

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-L835-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-L835-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

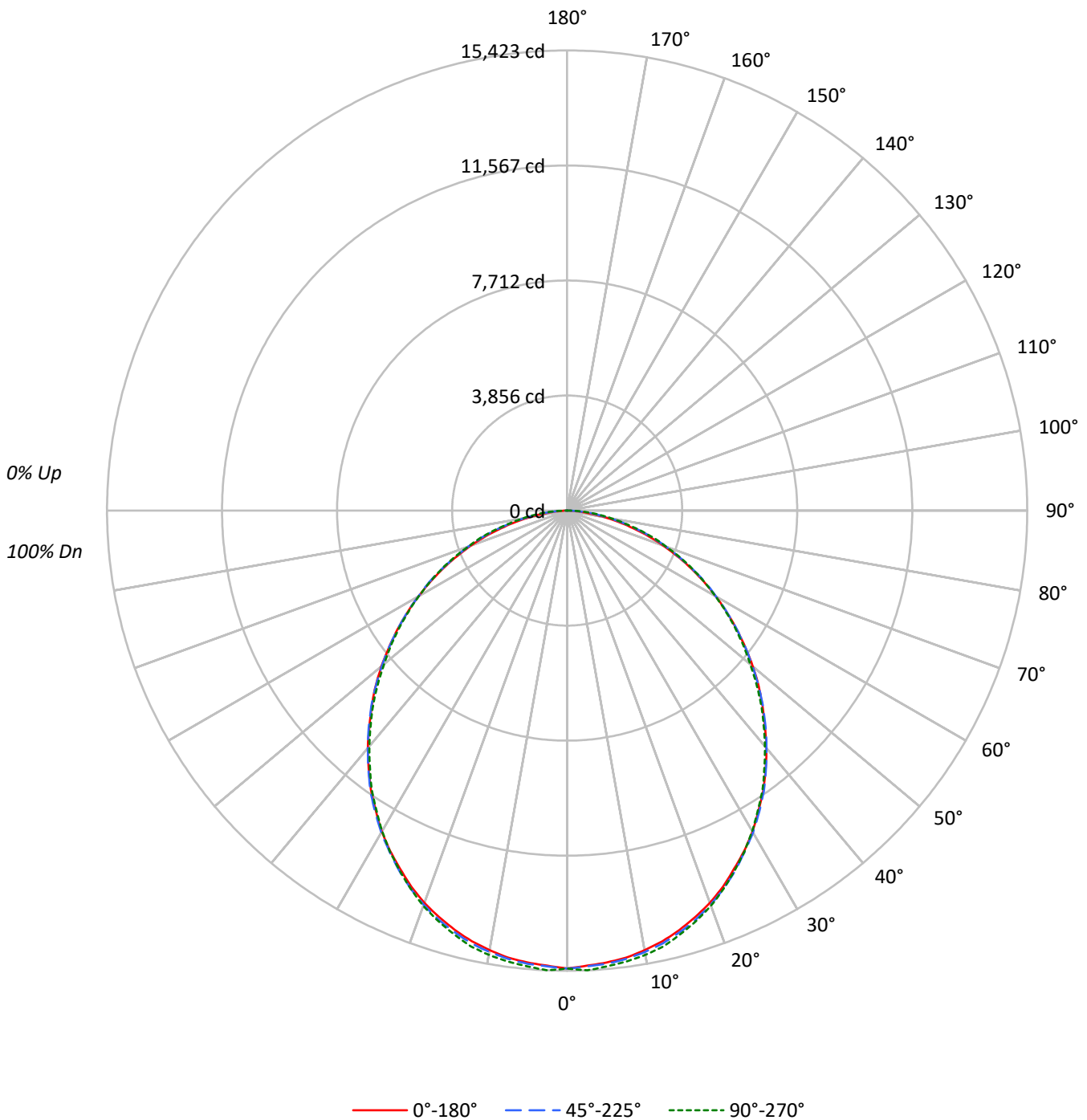
Lumens per Lamp: N/A  
Luminaire Lumens: 40094.0 lumens  
Efficiency: N/A  
Efficacy: 134.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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°	20652	20652	20652
5°	20535	20592	20710
10°	20441	20524	20657
15°	20262	20372	20471
20°	20032	20128	20187
25°	19661	19773	19744
30°	19299	19351	19272
35°	18821	18869	18749
40°	18255	18255	18115
45°	17617	17665	17485
50°	17012	16983	16770
55°	16275	16278	16131
60°	15487	15505	15445
65°	14596	14742	14780
70°	13482	13851	13866
75°	11915	12686	12884
80°	9771	11110	11738
85°	6780	9327	10549



