

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-LD5-48SE-W-FLI-UNV-L750-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 (P26703)  
Test Lab: INNOVATION CENTER-P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48SE-W-FLI-UNV-L750-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

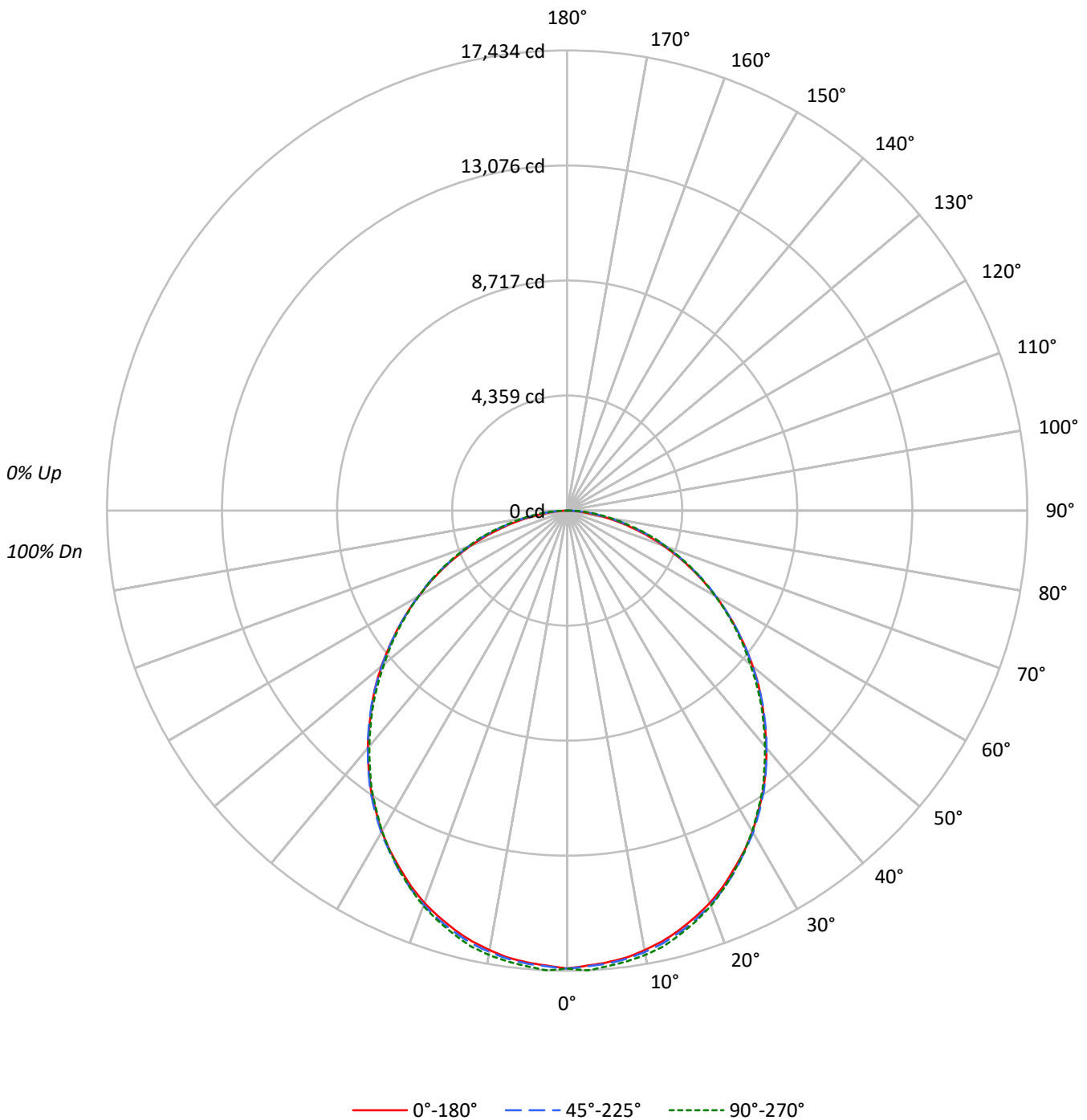
Lumens per Lamp: N/A  
Luminaire Lumens: 45322.0 lumens  
Efficiency: N/A  
Efficacy: 151.5 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 299.1  
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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	23345	23345	23345
5°	23212	23278	23410
10°	23107	23200	23351
15°	22904	23028	23140
20°	22644	22753	22819
25°	22225	22351	22318
30°	21815	21874	21785
35°	21275	21329	21193
40°	20636	20636	20477
45°	19914	19968	19765
50°	19230	19197	18957
55°	18398	18400	18235
60°	17506	17527	17459
65°	16500	16665	16707
70°	15240	15657	15674
75°	13468	14340	14564
80°	11046	12559	13268
85°	7665	10544	11924



