

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-L840-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-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

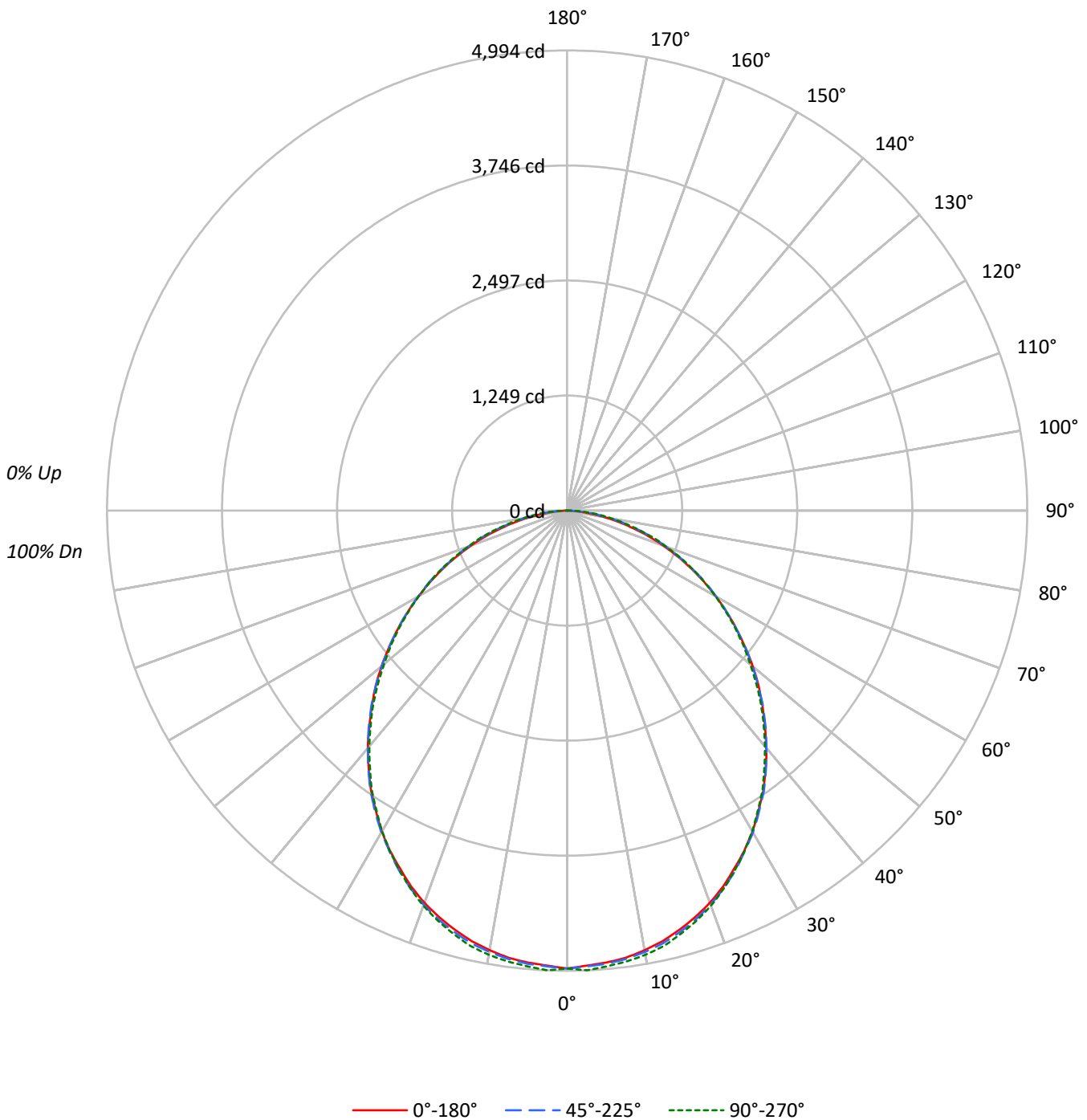
Lumens per Lamp: N/A
Luminaire Lumens: 12981.0 lumens
Efficiency: N/A
Efficacy: 136.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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°	6686	6686	6686
5°	6648	6667	6705
10°	6618	6645	6688
15°	6560	6596	6628
20°	6486	6517	6536
25°	6366	6402	6392
30°	6248	6265	6239
35°	6093	6109	6070
40°	5910	5910	5865
45°	5704	5719	5661
50°	5508	5498	5430
55°	5269	5270	5223
60°	5014	5020	5000
65°	4726	4773	4785
70°	4365	4484	4489
75°	3857	4107	4171
80°	3164	3597	3801
85°	2195	3020	3415



