

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-LD5-48HE-W-CLI-UNV-L840-ED4-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 (P23766)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48HE-W-CLI-UNV-L840-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

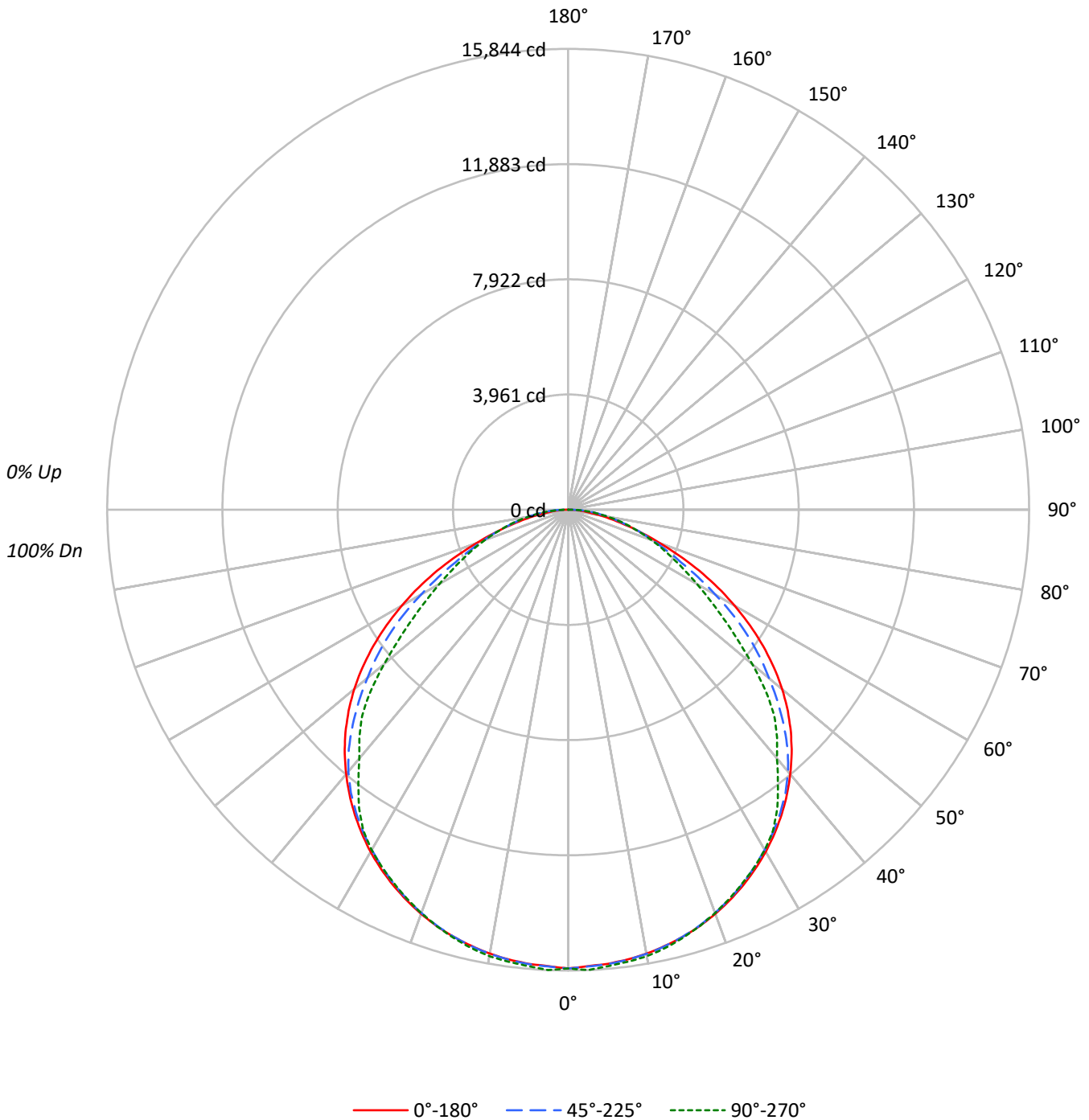
Lumens per Lamp: N/A  
Luminaire Lumens: 42374.0 lumens  
Efficiency: N/A  
Efficacy: 148.1 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.27 / 1.37  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 286.2  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	102	99	95	98	95	92	94	92	90	91	89	87	85
2	100	92	85	80	97	90	84	79	86	81	77	83	79	75	80	77	74	71
3	91	81	73	67	89	79	72	66	77	70	65	74	68	64	71	67	63	61
4	84	72	64	57	81	71	63	57	68	61	56	66	60	55	64	59	54	52
5	77	65	56	49	75	63	55	49	61	54	48	59	53	48	58	52	47	45
6	71	58	49	43	69	57	49	43	55	48	43	54	47	42	52	46	42	40
7	66	53	44	38	64	52	44	38	50	43	38	49	42	37	48	42	37	35
8	62	48	40	34	60	48	40	34	46	39	34	45	38	34	44	38	33	31
9	58	44	36	31	56	44	36	31	43	35	30	41	35	30	40	35	30	28
10	54	41	33	28	53	40	33	28	39	32	28	38	32	28	38	32	27	26

