

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-W-A-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 (P23761)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-15HE-W-A-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

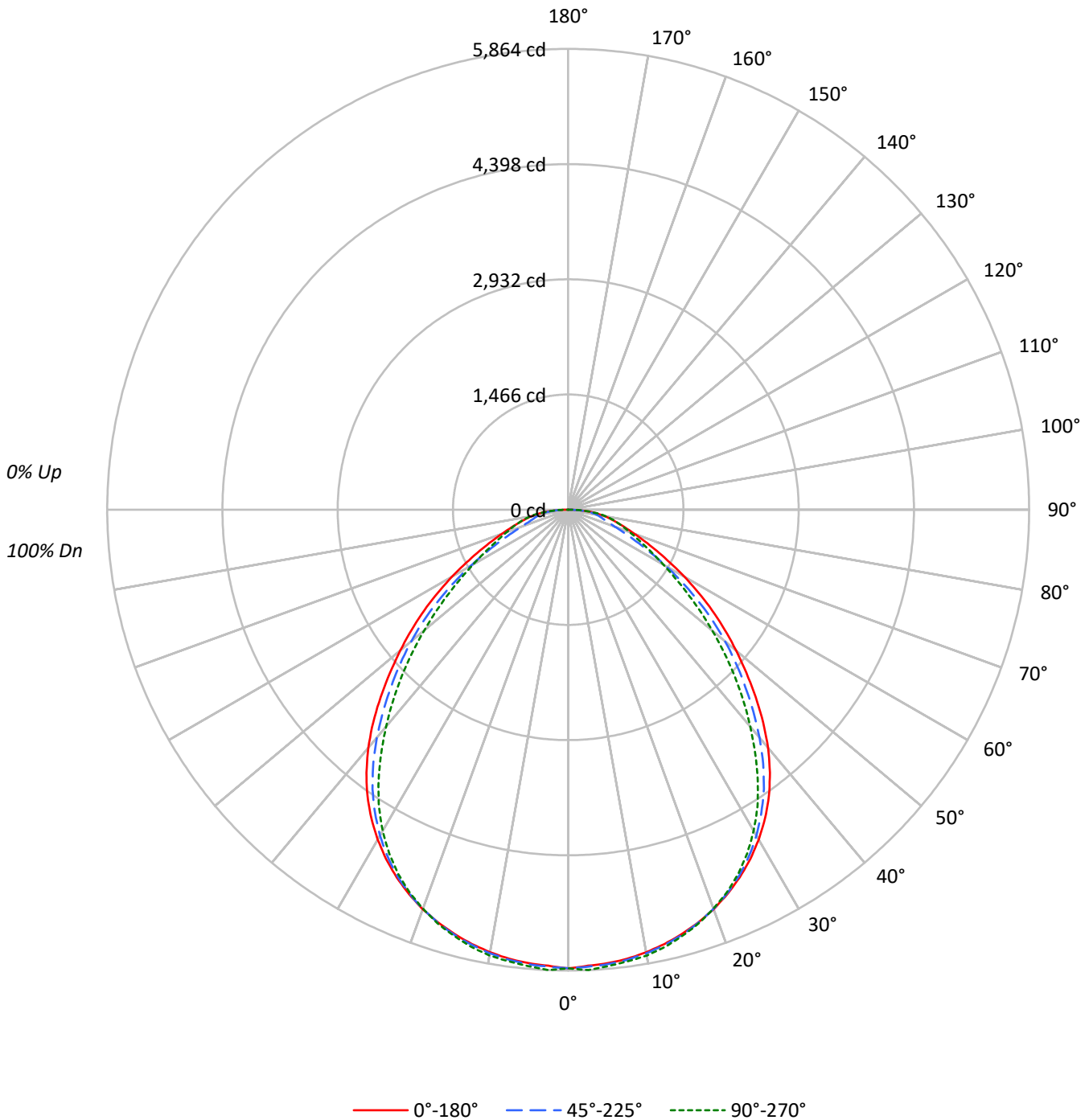
Lumens per Lamp: N/A  
Luminaire Lumens: 13405.0 lumens  
Efficiency: N/A  
Efficacy: 146.0 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

