

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-W-FLI-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 (P26703)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-30HE-W-FLI-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

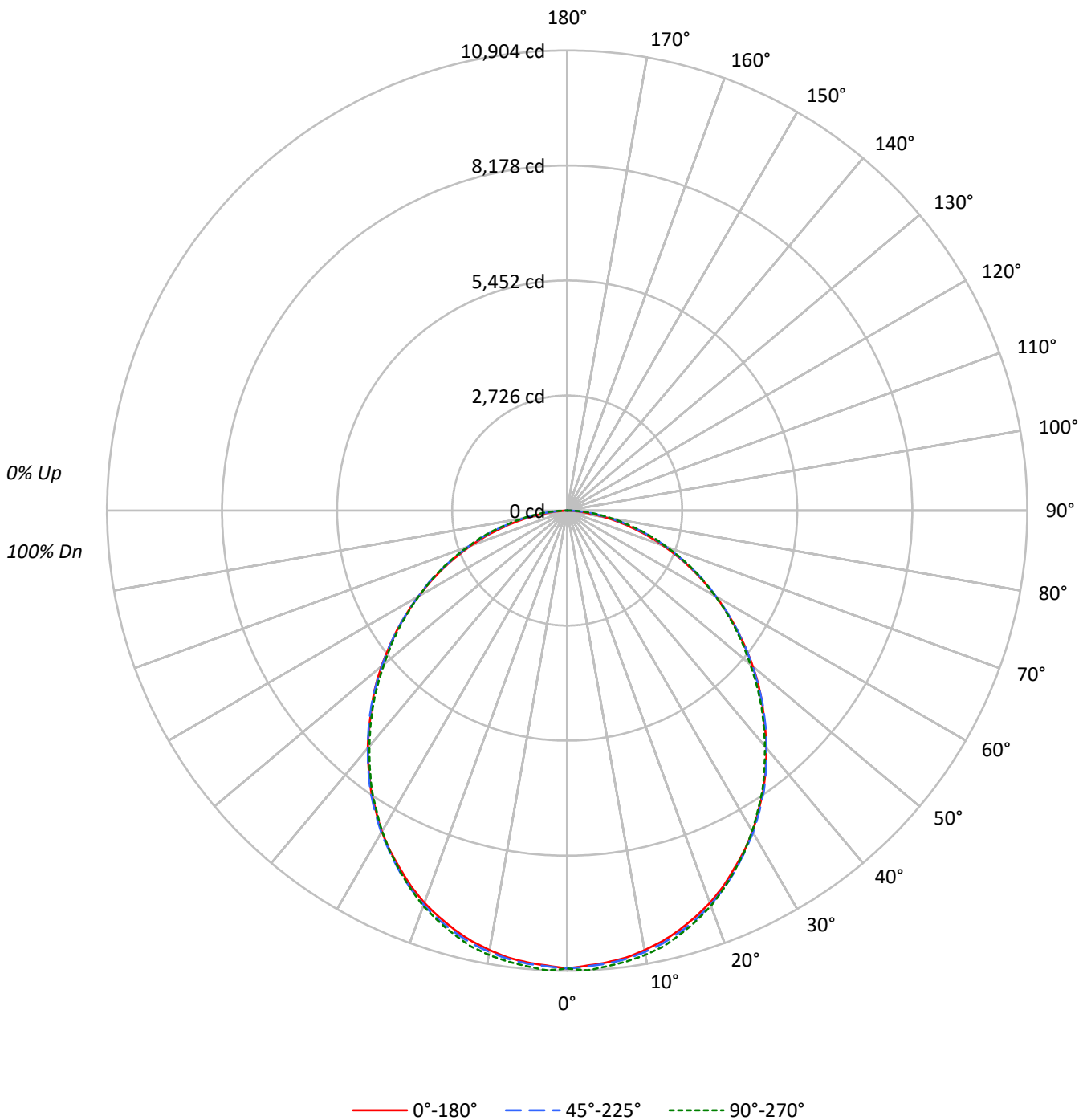
Lumens per Lamp: N/A
Luminaire Lumens: 28347.0 lumens
Efficiency: N/A
Efficacy: 157.5 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	14601	14601	14601
5°	14518	14559	14642
10°	14452	14511	14605
15°	14325	14403	14473
20°	14163	14231	14273
25°	13901	13980	13959
30°	13645	13681	13625
35°	13307	13341	13256
40°	12907	12907	12807
45°	12455	12489	12362
50°	12027	12007	11857
55°	11507	11508	11405
60°	10949	10962	10920
65°	10320	10423	10450
70°	9532	9792	9803
75°	8424	8969	9109
80°	6908	7855	8299
85°	4795	6595	7458



