

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-LD5-15SE-W-FLI-UNV-L850-ED1-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-LD5-15SE-W-FLI-UNV-L850-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

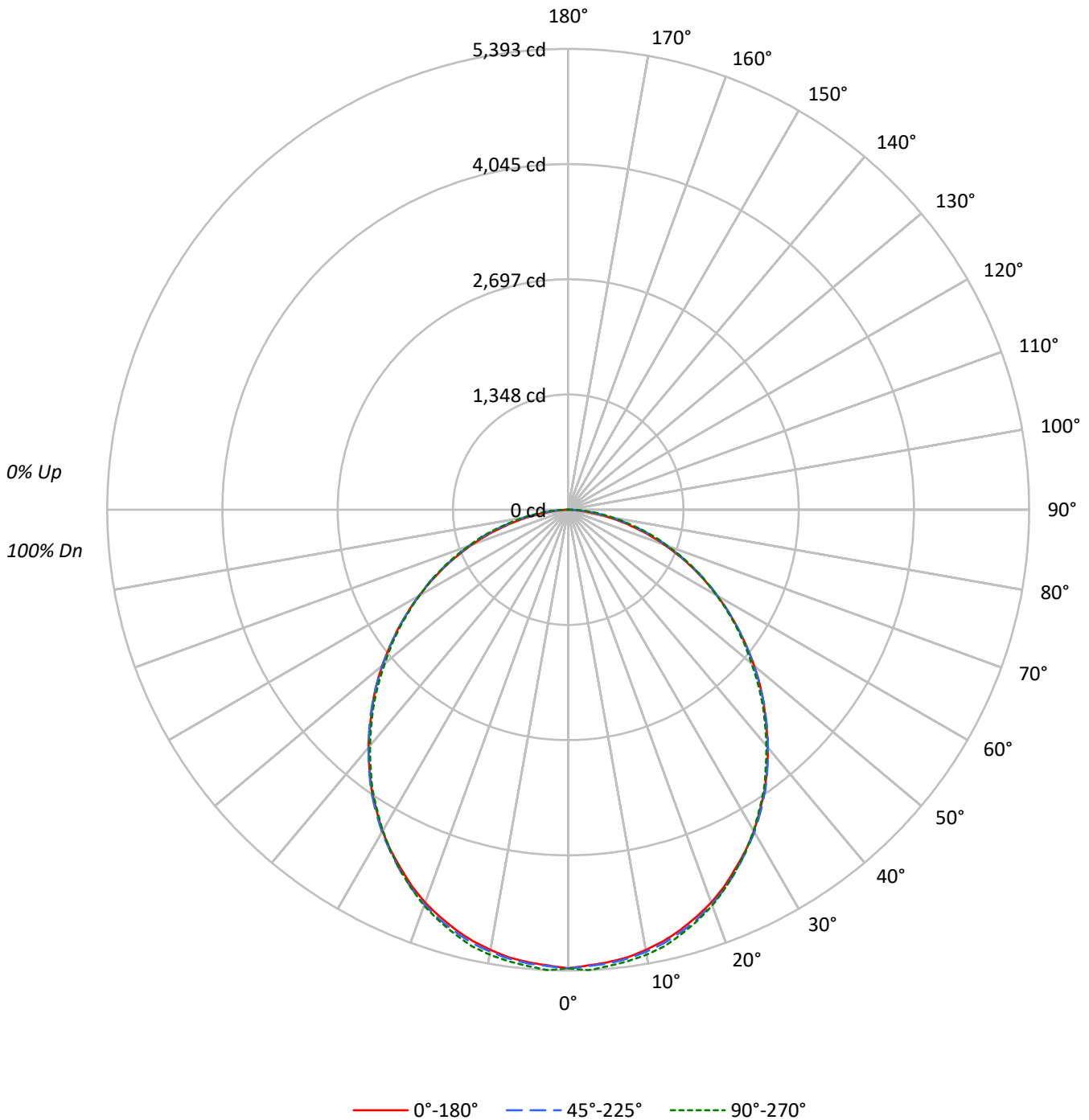
Lumens per Lamp: N/A
Luminaire Lumens: 14020.0 lumens
Efficiency: N/A
Efficacy: 147.3 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 95.2
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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84				84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71				71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60				60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51				51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45				45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39				39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35				35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31				31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28				28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25				25

