

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-LD5-36SE-W-AI-UNV-L850-ED3-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 (P23765)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-36SE-W-AI-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

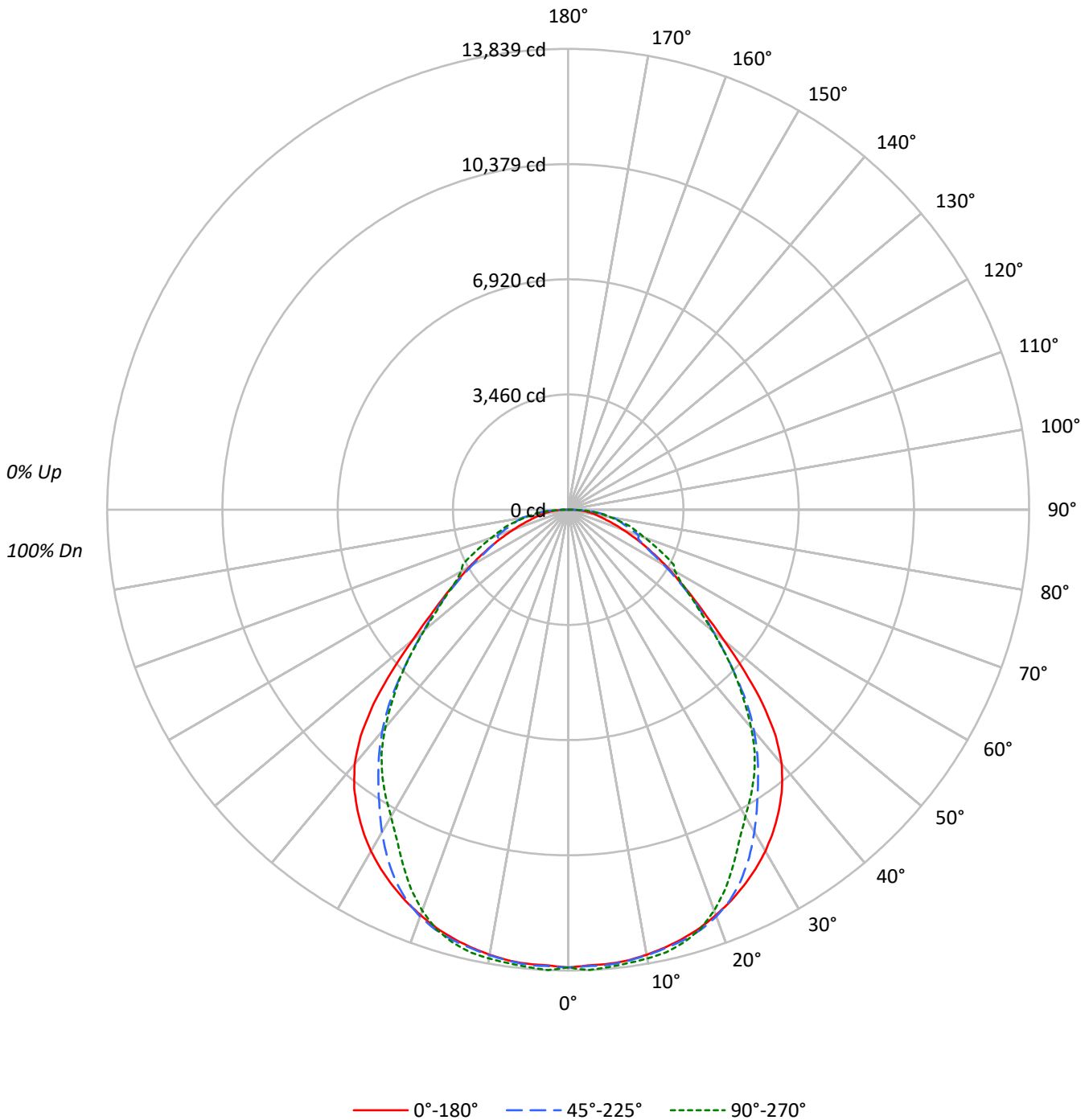
Lumens per Lamp: N/A  
Luminaire Lumens: 31819.0 lumens  
Efficiency: N/A  
Efficacy: 137.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 232  
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	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