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1026.3	3.6
10°-20°	2919.7	10.3
20°-30°	4338.8	15.3
30°-40°	5073.3	17.9
40°-50°	5058.2	17.8
50°-60°	4388.6	15.5
60°-70°	3241.5	11.4
70°-80°	1814.9	6.4
80°-90°	484.3	1.7
90°-100°	1.5	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°	8284.9	29.2
0°-40°	13358.1	47.1
0°-60°	22804.9	80.4
0°-90°	28345.6	100.0
90°-120°	1.5	0.0
90°-150°	1.5	0.0
90°-180°	1.0	0.0
0°-180°	28347.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10852	10852	10852	10852	10852	
5°	10749	10817	10780	10827	10841	###
15°	10284	10356	10340	10390	10390	2900
25°	9364	9439	9417	9437	9403	4317
35°	8101	8172	8122	8121	8070	5060
45°	6546	6615	6564	6537	6497	5053
55°	4905	4939	4906	4898	4862	4386
65°	3242	3273	3274	3290	3282	3206
75°	1620	1669	1725	1738	1752	1726
85°	311	375	427	465	483	377
90°	0	7	8	19	17	13
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-30HE-W-FLI-UNV-L850-ED2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10852.0	10852.0	10852.0	10852.0	10852.0
2.5°	10792.7	10856.9	10812.0	10854.8	10904.5
5°	10749.2	10816.8	10779.6	10827.2	10841.0
7.5°	10685.7	10751.3	10715.4	10763.0	10777.5
10°	10578.1	10649.1	10620.8	10674.7	10689.9
12.5°	10452.5	10519.4	10500.8	10563.6	10573.9
15°	10284.1	10355.8	10340.0	10389.7	10390.3
17.5°	10097.7	10165.4	10153.6	10192.3	10190.9
20°	9891.4	9963.9	9939.0	9981.1	9968.0
22.5°	9647.1	9724.4	9693.3	9728.5	9695.4
25°	9363.5	9438.7	9416.6	9437.3	9402.8
27.5°	9088.8	9157.8	9112.3	9137.1	9100.5
30°	8782.4	8841.0	8805.8	8814.1	8770.0
32.5°	8438.0	8507.7	8464.9	8463.6	8416.6
35°	8101.2	8172.3	8121.9	8120.6	8070.2
37.5°	7728.6	7794.8	7735.5	7738.9	7680.3
40°	7348.3	7405.6	7348.3	7345.6	7291.7
42.5°	6935.6	7011.6	6959.1	6965.3	6893.5
45°	6545.7	6615.4	6563.7	6536.8	6496.7
47.5°	6157.2	6187.6	6144.8	6137.9	6081.3
50°	5745.9	5768.7	5736.2	5727.9	5664.5
52.5°	5320.8	5360.1	5318.7	5307.7	5265.6
55°	4905.3	4939.1	4906.0	4897.7	4861.8
57.5°	4487.1	4531.3	4497.5	4489.2	4460.2
60°	4068.9	4082.0	4073.7	4086.2	4057.9
62.5°	3653.5	3683.8	3693.5	3690.0	3668.0
65°	3241.5	3273.2	3273.9	3290.5	3282.2
67.5°	2819.8	2861.2	2872.9	2890.2	2897.8
70°	2423.0	2454.7	2489.2	2499.6	2492.0
72.5°	2023.4	2074.5	2113.1	2122.1	2154.5
75°	1620.4	1668.7	1725.3	1737.7	1752.2
77.5°	1246.3	1310.5	1361.6	1378.2	1396.1
80°	891.6	962.7	1013.8	1036.6	1071.1
82.5°	585.2	657.7	709.4	732.2	774.3
85°	310.6	375.4	427.2	465.1	483.1
87.5°	91.8	147.0	176.7	187.7	203.6
90°	0.0	6.9	8.3	18.6	17.3
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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CANDELA DISTRIBUTION (continued):

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)