

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-N-CL-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 (P23768)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-36SE-N-CL-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

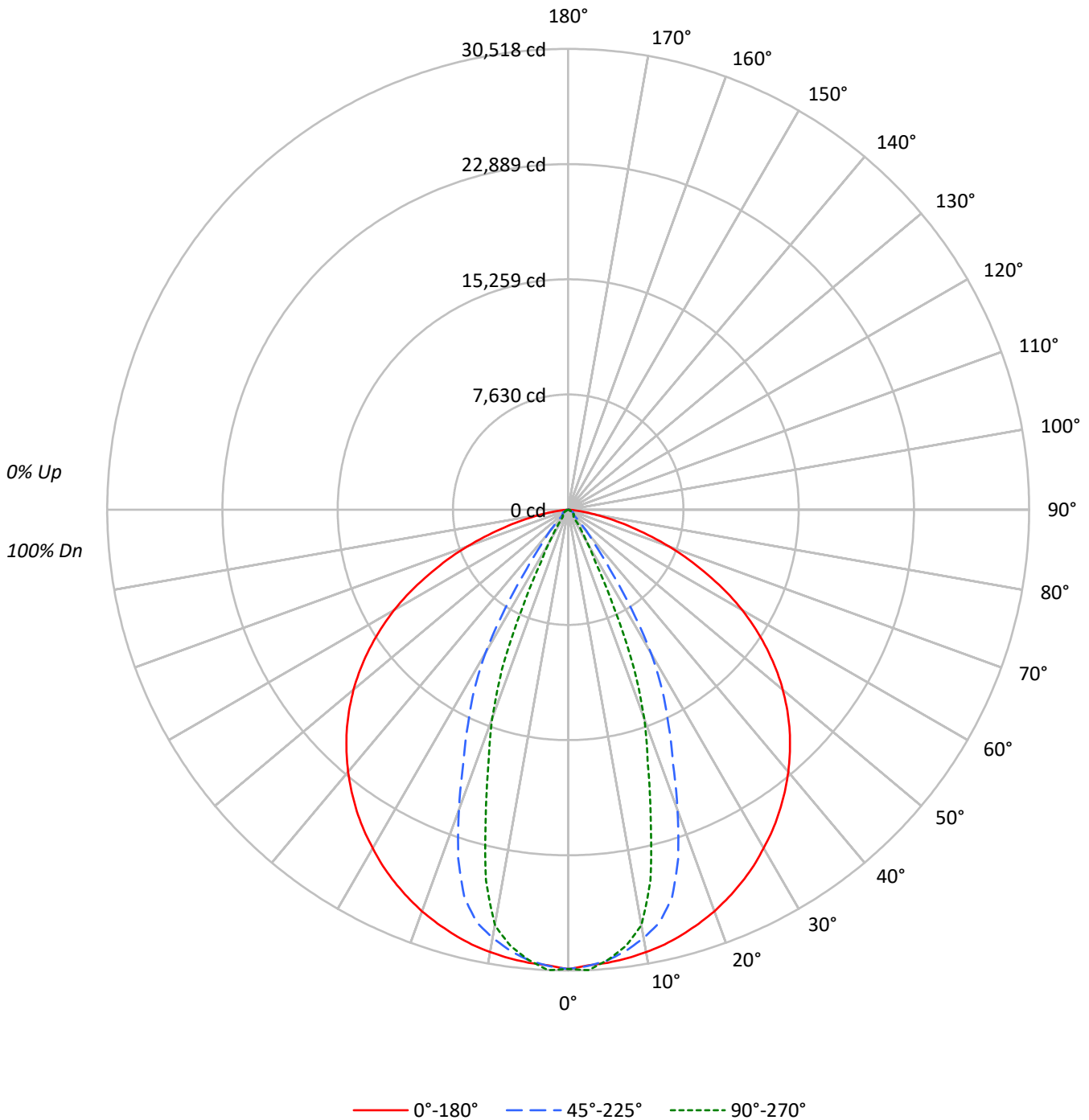
Lumens per Lamp: N/A  
Luminaire Lumens: 32531.0 lumens  
Efficiency: N/A  
Efficacy: 140.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	112	109	105	103	109	106	104	101	102	100	98	98	97	95	95	94	92	90					90			
2	105	99	94	90	102	97	92	89	94	90	87	91	87	85	88	85	83	81					81			
3	98	90	84	79	96	89	83	79	86	81	77	83	79	76	81	78	75	73					73			
4	92	83	76	71	90	82	75	71	79	74	70	77	73	69	75	71	68	66					66			
5	86	76	69	64	85	75	69	64	73	68	63	72	67	63	70	66	62	60					60			
6	81	71	64	59	80	70	63	58	68	62	58	67	62	58	65	61	57	55					55			
7	77	66	59	54	75	65	58	54	64	58	53	62	57	53	61	56	53	51					51			
8	72	61	55	50	71	61	54	50	60	54	49	59	53	49	58	53	49	47					47			
9	69	58	51	46	67	57	51	46	56	50	46	55	50	46	54	49	46	44					44			
10	65	54	48	43	64	54	47	43	53	47	43	52	47	43	51	46	43	41					41			

