

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-LD5-30SE-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-LD5-30SE-N-CL-UNV-L850-ED3-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

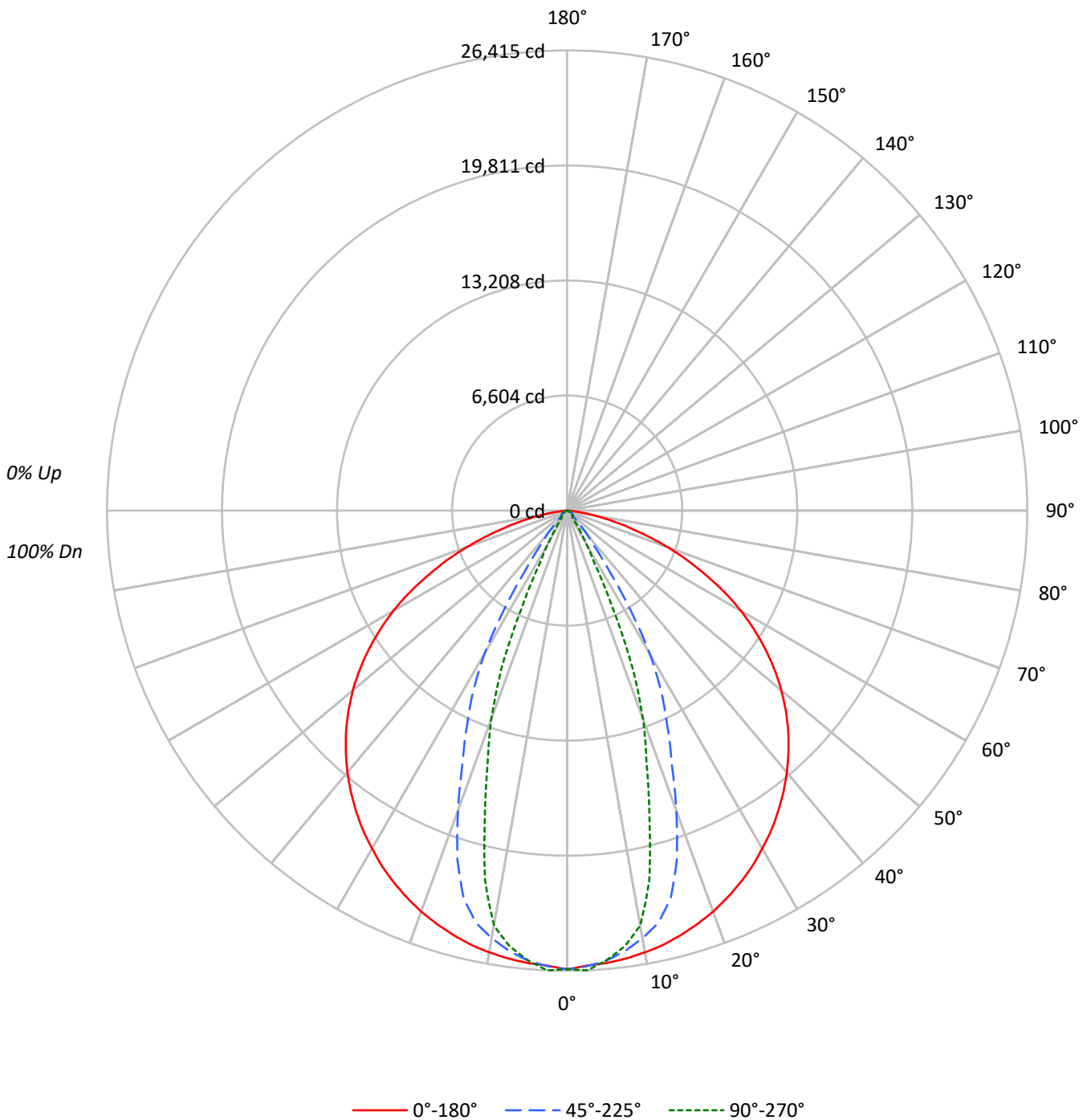
Lumens per Lamp: N/A  
Luminaire Lumens: 28157.0 lumens  
Efficiency: N/A  
Efficacy: 145.9 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 193  
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	112	109	105	103	109	106	104	101	102	100	98		98	97	95		95	94	92	90
2	105	99	94	90	102	97	92	89	94	90	87		91	87	85		88	85	83	81
3	98	90	84	79	96	89	83	79	86	81	77		83	79	76		81	78	75	73
4	92	83	76	71	90	82	75	71	79	74	70		77	73	69		75	71	68	66
5	86	76	69	64	85	75	69	64	73	68	63		72	67	63		70	66	62	60
6	81	71	64	59	80	70	63	58	68	62	58		67	62	58		65	61	57	55
7	77	66	59	54	75	65	58	54	64	58	53		62	57	53		61	56	53	51
8	72	61	55	50	71	61	54	50	60	54	49		59	53	49		58	53	49	47
9	69	58	51	46	67	57	51	46	56	50	46		55	50	46		54	49	46	44
10	65	54	48	43	64	54	47	43	53	47	43		52	47	43		51	46	43	41