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

	0°	45°	90°
0°	21221	21221	21221
5°	21164	21179	21274
10°	21176	21186	21297
15°	21178	21176	21226
20°	21173	21124	21130
25°	21141	21062	21037
30°	21106	20980	20991
35°	21008	20877	20582
40°	20858	20645	19604
45°	20593	19934	19062
50°	20098	18873	17264
55°	19183	17650	15265
60°	17802	15749	13767
65°	15823	13635	12659
70°	13132	12186	11932
75°	10621	11152	11290
80°	8436	10666	10621
85°	6606	11458	10931



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1495.7	3.5
10°-20°	4302.3	10.2
20°-30°	6560.2	15.5
30°-40°	7936.9	18.7
40°-50°	8039.4	19.0
50°-60°	6644.8	15.7
60°-70°	4388.7	10.4
70°-80°	2288.5	5.4
80°-90°	717.4	1.7
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°	12358.3	29.2
0°-40°	20295.2	47.9
0°-60°	34979.4	82.5
0°-90°	42374.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	42374.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15772	15772	15772	15772	15772	
5°	15670	15764	15681	15749	15751	###
15°	15204	15282	15202	15249	15238	4293
25°	14240	14297	14187	14223	14170	6566
35°	12790	12807	12710	12693	12530	8000
45°	10823	10794	10476	10150	10018	8333
55°	8178	8056	7524	6793	6508	7289
65°	4970	4826	4283	4004	3976	4909
75°	2043	2079	2145	2174	2172	2226
85°	428	551	742	736	708	519
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15771.8	15771.8	15771.8	15771.8	15771.8
2.5°	15705.6	15798.3	15720.7	15788.9	15843.8
5°	15669.6	15764.3	15681.0	15749.1	15751.0
7.5°	15599.5	15694.2	15609.0	15677.2	15675.3
10°	15499.2	15588.2	15506.8	15588.2	15588.2
12.5°	15362.9	15450.0	15370.4	15446.2	15434.8
15°	15203.8	15281.5	15201.9	15249.3	15237.9
17.5°	15016.4	15086.4	14997.5	15037.2	15014.5
20°	14787.3	14851.7	14753.2	14804.3	14757.0
22.5°	14529.8	14590.4	14490.0	14527.9	14474.9
25°	14240.1	14296.9	14187.1	14223.1	14170.0
27.5°	13927.7	13978.8	13855.7	13899.3	13857.6
30°	13585.0	13609.6	13503.6	13560.4	13511.1
32.5°	13202.5	13217.7	13124.9	13176.0	13092.7
35°	12789.8	12806.8	12710.2	12693.2	12530.4
37.5°	12348.6	12356.2	12265.3	12111.9	11843.1
40°	11875.3	11871.5	11754.1	11400.0	11161.5
42.5°	11369.7	11367.8	11161.5	10758.2	10621.9
45°	10822.6	10794.2	10476.1	10150.4	10017.9
47.5°	10235.6	10205.3	9760.4	9501.0	9199.9
50°	9601.3	9548.3	9016.3	8662.2	8247.6
52.5°	8917.8	8836.4	8294.9	7723.1	7331.2
55°	8177.5	8056.3	7524.3	6793.4	6507.5
57.5°	7406.9	7227.0	6710.1	5998.2	5765.3
60°	6615.5	6414.8	5852.4	5267.4	5115.9
62.5°	5801.3	5602.5	5028.8	4587.7	4504.3
65°	4970.1	4826.2	4282.8	4004.5	3976.1
67.5°	4118.1	4067.0	3652.3	3510.3	3499.0
70°	3338.0	3328.6	3097.6	3025.6	3033.2
72.5°	2667.8	2656.4	2622.3	2586.4	2588.2
75°	2043.0	2078.9	2145.2	2173.6	2171.7
77.5°	1524.2	1598.0	1738.1	1794.9	1785.5
80°	1088.7	1198.5	1376.5	1429.5	1370.8
82.5°	725.2	840.7	1050.8	1058.4	1011.1
85°	427.9	551.0	742.2	736.5	708.1
87.5°	212.1	331.3	444.9	426.0	407.1
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)