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

	0°	45°	90°
0°	7851	7851	7851
5°	7824	7841	7873
10°	7813	7831	7870
15°	7786	7802	7820
20°	7746	7740	7734
25°	7662	7635	7592
30°	7529	7438	7330
35°	7311	7127	6907
40°	6947	6649	6330
45°	6418	6060	5693
50°	5834	5457	5007
55°	5246	4724	4329
60°	4590	3861	3756
65°	3958	3036	3390
70°	3529	2478	3267
75°	3380	2419	3414
80°	3656	2861	3804
85°	4105	3444	4145



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	553.1	4.1
10°-20°	1582.8	11.8
20°-30°	2367.7	17.7
30°-40°	2701.4	20.2
40°-50°	2459.0	18.3
50°-60°	1805.6	13.5
60°-70°	1066.1	8.0
70°-80°	611.0	4.6
80°-90°	258.3	1.9
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°	4503.6	33.6
0°-40°	7204.9	53.7
0°-60°	11469.5	85.6
0°-90°	13405.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13405.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	5835	5835	5835	5835	5835	
5°	5793	5829	5806	5829	5830	551
15°	5590	5621	5601	5621	5614	1577
25°	5161	5179	5143	5141	5114	2376
35°	4451	4429	4339	4264	4205	2773
45°	3373	3353	3185	3042	2992	2599
55°	2236	2133	2014	1868	1845	2000
65°	1243	1085	954	1020	1065	1251
75°	650	557	465	607	657	701
85°	266	246	223	263	268	278
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	5835.4	5835.4	5835.4	5835.4	5835.4
2.5°	5808.4	5842.0	5820.9	5844.0	5863.7
5°	5792.6	5828.8	5805.8	5828.8	5829.5
7.5°	5763.7	5797.3	5774.9	5799.9	5797.3
10°	5718.3	5751.8	5731.4	5758.4	5760.4
12.5°	5660.4	5692.6	5671.6	5702.5	5697.2
15°	5589.9	5620.9	5601.1	5620.9	5614.3
17.5°	5507.0	5535.3	5509.7	5531.4	5520.2
20°	5409.6	5433.3	5405.7	5426.1	5401.7
22.5°	5293.1	5314.2	5285.2	5296.4	5271.4
25°	5160.9	5179.3	5143.1	5141.1	5114.1
27.5°	5013.4	5023.3	4977.3	4961.5	4930.5
30°	4846.3	4848.9	4787.7	4758.1	4718.0
32.5°	4658.7	4652.1	4573.8	4529.7	4480.4
35°	4450.8	4429.1	4338.9	4264.5	4205.3
37.5°	4215.8	4181.6	4073.7	3963.8	3907.2
40°	3955.2	3915.1	3785.4	3649.2	3603.8
42.5°	3671.6	3637.3	3484.7	3342.5	3297.8
45°	3372.8	3353.0	3184.6	3041.8	2991.7
47.5°	3074.0	3059.5	2895.0	2749.6	2689.0
50°	2787.1	2755.5	2606.8	2447.5	2392.2
52.5°	2508.7	2444.2	2313.2	2150.0	2109.2
55°	2236.2	2132.9	2013.8	1867.7	1845.3
57.5°	1966.4	1832.8	1717.0	1607.8	1607.1
60°	1705.8	1553.1	1434.7	1377.4	1395.8
62.5°	1461.7	1305.0	1176.7	1180.6	1214.2
65°	1243.2	1085.2	953.6	1020.1	1064.8
67.5°	1055.6	904.9	771.3	895.0	937.8
70°	897.0	760.8	629.8	784.5	830.5
72.5°	763.4	648.9	531.1	692.3	739.1
75°	650.2	557.4	465.3	606.8	656.8
77.5°	558.1	475.8	417.2	525.2	577.2
80°	471.9	399.5	369.2	446.2	490.9
82.5°	373.8	323.8	306.0	362.6	385.6
85°	265.9	245.5	223.1	263.2	268.5
87.5°	146.1	151.4	125.0	151.4	152.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)