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

	0°	45°	90°
0°	18496	18496	18496
5°	18495	18535	18626
10°	18541	18565	18701
15°	18570	18639	18730
20°	18551	18620	18344
25°	18504	18227	17434
30°	18395	17367	16521
35°	18118	16323	15983
40°	17512	15262	15010
45°	15740	13628	13578
50°	12766	11870	11789
55°	10601	10403	10400
60°	9178	8910	9961
65°	7954	7905	10041
70°	6859	8867	9571
75°	6150	9088	9978
80°	6392	10699	10011
85°	7257	12329	11439



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1308.9	4.1
10°-20°	3780.1	11.9
20°-30°	5614.3	17.6
30°-40°	6373.8	20.0
40°-50°	5697.9	17.9
50°-60°	3939.5	12.4
60°-70°	2599.5	8.2
70°-80°	1753.8	5.5
80°-90°	751.1	2.4
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°	10703.3	33.6
0°-40°	17077.1	53.7
0°-60°	26714.5	84.0
0°-90°	31819.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	31819.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13747	13747	13747	13747	13747	
5°	13694	13778	13723	13780	13790	###
15°	13331	13395	13381	13456	13446	3763
25°	12464	12582	12277	11912	11743	5743
35°	11030	10798	9938	9793	9731	6878
45°	8272	7572	7162	7217	7136	6291
55°	4519	4125	4435	4373	4433	4105
65°	2498	2218	2483	2903	3154	2493
75°	1183	1488	1748	1868	1919	1292
85°	470	654	799	803	741	490
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13746.8	13746.8	13746.8	13746.8	13746.8
2.5°	13700.1	13785.7	13721.9	13781.0	13838.6
5°	13693.9	13777.9	13723.4	13779.5	13790.4
7.5°	13654.9	13732.8	13669.0	13723.4	13735.9
10°	13570.9	13662.7	13588.0	13672.1	13687.6
12.5°	13461.9	13555.3	13489.9	13605.1	13611.4
15°	13331.2	13395.0	13381.0	13455.7	13446.4
17.5°	13166.2	13239.3	13228.4	13247.1	13203.5
20°	12956.0	13038.5	13004.3	12918.7	12811.2
22.5°	12730.3	12829.9	12694.5	12478.1	12327.1
25°	12464.1	12582.4	12277.3	11911.5	11743.4
27.5°	12169.9	12275.8	11768.3	11320.0	11145.6
30°	11839.9	11885.0	11178.3	10751.8	10633.5
32.5°	11458.5	11393.1	10547.9	10266.1	10197.6
35°	11030.4	10798.5	9937.7	9792.9	9730.6
37.5°	10547.9	10122.9	9335.2	9268.3	9202.9
40°	9970.4	9343.0	8689.2	8645.6	8546.0
42.5°	9224.7	8494.6	7971.6	7920.2	7831.5
45°	8272.0	7571.6	7162.2	7216.6	7135.7
47.5°	7176.2	6645.3	6385.4	6534.8	6385.4
50°	6099.0	5742.5	5670.9	5806.3	5632.0
52.5°	5216.3	4895.7	5043.6	5066.9	4962.6
55°	4519.0	4125.1	4434.9	4372.6	4433.3
57.5°	3911.9	3471.3	3852.7	3781.1	3989.7
60°	3410.6	2915.6	3311.0	3295.4	3701.7
62.5°	2918.7	2523.3	2840.9	3069.7	3569.4
65°	2498.4	2218.2	2482.9	2903.2	3153.8
67.5°	2095.3	1989.4	2271.2	2504.7	2778.6
70°	1743.5	1797.9	2254.0	2210.4	2433.0
72.5°	1447.7	1632.9	1989.4	1997.2	2154.4
75°	1183.1	1488.2	1748.1	1868.0	1919.4
77.5°	983.8	1349.6	1578.4	1620.5	1570.7
80°	825.0	1189.3	1380.8	1362.1	1292.0
82.5°	666.2	901.3	1088.1	1105.2	1022.7
85°	470.1	653.8	798.6	803.2	741.0
87.5°	252.2	403.2	484.1	498.1	460.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)