

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-LD5-18HE-W-FLI-UNV-L840-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-LD5-18HE-W-FLI-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

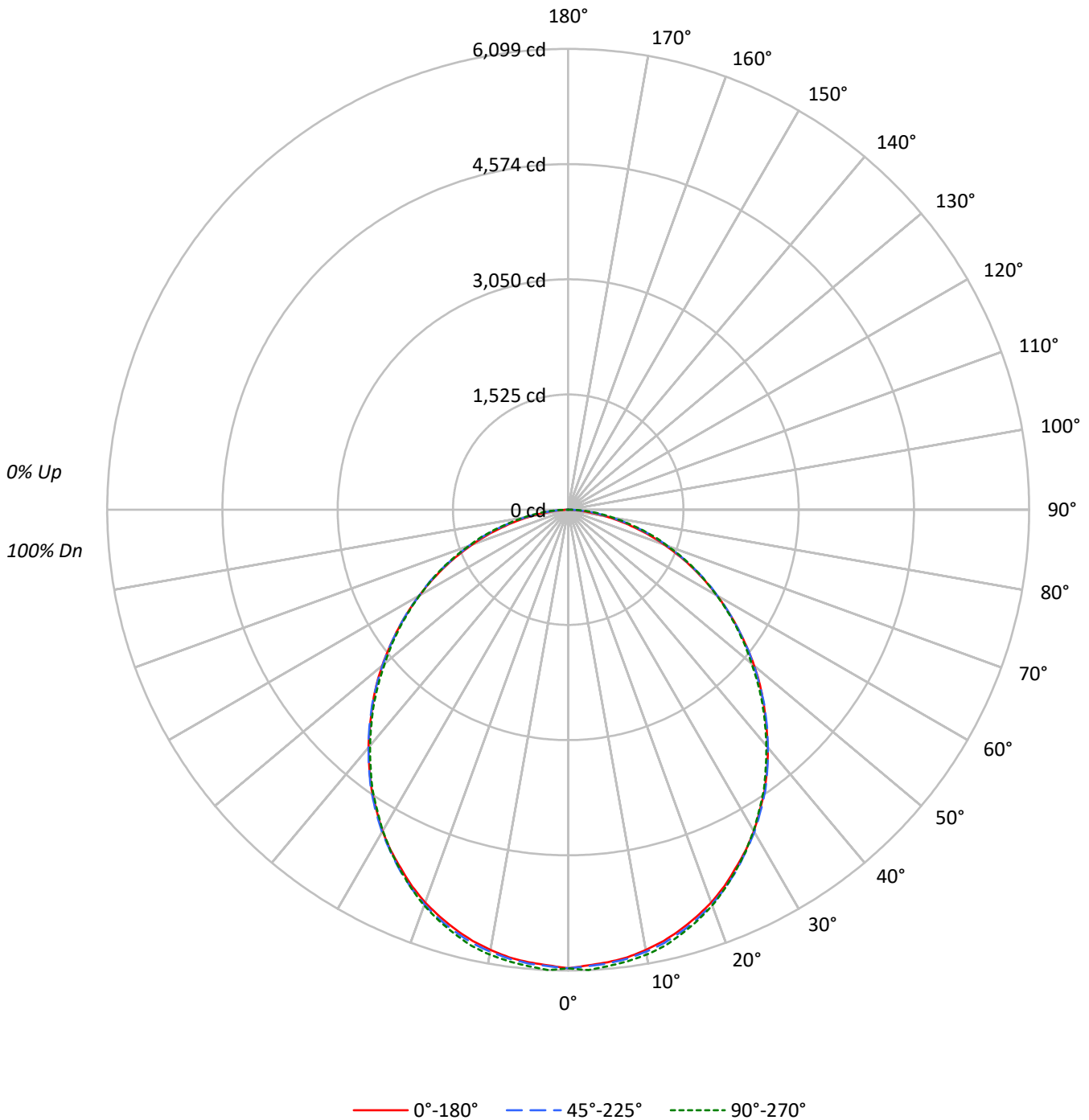
Lumens per Lamp: N/A
Luminaire Lumens: 15854.0 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 111.9
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	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10	50	30	10																
RCR	0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100																	
	1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84	84																	
	2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71	71																
	3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60	60																
	4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51	51																
	5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45	45																
	6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39	39																
	7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35	35																
	8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31	31																
	9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28	28																
	10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25	25																