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	7222	7222	7222
5°	7180	7201	7242
10°	7148	7177	7223
15°	7085	7124	7158
20°	7005	7038	7059
25°	6875	6914	6904
30°	6748	6766	6739
35°	6581	6598	6556
40°	6384	6384	6334
45°	6160	6177	6114
50°	5948	5938	5864
55°	5691	5692	5641
60°	5415	5422	5401
65°	5104	5155	5168
70°	4714	4843	4849
75°	4166	4436	4505
80°	3417	3885	4104
85°	2371	3262	3688



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	507.6	3.6
10°-20°	1444.0	10.3
20°-30°	2145.9	15.3
30°-40°	2509.2	17.9
40°-50°	2501.7	17.8
50°-60°	2170.5	15.5
60°-70°	1603.2	11.4
70°-80°	897.6	6.4
80°-90°	239.5	1.7
90°-100°	0.7	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°	4097.6	29.2
0°-40°	6606.7	47.1
0°-60°	11279.0	80.4
0°-90°	14019.3	100.0
90°-120°	0.7	0.0
90°-150°	0.7	0.0
90°-180°	1.0	0.0
0°-180°	14020.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	5367	5367	5367	5367	5367	
5°	5316	5350	5331	5355	5362	505
15°	5086	5122	5114	5139	5139	1434
25°	4631	4668	4657	4668	4650	2135
35°	4007	4042	4017	4016	3991	2503
45°	3237	3272	3246	3233	3213	2499
55°	2426	2443	2426	2422	2405	2169
65°	1603	1619	1619	1627	1623	1586
75°	801	825	853	859	867	853
85°	154	186	211	230	239	187
90°	0	3	4	9	8	6
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-LD5-15SE-W-FLI-UNV-L850-ED1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	5367.3	5367.3	5367.3	5367.3	5367.3
2.5°	5337.9	5369.6	5347.5	5368.6	5393.2
5°	5316.4	5349.8	5331.4	5355.0	5361.8
7.5°	5285.0	5317.4	5299.7	5323.2	5330.4
10°	5231.7	5266.9	5252.9	5279.5	5287.0
12.5°	5169.6	5202.7	5193.5	5224.6	5229.7
15°	5086.3	5121.8	5114.0	5138.6	5138.9
17.5°	4994.2	5027.6	5021.8	5041.0	5040.3
20°	4892.1	4928.0	4915.7	4936.5	4930.0
22.5°	4771.3	4809.5	4794.2	4811.6	4795.2
25°	4631.0	4668.2	4657.3	4667.5	4650.5
27.5°	4495.2	4529.3	4506.8	4519.1	4501.0
30°	4343.6	4372.6	4355.2	4359.3	4337.5
32.5°	4173.3	4207.8	4186.6	4185.9	4162.7
35°	4006.8	4041.9	4017.0	4016.3	3991.4
37.5°	3822.4	3855.2	3825.9	3827.6	3798.5
40°	3634.4	3662.7	3634.4	3633.0	3606.4
42.5°	3430.3	3467.8	3441.9	3444.9	3409.4
45°	3237.4	3271.9	3246.3	3233.0	3213.2
47.5°	3045.3	3060.3	3039.1	3035.7	3007.7
50°	2841.8	2853.1	2837.0	2833.0	2801.6
52.5°	2631.6	2651.0	2630.6	2625.1	2604.3
55°	2426.1	2442.8	2426.4	2422.3	2404.6
57.5°	2219.3	2241.1	2224.4	2220.3	2205.9
60°	2012.4	2018.9	2014.8	2021.0	2007.0
62.5°	1806.9	1822.0	1826.7	1825.0	1814.1
65°	1603.2	1618.9	1619.2	1627.4	1623.3
67.5°	1394.6	1415.1	1420.9	1429.4	1433.2
70°	1198.4	1214.1	1231.1	1236.3	1232.5
72.5°	1000.7	1026.0	1045.1	1049.6	1065.6
75°	801.4	825.3	853.3	859.4	866.6
77.5°	616.4	648.2	673.4	681.6	690.5
80°	441.0	476.1	501.4	512.7	529.7
82.5°	289.4	325.3	350.9	362.1	383.0
85°	153.6	185.7	211.3	230.0	238.9
87.5°	45.4	72.7	87.4	92.8	100.7
90°	0.0	3.4	4.1	9.2	8.5
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)