

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-N-UNV-L850-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-48SE-N-UNV-L850-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

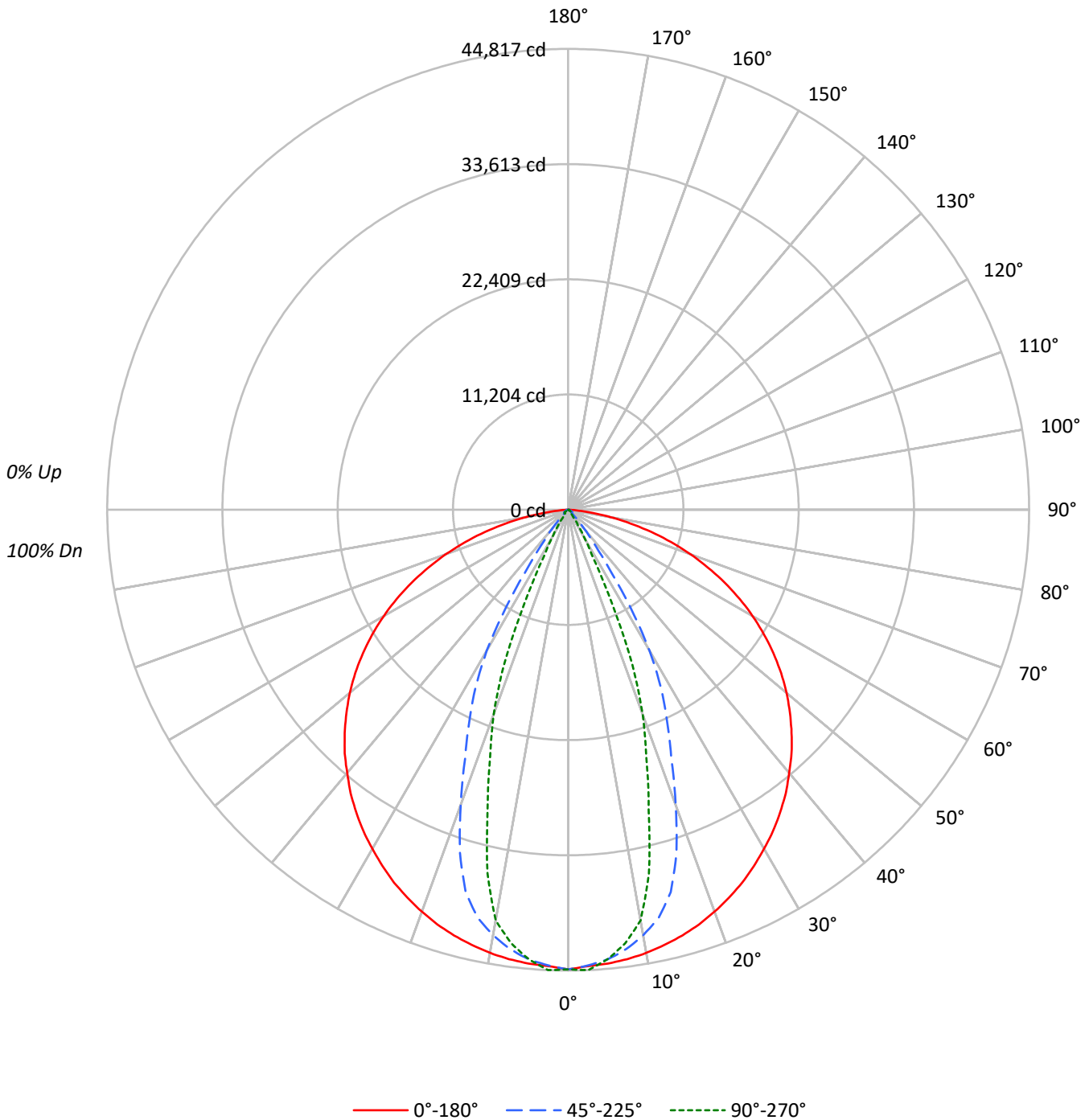
Lumens per Lamp: N/A  
Luminaire Lumens: 47520.0 lumens  
Efficiency: N/A  
Efficacy: 158.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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					100			
1	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

