

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-W-FLI-UNV-L840-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 (P26703)
Test Lab: INNOVATION CENTER-P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-30SE-W-FLI-UNV-L840-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

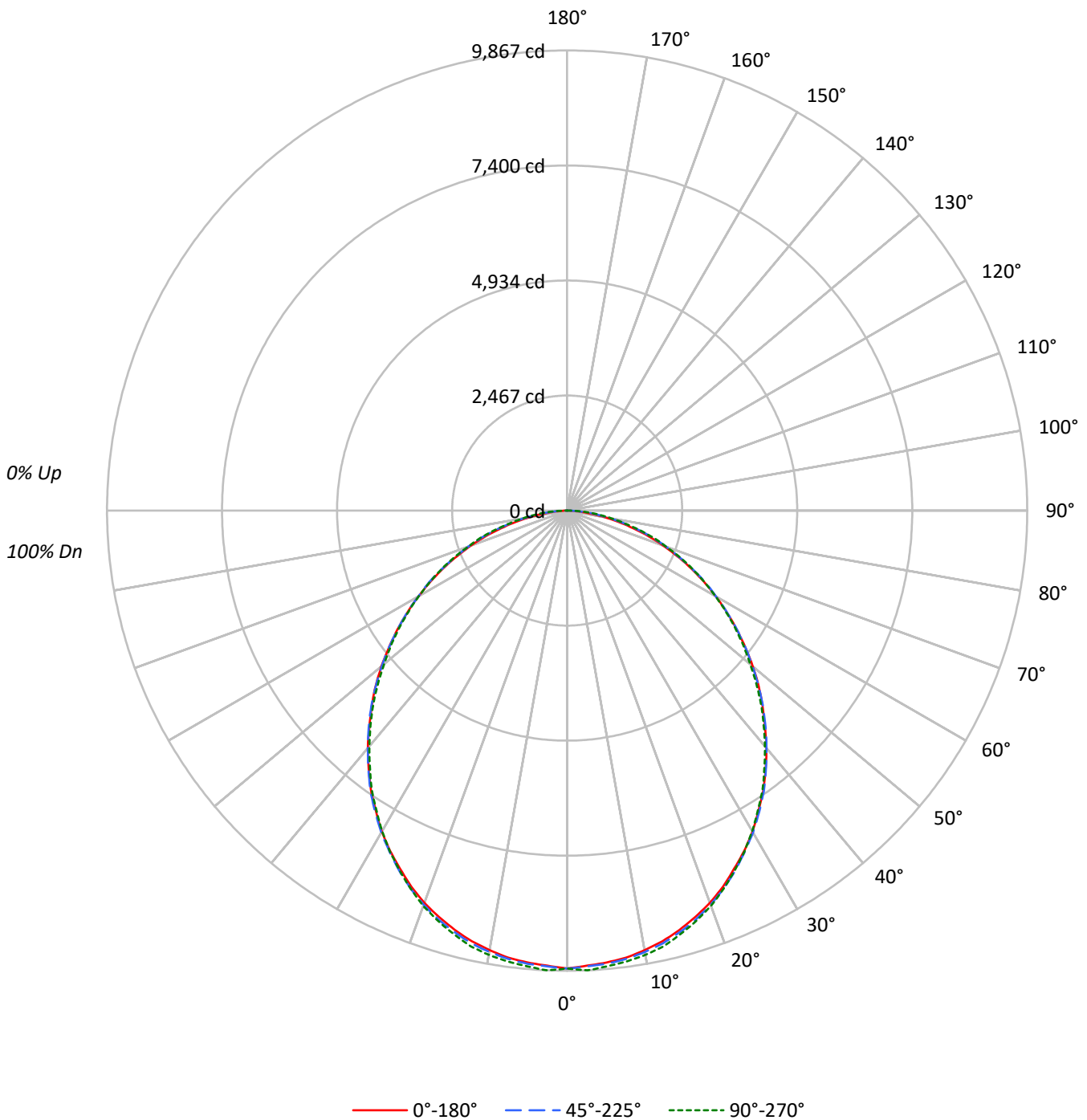
Lumens per Lamp: N/A
Luminaire Lumens: 25651.0 lumens
Efficiency: N/A
Efficacy: 132.9 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	13213	13213	13213
5°	13137	13175	13250
10°	13078	13131	13216
15°	12963	13033	13097
20°	12816	12878	12915
25°	12579	12650	12632
30°	12347	12380	12330
35°	12041	12072	11995
40°	11679	11679	11589
45°	11271	11302	11186
50°	10883	10865	10729
55°	10412	10414	10320
60°	9908	9920	9881
65°	9338	9432	9456
70°	8625	8861	8871
75°	7623	8116	8243
80°	6251	7108	7510
85°	4338	5968	6748



