342
80°	3260	584	374
85°	2441	709	485



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1055.4	8.4
10°-20°	2625.6	20.9
20°-30°	2908.2	23.2
30°-40°	2330.0	18.6
40°-50°	1663.3	13.3
50°-60°	1068.4	8.5
60°-70°	579.0	4.6
70°-80°	247.5	2.0
80°-90°	68.6	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°	6589.2	52.5
0°-40°	8919.2	71.1
0°-60°	11650.9	92.9
0°-90°	12546.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12546.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	11460	11460	11460	11460	11460	
5°	11348	11390	11235	11199	11176	###
15°	10940	10598	9454	8354	7926	3087
25°	10112	8916	5952	3878	3185	4658
35°	8866	6413	2538	1024	739	5543
45°	7161	3702	786	334	278	5520
55°	4958	1655	316	194	165	4419
65°	2525	680	181	125	105	2529
75°	857	249	113	78	66	952
85°	158	66	46	38	31	193
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	11459.9	11459.9	11459.9	11459.9	11459.9
2.5°	11384.4	11455.6	11379.0	11426.7	11475.6
5°	11347.6	11389.8	11234.7	11199.1	11175.6
7.5°	11283.6	11271.5	10980.0	10791.1	10699.9
10°	11199.1	11101.3	10603.4	10188.1	10005.8
12.5°	11078.4	10876.8	10093.3	9364.2	9055.1
15°	10940.2	10597.9	9453.5	8354.4	7925.8
17.5°	10774.8	10272.0	8688.8	7271.5	6705.9
20°	10579.2	9878.4	7825.6	6121.1	5465.0
22.5°	10360.7	9424.5	6901.5	4974.2	4270.4
25°	10112.0	8916.3	5951.5	3877.5	3184.6
27.5°	9843.4	8352.0	5006.8	2897.3	2265.3
30°	9545.3	7741.1	4104.4	2089.0	1563.9
32.5°	9219.9	7091.6	3266.1	1469.2	1069.6
35°	8865.6	6412.6	2538.1	1023.7	738.8
37.5°	8502.9	5719.7	1917.0	723.7	530.0
40°	8094.2	5029.2	1425.7	530.0	403.2
42.5°	7655.4	4351.9	1055.1	408.0	326.5
45°	7161.1	3701.9	785.9	334.4	278.3
47.5°	6681.8	3095.8	597.0	284.9	242.0
50°	6139.8	2549.0	467.2	248.7	212.5
52.5°	5564.5	2067.9	379.1	219.1	187.1
55°	4958.5	1655.1	316.3	194.4	165.4
57.5°	4344.7	1311.0	270.4	173.2	147.3
60°	3714.5	1048.4	234.8	155.1	131.6
62.5°	3099.5	838.4	205.2	139.4	117.7
65°	2525.4	679.6	181.1	124.9	105.0
67.5°	1994.9	537.2	169.0	112.3	94.8
70°	1539.8	418.3	156.9	100.2	84.5
72.5°	1166.8	321.1	138.8	89.3	74.8
75°	857.1	248.7	112.9	78.5	65.8
77.5°	613.3	191.3	91.7	68.2	56.7
80°	420.7	142.4	75.4	58.5	48.3
82.5°	273.4	100.8	61.0	48.3	39.8
85°	158.1	65.8	45.9	38.0	31.4
87.5°	68.2	36.2	31.4	28.4	24.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)