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1451.6	3.6
10°-20°	4129.6	10.3
20°-30°	6136.9	15.3
30°-40°	7175.6	17.9
40°-50°	7154.3	17.8
50°-60°	6207.3	15.5
60°-70°	4584.8	11.4
70°-80°	2567.0	6.4
80°-90°	684.9	1.7
90°-100°	2.1	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°	11718.1	29.2
0°-40°	18893.7	47.1
0°-60°	32255.3	80.4
0°-90°	40091.9	100.0
90°-120°	2.1	0.0
90°-150°	2.1	0.0
90°-180°	2.0	0.0
0°-180°	40094.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	15349	15349	15349	15349	15349	
5°	15204	15299	15247	15314	15334	###
15°	14546	14647	14625	14695	14696	4102
25°	13244	13350	13319	13348	13299	6106
35°	11458	11559	11488	11486	11414	7157
45°	9258	9357	9284	9246	9189	7147
55°	6938	6986	6939	6927	6877	6204
65°	4585	4630	4631	4654	4642	4534
75°	2292	2360	2440	2458	2478	2441
85°	439	531	604	658	683	533
90°	0	10	12	26	24	18
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-L835-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	15349.1	15349.1	15349.1	15349.1	15349.1
2.5°	15265.2	15355.9	15292.5	15353.0	15423.3
5°	15203.7	15299.3	15246.6	15314.0	15333.5
7.5°	15113.9	15206.6	15155.8	15223.2	15243.7
10°	14961.6	15062.1	15022.1	15098.3	15119.7
12.5°	14784.0	14878.6	14852.3	14941.1	14955.7
15°	14545.8	14647.3	14624.9	14695.1	14696.1
17.5°	14282.2	14377.9	14361.3	14416.0	14414.0
20°	13990.4	14092.9	14057.7	14117.3	14098.7
22.5°	13644.9	13754.2	13710.3	13760.0	13713.2
25°	13243.7	13350.1	13318.8	13348.1	13299.3
27.5°	12855.2	12952.8	12888.4	12923.5	12871.8
30°	12421.8	12504.8	12455.0	12466.7	12404.2
32.5°	11934.7	12033.3	11972.8	11970.8	11904.5
35°	11458.4	11558.9	11487.7	11485.7	11414.5
37.5°	10931.3	11025.0	10941.1	10945.9	10863.0
40°	10393.5	10474.5	10393.5	10389.6	10313.4
42.5°	9809.8	9917.1	9843.0	9851.7	9750.2
45°	9258.3	9356.9	9283.7	9245.6	9189.0
47.5°	8708.7	8751.7	8691.2	8681.4	8601.4
50°	8127.0	8159.2	8113.3	8101.6	8011.8
52.5°	7525.7	7581.3	7522.8	7507.2	7447.6
55°	6938.1	6985.9	6939.1	6927.4	6876.6
57.5°	6346.6	6409.0	6361.2	6349.5	6308.5
60°	5755.1	5773.6	5761.9	5779.5	5739.4
62.5°	5167.5	5210.4	5224.1	5219.2	5188.0
65°	4584.7	4629.6	4630.6	4654.0	4642.3
67.5°	3988.3	4046.9	4063.5	4087.9	4098.6
70°	3427.1	3472.0	3520.8	3535.4	3524.7
72.5°	2861.9	2934.1	2988.8	3001.5	3047.4
75°	2291.9	2360.2	2440.2	2457.8	2478.3
77.5°	1762.8	1853.6	1925.8	1949.3	1974.6
80°	1261.1	1361.7	1433.9	1466.1	1514.9
82.5°	827.7	930.2	1003.4	1035.6	1095.2
85°	439.2	531.0	604.2	657.9	683.3
87.5°	129.8	207.9	249.9	265.5	287.9
90°	0.0	9.8	11.7	26.4	24.4
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)