

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-A-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 (P23761)  
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-A-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

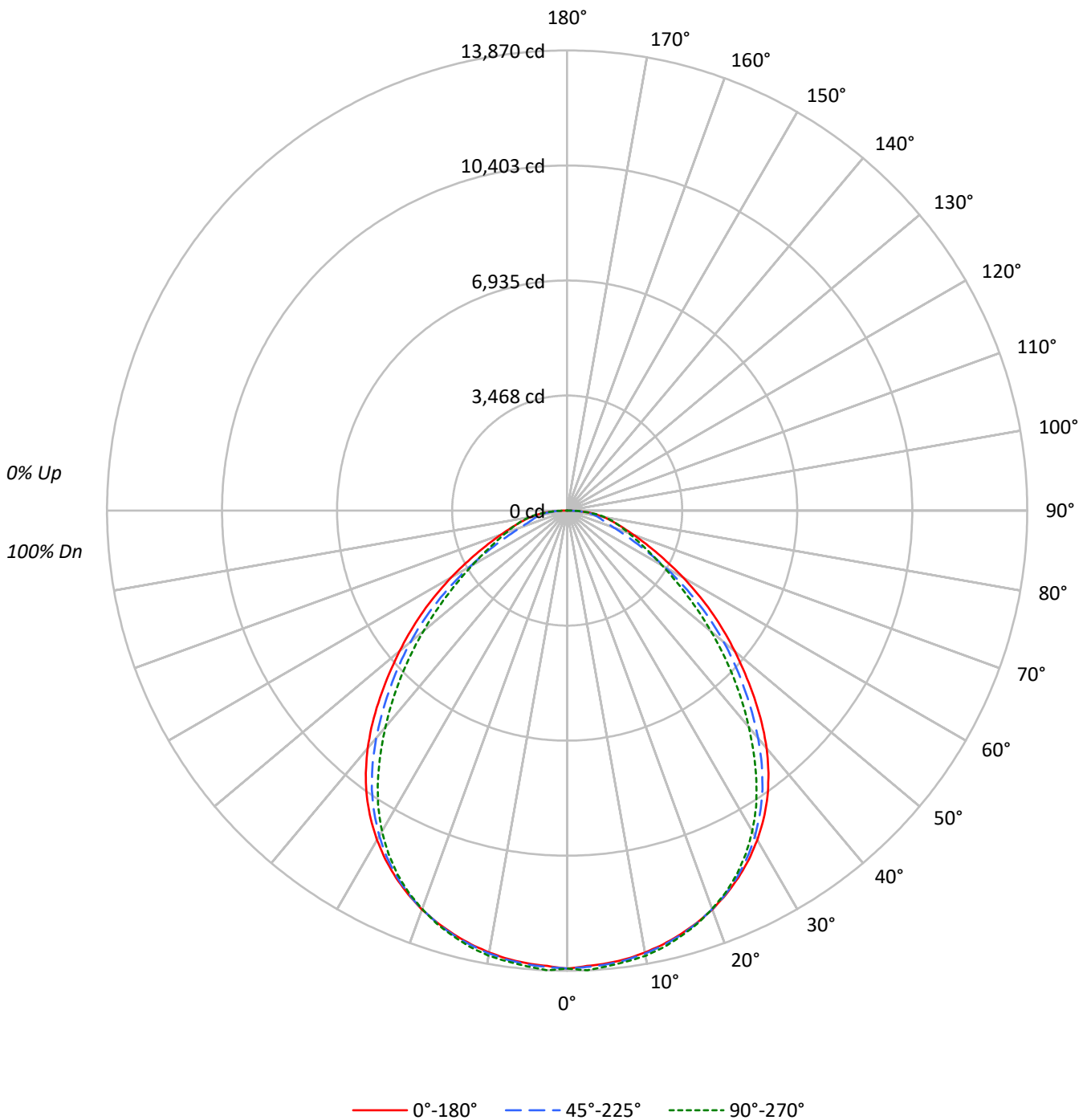
Lumens per Lamp: N/A  
Luminaire Lumens: 31707.0 lumens  
Efficiency: N/A  
Efficacy: 136.7 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