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	8166	8166	8166
5°	8120	8143	8189
10°	8083	8116	8168
15°	8012	8055	8095
20°	7921	7959	7982
25°	7774	7819	7807
30°	7631	7652	7620
35°	7442	7461	7414
40°	7219	7219	7163
45°	6966	6985	6914
50°	6727	6715	6631
55°	6436	6437	6379
60°	6124	6131	6107
65°	5772	5829	5844
70°	5331	5477	5483
75°	4711	5016	5095
80°	3864	4393	4641
85°	2682	3688	4171



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	574.0	3.6
10°-20°	1632.9	10.3
20°-30°	2426.6	15.3
30°-40°	2837.4	17.9
40°-50°	2828.9	17.8
50°-60°	2454.5	15.5
60°-70°	1812.9	11.4
70°-80°	1015.0	6.4
80°-90°	270.8	1.7
90°-100°	0.8	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°	4633.6	29.2
0°-40°	7471.0	47.1
0°-60°	12754.4	80.4
0°-90°	15853.2	100.0
90°-120°	0.8	0.0
90°-150°	0.8	0.0
90°-180°	1.0	0.0
0°-180°	15854.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6069	6069	6069	6069	6069	
5°	6012	6050	6029	6056	6063	571
15°	5752	5792	5783	5811	5811	1622
25°	5237	5279	5266	5278	5259	2414
35°	4531	4571	4542	4542	4514	2830
45°	3661	3700	3671	3656	3634	2826
55°	2744	2762	2744	2739	2719	2453
65°	1813	1831	1831	1840	1836	1793
75°	906	933	965	972	980	965
85°	174	210	239	260	270	211
90°	0	4	5	10	10	7
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°	6069.4	6069.4	6069.4	6069.4	6069.4
2.5°	6036.2	6072.1	6047.0	6070.9	6098.7
5°	6011.8	6049.7	6028.8	6055.5	6063.2
7.5°	5976.3	6013.0	5992.9	6019.6	6027.7
10°	5916.1	5955.9	5940.1	5970.2	5978.7
12.5°	5845.9	5883.3	5872.9	5908.0	5913.8
15°	5751.7	5791.8	5783.0	5810.8	5811.1
17.5°	5647.5	5685.3	5678.8	5700.4	5699.6
20°	5532.1	5572.6	5558.7	5582.3	5574.9
22.5°	5395.5	5438.7	5421.3	5441.0	5422.5
25°	5236.8	5278.9	5266.5	5278.1	5258.8
27.5°	5083.2	5121.8	5096.3	5110.2	5089.8
30°	4911.8	4944.6	4925.0	4929.6	4904.9
32.5°	4719.2	4758.2	4734.3	4733.5	4707.3
35°	4530.9	4570.6	4542.5	4541.7	4513.5
37.5°	4322.5	4359.5	4326.3	4328.3	4295.4
40°	4109.8	4141.8	4109.8	4108.3	4078.1
42.5°	3879.0	3921.4	3892.1	3895.6	3855.4
45°	3660.9	3699.9	3670.9	3655.9	3633.5
47.5°	3443.6	3460.6	3436.7	3432.8	3401.2
50°	3213.6	3226.3	3208.2	3203.5	3168.0
52.5°	2975.8	2997.8	2974.7	2968.5	2944.9
55°	2743.5	2762.4	2743.9	2739.2	2719.2
57.5°	2509.6	2534.3	2515.4	2510.7	2494.5
60°	2275.7	2283.0	2278.4	2285.3	2269.5
62.5°	2043.3	2060.3	2065.7	2063.8	2051.4
65°	1812.9	1830.6	1831.0	1840.3	1835.7
67.5°	1577.1	1600.2	1606.8	1616.4	1620.7
70°	1355.1	1372.9	1392.2	1398.0	1393.7
72.5°	1131.7	1160.2	1181.8	1186.9	1205.0
75°	906.3	933.3	964.9	971.9	980.0
77.5°	697.1	733.0	761.5	770.8	780.8
80°	498.7	538.4	567.0	579.7	599.0
82.5°	327.3	367.8	396.8	409.5	433.1
85°	173.7	210.0	238.9	260.1	270.2
87.5°	51.3	82.2	98.8	105.0	113.9
90°	0.0	3.9	4.6	10.4	9.6
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)