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

	0°	45°	90°
0°	40926	40926	40926
5°	40675	40462	40433
10°	40647	39344	38183
15°	40601	36997	29359
20°	40522	30277	21059
25°	40395	23327	10701
30°	40203	17024	3893
35°	40060	7818	1355
40°	39813	3549	935
45°	39459	1324	948
50°	38830	961	997
55°	37681	1012	760
60°	35808	1081	670
65°	32473	823	545
70°	27843	594	502
75°	21281	526	477
80°	13315	494	518
85°	4205	577	696



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2831.8	8.7
10°-20°	7133.6	21.9
20°-30°	7768.8	23.9
30°-40°	5811.5	17.9
40°-50°	4178.6	12.8
50°-60°	2566.3	7.9
60°-70°	1476.7	4.5
70°-80°	659.1	2.0
80°-90°	104.5	0.3
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°	17734.3	54.5
0°-40°	23545.8	72.4
0°-60°	30290.7	93.1
0°-90°	32531.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	32531.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	30417	30417	30417	30417	30417	
5°	30115	30257	29958	29986	29936	###
15°	29147	28588	26560	22811	21077	8228
25°	27209	25258	15713	10082	7208	12543
35°	24389	17492	4760	1399	825	15256
45°	20737	9828	696	515	498	15975
55°	16063	2042	431	417	324	14321
65°	10200	224	258	215	171	10097
75°	4094	135	101	104	92	4442
85°	272	26	37	48	45	543
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	30417.3	30417.3	30417.3	30417.3	30417.3
2.5°	30205.7	30403.3	30236.8	30386.2	30518.5
5°	30115.4	30257.0	29958.2	29986.2	29936.4
7.5°	29959.7	29994.0	29453.9	29245.3	29144.1
10°	29751.2	29659.3	28797.0	28300.5	27947.2
12.5°	29488.1	29184.6	27979.8	26207.0	25150.1
15°	29147.2	28588.4	26560.3	22810.7	21076.7
17.5°	28741.0	27965.8	24210.0	19011.2	17510.8
20°	28300.5	27277.9	21145.2	16164.4	14707.5
22.5°	27780.6	26398.4	18122.5	13443.6	11443.5
25°	27209.4	25257.5	15713.0	10081.5	7208.2
27.5°	26593.0	23752.4	13482.5	6182.5	3897.5
30°	25877.0	21920.4	10957.8	3469.5	2506.0
32.5°	25178.1	19784.8	7827.7	2311.4	1601.7
35°	24389.0	17492.1	4759.8	1399.3	825.0
37.5°	23553.1	15407.9	2979.2	761.1	569.7
40°	22667.5	13431.1	2020.4	540.1	532.3
42.5°	21721.1	11642.7	1265.4	513.6	530.8
45°	20737.4	9827.8	695.8	515.2	498.1
47.5°	19669.6	7857.3	485.6	487.2	485.6
50°	18550.5	5636.1	459.2	481.0	476.3
52.5°	17344.2	3499.0	460.7	470.1	421.8
55°	16063.2	2042.1	431.2	417.1	323.8
57.5°	14716.8	1273.2	421.8	344.0	291.1
60°	13306.6	672.4	401.6	309.7	249.0
62.5°	11804.6	331.5	322.2	264.6	203.9
65°	10199.8	224.1	258.4	214.8	171.2
67.5°	8649.5	202.3	194.6	175.9	149.4
70°	7077.5	185.2	151.0	154.1	127.6
72.5°	5535.0	168.1	121.4	132.3	107.4
75°	4093.6	135.4	101.2	104.3	91.8
77.5°	2848.4	105.8	79.4	88.7	85.6
80°	1718.4	66.9	63.8	73.2	66.9
82.5°	832.7	43.6	49.8	57.6	52.9
85°	272.4	26.5	37.4	48.3	45.1
87.5°	34.2	15.6	31.1	42.0	38.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)