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

	0°	45°	90°
0°	18571	18571	18571
5°	18506	18548	18623
10°	18479	18522	18615
15°	18418	18454	18498
20°	18321	18308	18294
25°	18122	18060	17958
30°	17809	17594	17338
35°	17292	16857	16338
40°	16432	15726	14972
45°	15180	14333	13465
50°	13799	12906	11844
55°	12408	11174	10239
60°	10858	9132	8885
65°	9362	7181	8018
70°	8347	5860	7728
75°	7995	5721	8076
80°	8648	6767	8997
85°	9709	8147	9805



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1308.1	4.1
10°-20°	3743.8	11.8
20°-30°	5600.4	17.7
30°-40°	6389.6	20.2
40°-50°	5816.3	18.3
50°-60°	4270.8	13.5
60°-70°	2521.8	8.0
70°-80°	1445.2	4.6
80°-90°	611.0	1.9
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°	10652.3	33.6
0°-40°	17041.9	53.7
0°-60°	27129.0	85.6
0°-90°	31707.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	31707.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	13803	13803	13803	13803	13803	
5°	13701	13787	13732	13787	13789	###
15°	13222	13295	13248	13295	13280	3731
25°	12207	12251	12165	12160	12096	5619
35°	10528	10476	10263	10087	9947	6559
45°	7978	7931	7532	7195	7076	6148
55°	5289	5045	4763	4418	4365	4730
65°	2940	2567	2256	2413	2519	2959
75°	1538	1318	1100	1435	1554	1658
85°	629	581	528	623	635	658
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	13802.6	13802.6	13802.6	13802.6	13802.6
2.5°	13738.8	13818.2	13768.3	13822.8	13869.5
5°	13701.4	13787.0	13732.5	13787.0	13788.6
7.5°	13632.9	13712.3	13659.4	13718.5	13712.3
10°	13525.5	13604.9	13556.6	13620.5	13625.1
12.5°	13388.5	13464.8	13415.0	13488.2	13475.7
15°	13222.0	13295.1	13248.4	13295.1	13279.6
17.5°	13025.8	13092.8	13032.1	13083.4	13057.0
20°	12795.5	12851.5	12786.1	12834.4	12776.8
22.5°	12519.9	12569.7	12501.3	12527.7	12468.6
25°	12207.1	12250.6	12165.0	12160.4	12096.5
27.5°	11858.4	11881.7	11772.8	11735.4	11662.2
30°	11463.0	11469.2	11324.4	11254.4	11159.4
32.5°	11019.3	11003.8	10818.5	10714.2	10597.5
35°	10527.5	10476.1	10262.8	10086.9	9946.8
37.5°	9971.7	9890.8	9635.5	9375.6	9241.7
40°	9355.3	9260.4	8953.7	8631.5	8524.1
42.5°	8684.4	8603.5	8242.3	7906.1	7800.2
45°	7977.7	7931.0	7532.5	7194.7	7076.4
47.5°	7271.0	7236.7	6847.6	6503.6	6360.4
50°	6592.3	6517.6	6165.8	5789.1	5658.3
52.5°	5933.9	5781.3	5471.5	5085.5	4989.0
55°	5289.4	5045.0	4763.3	4417.7	4364.8
57.5°	4651.2	4335.2	4061.2	3802.8	3801.3
60°	4034.8	3673.6	3393.4	3258.0	3301.6
62.5°	3457.3	3086.8	2783.2	2792.6	2872.0
65°	2940.5	2566.9	2255.5	2412.8	2518.6
67.5°	2496.8	2140.4	1824.4	2117.0	2218.2
70°	2121.7	1799.5	1489.7	1855.5	1964.5
72.5°	1805.7	1534.8	1256.2	1637.6	1748.1
75°	1537.9	1318.5	1100.5	1435.2	1553.5
77.5°	1320.0	1125.4	986.9	1242.2	1365.2
80°	1116.1	944.9	873.3	1055.4	1161.2
82.5°	884.2	765.9	723.8	857.7	912.2
85°	628.9	580.6	527.7	622.6	635.1
87.5°	345.6	358.0	295.8	358.0	359.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)