

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-LD5-30HE-N-CL-UNV-L850-ED2-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-LD5-30HE-N-CL-UNV-L850-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

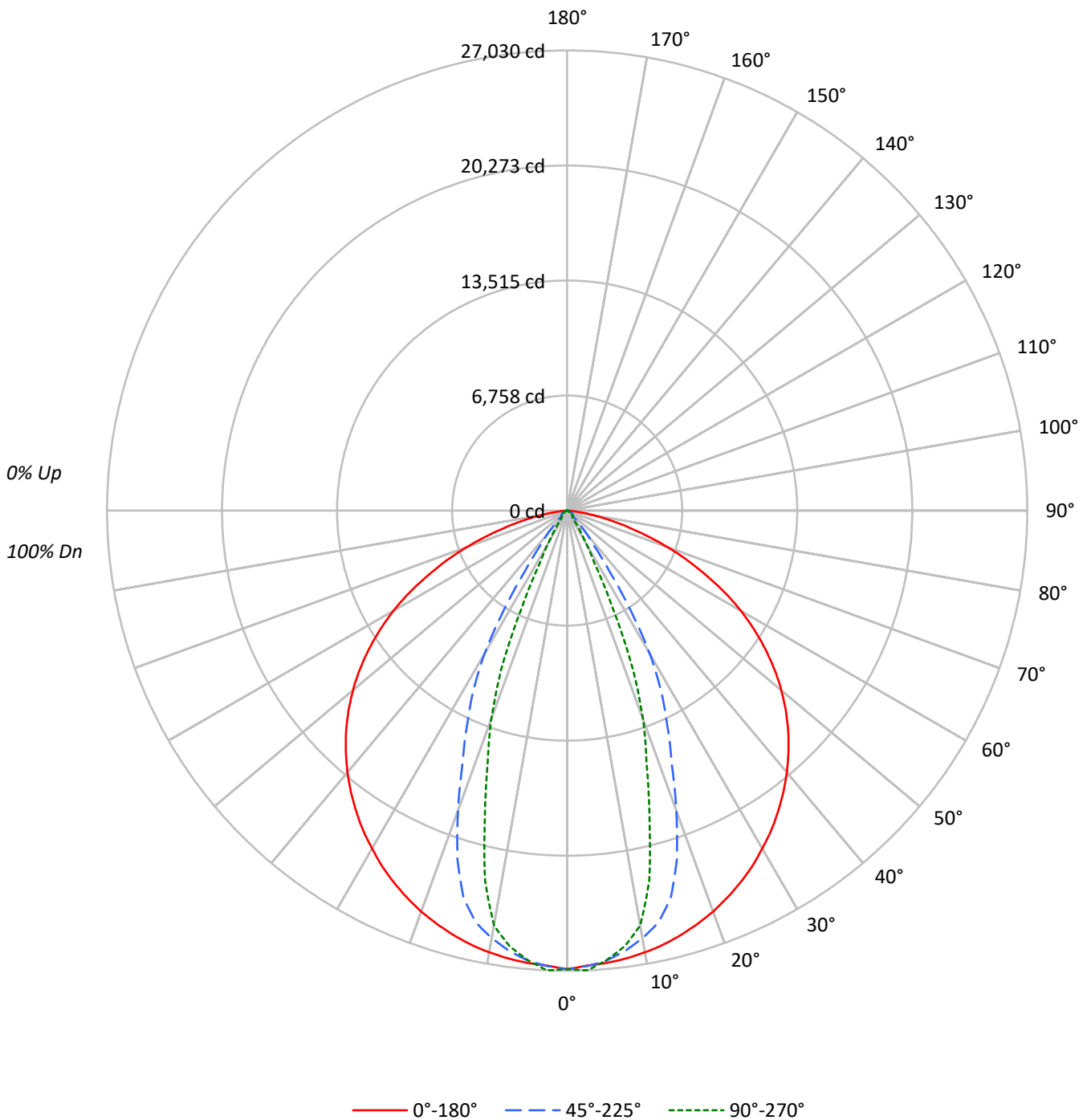
Lumens per Lamp: N/A  
Luminaire Lumens: 28812.0 lumens  
Efficiency: N/A  
Efficacy: 160.1 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.63 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 180  
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	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°	36247	36247	36247
5°	36025	35837	35811
10°	36001	34846	33818
15°	35959	32768	26003
20°	35889	26815	18651
25°	35777	20660	9478
30°	35607	15078	3448
35°	35480	6924	1200
40°	35262	3143	828
45°	34948	1173	839
50°	34391	851	883
55°	33373	896	673
60°	31714	957	594
65°	28761	728	483
70°	24660	526	445
75°	18848	466	423
80°	11792	438	459
85°	3724	511	618