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1640.9	3.6
10°-20°	4668.1	10.3
20°-30°	6937.1	15.3
30°-40°	8111.3	17.9
40°-50°	8087.1	17.8
50°-60°	7016.6	15.5
60°-70°	5182.6	11.4
70°-80°	2901.7	6.4
80°-90°	774.2	1.7
90°-100°	2.3	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°	13246.1	29.2
0°-40°	21357.3	47.1
0°-60°	36461.1	80.4
0°-90°	45319.7	100.0
90°-120°	2.3	0.0
90°-150°	2.3	0.0
90°-180°	2.0	0.0
0°-180°	45322.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	17350	17350	17350	17350	17350	
5°	17186	17294	17235	17311	17333	###
15°	16442	16557	16532	16611	16612	4637
25°	14971	15091	15056	15089	15034	6902
35°	12952	13066	12986	12983	12903	8091
45°	10466	10577	10494	10451	10387	8079
55°	7843	7897	7844	7831	7773	7013
65°	5182	5233	5234	5261	5248	5126
75°	2591	2668	2758	2778	2802	2759
85°	496	600	683	744	772	603
90°	0	11	13	30	28	20
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-W-FLI-UNV-L750-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	17350.5	17350.5	17350.5	17350.5	17350.5
2.5°	17255.7	17358.3	17286.5	17355.0	17434.4
5°	17186.1	17294.3	17234.7	17310.8	17332.9
7.5°	17084.6	17189.4	17132.1	17208.2	17231.4
10°	16912.5	17026.2	16980.9	17067.0	17091.2
12.5°	16711.7	16818.7	16788.9	16889.3	16905.9
15°	16442.5	16557.2	16531.8	16611.3	16612.4
17.5°	16144.6	16252.7	16233.9	16295.7	16293.5
20°	15814.6	15930.5	15890.8	15958.1	15937.1
22.5°	15424.1	15547.6	15498.0	15554.3	15501.3
25°	14970.6	15090.8	15055.5	15088.6	15033.5
27.5°	14531.4	14641.8	14568.9	14608.7	14550.2
30°	14041.5	14135.3	14079.0	14092.3	14021.7
32.5°	13490.9	13602.4	13534.0	13531.8	13456.7
35°	12952.5	13066.1	12985.6	12983.4	12902.8
37.5°	12356.7	12462.6	12367.7	12373.2	12279.4
40°	11748.7	11840.3	11748.7	11744.3	11658.2
42.5°	11088.9	11210.3	11126.4	11136.3	11021.6
45°	10465.5	10576.9	10494.2	10451.1	10387.2
47.5°	9844.3	9892.8	9824.4	9813.4	9722.9
50°	9186.7	9223.1	9171.2	9158.0	9056.5
52.5°	8507.0	8569.9	8503.7	8486.0	8418.7
55°	7842.8	7896.8	7843.9	7830.6	7773.3
57.5°	7174.1	7244.7	7190.7	7177.4	7131.1
60°	6505.5	6526.5	6513.2	6533.1	6487.8
62.5°	5841.3	5889.8	5905.3	5899.7	5864.4
65°	5182.5	5233.3	5234.4	5260.9	5247.6
67.5°	4508.4	4574.6	4593.3	4620.9	4633.1
70°	3873.9	3924.7	3979.9	3996.4	3984.3
72.5°	3235.1	3316.7	3378.5	3392.9	3444.7
75°	2590.7	2668.0	2758.4	2778.3	2801.5
77.5°	1992.7	2095.3	2177.0	2203.4	2232.1
80°	1425.6	1539.2	1620.9	1657.3	1712.4
82.5°	935.7	1051.5	1134.3	1170.7	1238.0
85°	496.5	600.2	683.0	743.7	772.4
87.5°	146.7	235.0	282.5	300.1	325.5
90°	0.0	11.0	13.2	29.8	27.6
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)