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

	0°	45°	90°
0°	60155	60155	60155
5°	59834	59305	59279
10°	59796	57405	55391
15°	59712	53630	42155
20°	59573	43719	30344
25°	59421	33804	14948
30°	59158	24568	4848
35°	59019	10900	1247
40°	58710	4427	840
45°	58447	1242	894
50°	57992	881	993
55°	57156	1048	424
60°	55746	1168	258
65°	53453	745	305
70°	49658	661	376
75°	43442	498	520
80°	32482	610	742
85°	16089	787	985



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4149.1	8.7
10°-20°	10374.7	21.8
20°-30°	11237.4	23.6
30°-40°	8321.8	17.5
40°-50°	5993.8	12.6
50°-60°	3711.3	7.8
60°-70°	2282.4	4.8
70°-80°	1203.2	2.5
80°-90°	246.3	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°	25761.2	54.2
0°-40°	34082.9	71.7
0°-60°	43788.1	92.1
0°-90°	47520.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	47520.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	44709	44709	44709	44709	44709	
5°	44301	44464	43909	43941	43890	###
15°	42867	41872	38501	32741	30263	12101
25°	40026	36663	22770	14324	10069	18443
35°	35931	25331	6636	1561	759	22479
45°	30716	14271	653	472	470	23689
55°	24365	2939	447	404	181	21751
65°	16790	310	234	149	96	16565
75°	8356	72	96	126	100	8826
85°	1042	28	51	77	64	###
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	44709.0	44709.0	44709.0	44709.0	44709.0
2.5°	44421.8	44704.7	44370.8	44619.6	44817.4
5°	44300.6	44464.4	43909.3	43941.2	43890.1
7.5°	44087.9	44049.6	43115.9	42707.6	42528.9
10°	43766.8	43513.7	42016.4	41163.5	40542.4
12.5°	43352.0	42786.3	40644.5	37932.8	36248.3
15°	42867.1	41871.7	38500.6	32741.1	30263.3
17.5°	42288.6	40878.5	34995.6	27440.9	25229.0
20°	41605.9	39770.4	30533.4	23346.7	21192.2
22.5°	40844.4	38421.9	26198.8	19403.5	16330.1
25°	40025.6	36663.0	22770.3	14324.5	10068.6
27.5°	39079.1	34402.2	19554.5	8437.3	5138.5
30°	38077.4	31679.8	15813.3	4538.7	3120.1
32.5°	37067.1	28593.7	11189.5	2835.1	1769.6
35°	35931.4	25331.0	6635.8	1561.1	759.3
37.5°	34746.7	22340.7	3922.0	710.4	487.1
40°	33425.9	19607.6	2520.3	472.2	478.5
42.5°	32149.8	17059.6	1418.6	465.8	474.3
45°	30716.3	14271.3	652.9	472.2	470.0
47.5°	29233.9	11380.9	423.2	476.4	476.4
50°	27704.6	8137.4	421.1	487.1	474.3
52.5°	26090.3	5076.8	438.1	484.9	389.2
55°	24365.4	2939.3	446.6	404.1	180.8
57.5°	22578.9	1733.4	450.9	231.8	102.1
60°	20715.7	959.2	433.9	172.3	95.7
62.5°	18795.2	457.3	342.4	161.6	93.6
65°	16789.5	310.5	234.0	148.9	95.7
67.5°	14707.3	240.3	185.0	140.4	97.8
70°	12623.0	178.7	168.0	140.4	95.7
72.5°	10504.6	121.2	140.4	142.5	95.7
75°	8356.5	72.3	95.7	125.5	100.0
77.5°	6227.5	44.7	74.4	129.7	121.2
80°	4192.1	38.3	78.7	121.2	95.7
82.5°	2460.8	34.0	76.6	93.6	76.6
85°	1042.2	27.6	51.0	76.6	63.8
87.5°	195.7	23.4	40.4	61.7	55.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)