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2508.1	8.7
10°-20°	6318.1	21.9
20°-30°	6880.7	23.9
30°-40°	5147.1	17.9
40°-50°	3700.9	12.8
50°-60°	2272.9	7.9
60°-70°	1307.9	4.5
70°-80°	583.7	2.0
80°-90°	92.6	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°	15706.9	54.5
0°-40°	20854.0	72.4
0°-60°	26827.8	93.1
0°-90°	28812.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	28812.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	26940	26940	26940	26940	26940	
5°	26672	26798	26533	26558	26514	###
15°	25815	25320	23524	20203	18667	7287
25°	24099	22370	13917	8929	6384	11109
35°	21601	15492	4216	1239	731	13512
45°	18367	8704	616	456	441	14149
55°	14227	1809	382	370	287	12684
65°	9034	198	229	190	152	8942
75°	3626	120	90	92	81	3934
85°	241	23	33	43	40	481
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	26940.0	26940.0	26940.0	26940.0	26940.0
2.5°	26752.5	26927.6	26780.1	26912.4	27029.6
5°	26672.5	26798.0	26533.3	26558.1	26514.0
7.5°	26534.7	26565.0	26086.6	25901.9	25812.3
10°	26350.0	26268.6	25504.9	25065.1	24752.2
12.5°	26117.0	25848.2	24781.1	23211.0	22274.9
15°	25815.1	25320.2	23523.9	20202.9	18667.2
17.5°	25455.3	24768.7	21442.3	16837.8	15508.9
20°	25065.1	24159.4	18727.9	14316.4	13026.1
22.5°	24604.7	23380.5	16050.7	11906.7	10135.2
25°	24098.8	22370.0	13916.6	8929.0	6384.2
27.5°	23552.8	21037.0	11941.2	5475.7	3451.9
30°	22918.7	19414.4	9705.1	3072.8	2219.5
32.5°	22299.7	17523.0	6932.8	2047.2	1418.5
35°	21600.8	15492.4	4215.7	1239.3	730.6
37.5°	20860.5	13646.4	2638.6	674.1	504.6
40°	20076.1	11895.7	1789.4	478.4	471.5
42.5°	19237.9	10311.7	1120.8	454.9	470.1
45°	18366.7	8704.3	616.2	456.3	441.1
47.5°	17421.0	6959.0	430.1	431.5	430.1
50°	16429.8	4991.8	406.7	426.0	421.8
52.5°	15361.4	3099.0	408.1	416.3	373.6
55°	14226.8	1808.7	381.9	369.5	286.7
57.5°	13034.4	1127.7	373.6	304.7	257.8
60°	11785.4	595.5	355.7	274.3	220.6
62.5°	10455.1	293.6	285.4	234.4	180.6
65°	9033.8	198.5	228.8	190.2	151.6
67.5°	7660.7	179.2	172.3	155.8	132.3
70°	6268.4	164.0	133.7	136.5	113.0
72.5°	4902.2	148.9	107.5	117.2	95.1
75°	3625.6	119.9	89.6	92.4	81.3
77.5°	2522.8	93.7	70.3	78.6	75.8
80°	1521.9	59.3	56.5	64.8	59.3
82.5°	737.5	38.6	44.1	51.0	46.9
85°	241.2	23.4	33.1	42.7	40.0
87.5°	30.3	13.8	27.6	37.2	34.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)