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

	0°	45°	90°
0°	35423	35423	35423
5°	35206	35022	34996
10°	35182	34054	33049
15°	35142	32023	25411
20°	35073	26206	18227
25°	34963	20191	9262
30°	34798	14735	3370
35°	34674	6767	1173
40°	34460	3071	809
45°	34154	1146	820
50°	33609	832	863
55°	32614	875	657
60°	30993	935	580
65°	28107	712	472
70°	24099	514	435
75°	18420	455	413
80°	11524	428	449
85°	3640	499	604



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2451.1	8.7
10°-20°	6174.5	21.9
20°-30°	6724.3	23.9
30°-40°	5030.1	17.9
40°-50°	3616.8	12.8
50°-60°	2221.2	7.9
60°-70°	1278.1	4.5
70°-80°	570.5	2.0
80°-90°	90.5	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°	15349.8	54.5
0°-40°	20379.9	72.4
0°-60°	26217.9	93.1
0°-90°	28157.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28157.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	26328	26328	26328	26328	26328	
5°	26066	26189	25930	25954	25911	###
15°	25228	24744	22989	19744	18243	7122
25°	23551	21862	13600	8726	6239	10856
35°	21110	15140	4120	1211	714	13205
45°	17949	8506	602	446	431	13827
55°	13903	1768	373	361	280	12396
65°	8828	194	224	186	148	8739
75°	3543	117	88	90	80	3845
85°	236	23	32	42	39	470
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	26327.5	26327.5	26327.5	26327.5	26327.5
2.5°	26144.3	26315.4	26171.3	26300.6	26415.1
5°	26066.2	26188.8	25930.1	25954.4	25911.2
7.5°	25931.5	25961.1	25493.6	25313.1	25225.5
10°	25750.9	25671.4	24925.1	24495.3	24189.5
12.5°	25523.2	25260.5	24217.8	22683.3	21768.5
15°	25228.2	24744.5	22989.1	19743.6	18242.8
17.5°	24876.6	24205.7	20954.8	16455.0	15156.3
20°	24495.3	23610.2	18302.1	13991.0	12730.0
22.5°	24045.3	22849.0	15685.8	11636.0	9904.8
25°	23550.9	21861.5	13600.3	8726.0	6239.0
27.5°	23017.4	20558.7	11669.7	5351.2	3373.5
30°	22397.7	18973.0	9484.5	3003.0	2169.0
32.5°	21792.8	17124.6	6775.2	2000.6	1386.3
35°	21109.7	15140.2	4119.8	1211.2	714.0
37.5°	20386.3	13336.2	2578.6	658.8	493.1
40°	19619.7	11625.2	1748.7	467.5	460.8
42.5°	18800.6	10077.3	1095.3	444.6	459.4
45°	17949.1	8506.4	602.2	445.9	431.1
47.5°	17024.9	6800.8	420.3	421.7	420.3
50°	16056.3	4878.3	397.4	416.3	412.3
52.5°	15012.2	3028.6	398.8	406.9	365.1
55°	13903.4	1767.6	373.2	361.1	280.2
57.5°	12738.0	1102.0	365.1	297.7	251.9
60°	11517.5	582.0	347.6	268.1	215.6
62.5°	10217.4	287.0	278.9	229.0	176.5
65°	8828.4	194.0	223.6	185.9	148.2
67.5°	7486.5	175.1	168.4	152.2	129.3
70°	6125.8	160.3	130.7	133.4	110.5
72.5°	4790.7	145.5	105.1	114.5	93.0
75°	3543.2	117.2	87.6	90.3	79.5
77.5°	2465.4	91.6	68.7	76.8	74.1
80°	1487.3	57.9	55.2	63.3	57.9
82.5°	720.8	37.7	43.1	49.8	45.8
85°	235.8	22.9	32.3	41.8	39.1
87.5°	29.6	13.5	26.9	36.4	33.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)