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	470.0	3.6
10°-20°	1337.0	10.3
20°-30°	1986.9	15.3
30°-40°	2323.2	17.9
40°-50°	2316.3	17.8
50°-60°	2009.7	15.5
60°-70°	1484.4	11.4
70°-80°	831.1	6.4
80°-90°	221.8	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°	3793.9	29.2
0°-40°	6117.1	47.1
0°-60°	10443.1	80.4
0°-90°	12980.3	100.0
90°-120°	0.7	0.0
90°-150°	0.7	0.0
90°-180°	1.0	0.0
0°-180°	12981.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	4970	4970	4970	4970	4970	
5°	4922	4953	4936	4958	4964	468
15°	4709	4742	4735	4758	4758	1328
25°	4288	4322	4312	4322	4306	1977
35°	3710	3742	3719	3719	3696	2317
45°	2998	3029	3006	2993	2975	2314
55°	2246	2262	2247	2243	2226	2009
65°	1484	1499	1499	1507	1503	1468
75°	742	764	790	796	802	790
85°	142	172	196	213	221	173
90°	0	3	4	8	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



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CATALOG NUMBER: HBLED-LD5-15SE-W-FLI-UNV-L840-ED1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	4969.5	4969.5	4969.5	4969.5	4969.5
2.5°	4942.3	4971.7	4951.2	4970.8	4993.5
5°	4922.4	4953.4	4936.3	4958.1	4964.4
7.5°	4893.3	4923.4	4906.9	4928.7	4935.4
10°	4844.0	4876.6	4863.6	4888.3	4895.2
12.5°	4786.5	4817.2	4808.6	4837.4	4842.1
15°	4709.4	4742.3	4735.0	4757.8	4758.1
17.5°	4624.1	4655.0	4649.7	4667.4	4666.7
20°	4529.6	4562.8	4551.4	4570.7	4564.7
22.5°	4417.7	4453.1	4438.9	4455.0	4439.8
25°	4287.8	4322.3	4312.2	4321.6	4305.8
27.5°	4162.0	4193.7	4172.8	4184.2	4167.4
30°	4021.7	4048.6	4032.5	4036.3	4016.0
32.5°	3864.0	3896.0	3876.4	3875.7	3854.2
35°	3709.8	3742.4	3719.3	3718.7	3695.6
37.5°	3539.2	3569.5	3542.3	3543.9	3517.0
40°	3365.0	3391.3	3365.0	3363.8	3339.1
42.5°	3176.1	3210.8	3186.8	3189.6	3156.8
45°	2997.5	3029.4	3005.7	2993.4	2975.1
47.5°	2819.6	2833.5	2813.9	2810.7	2784.8
50°	2631.2	2641.7	2626.8	2623.0	2593.9
52.5°	2436.6	2454.6	2435.6	2430.5	2411.3
55°	2246.3	2261.8	2246.6	2242.8	2226.4
57.5°	2054.8	2075.0	2059.5	2055.7	2042.5
60°	1863.3	1869.3	1865.5	1871.2	1858.2
62.5°	1673.0	1686.9	1691.4	1689.8	1679.7
65°	1484.4	1498.9	1499.2	1506.8	1503.0
67.5°	1291.3	1310.2	1315.6	1323.5	1327.0
70°	1109.6	1124.1	1139.9	1144.6	1141.2
72.5°	926.6	950.0	967.7	971.8	986.6
75°	742.0	764.1	790.1	795.8	802.4
77.5°	570.7	600.1	623.5	631.1	639.3
80°	408.3	440.9	464.2	474.7	490.5
82.5°	268.0	301.2	324.9	335.3	354.6
85°	142.2	171.9	195.6	213.0	221.2
87.5°	42.0	67.3	80.9	86.0	93.2
90°	0.0	3.2	3.8	8.5	7.9
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)