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	928.7	3.6
10°-20°	2642.0	10.3
20°-30°	3926.2	15.3
30°-40°	4590.8	17.9
40°-50°	4577.1	17.8
50°-60°	3971.2	15.5
60°-70°	2933.2	11.4
70°-80°	1642.3	6.4
80°-90°	438.2	1.7
90°-100°	1.3	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°	7496.9	29.2
0°-40°	12087.7	47.1
0°-60°	20636.0	80.4
0°-90°	25649.7	100.0
90°-120°	1.3	0.0
90°-150°	1.3	0.0
90°-180°	1.0	0.0
0°-180°	25651.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9820	9820	9820	9820	9820	
5°	9727	9788	9754	9797	9810	924
15°	9306	9371	9357	9402	9402	2625
25°	8473	8541	8521	8540	8508	3906
35°	7331	7395	7350	7348	7303	4579
45°	5923	5986	5939	5915	5879	4573
55°	4439	4469	4439	4432	4400	3969
65°	2933	2962	2962	2978	2970	2901
75°	1466	1510	1561	1572	1586	1562
85°	281	340	387	421	437	341
90°	0	6	8	17	16	11
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#

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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9819.9	9819.9	9819.9	9819.9	9819.9
2.5°	9766.2	9824.3	9783.7	9822.4	9867.4
5°	9726.9	9788.1	9754.4	9797.4	9809.9
7.5°	9669.4	9728.8	9696.3	9739.4	9752.5
10°	9572.0	9636.3	9610.7	9659.4	9673.2
12.5°	9458.4	9518.9	9502.1	9558.9	9568.3
15°	9306.0	9370.9	9356.6	9401.5	9402.2
17.5°	9137.4	9198.6	9188.0	9222.9	9221.7
20°	8950.7	9016.2	8993.7	9031.8	9020.0
22.5°	8729.6	8799.5	8771.4	8803.3	8773.3
25°	8472.9	8541.0	8521.0	8539.7	8508.5
27.5°	8224.4	8286.8	8245.6	8268.1	8235.0
30°	7947.1	8000.2	7968.3	7975.8	7935.9
32.5°	7635.5	7698.6	7659.9	7658.6	7616.1
35°	7330.8	7395.1	7349.5	7348.2	7302.7
37.5°	6993.5	7053.5	6999.8	7002.9	6949.8
40°	6649.4	6701.3	6649.4	6647.0	6598.2
42.5°	6276.0	6344.7	6297.2	6302.9	6237.9
45°	5923.2	5986.3	5939.4	5915.1	5878.8
47.5°	5571.6	5599.1	5560.4	5554.1	5502.9
50°	5199.4	5220.0	5190.7	5183.2	5125.7
52.5°	4814.7	4850.3	4812.9	4802.9	4764.8
55°	4438.8	4469.4	4439.4	4431.9	4399.5
57.5°	4060.4	4100.3	4069.7	4062.2	4036.0
60°	3681.9	3693.8	3686.3	3697.5	3671.9
62.5°	3306.0	3333.5	3342.2	3339.1	3319.1
65°	2933.2	2961.9	2962.5	2977.5	2970.0
67.5°	2551.6	2589.1	2599.7	2615.3	2622.2
70°	2192.5	2221.3	2252.5	2261.9	2255.0
72.5°	1831.0	1877.2	1912.2	1920.3	1949.6
75°	1466.3	1510.0	1561.2	1572.4	1585.6
77.5°	1127.8	1185.9	1232.1	1247.1	1263.3
80°	806.8	871.1	917.4	938.0	969.2
82.5°	529.6	595.1	642.0	662.6	700.7
85°	281.0	339.7	386.6	420.9	437.1
87.5°	83.1	133.0	159.9	169.9	184.2
90°	0.0	6.2	7.5	16.9	15.6
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)