

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-LD5-24HE-W-FLI-UNV-L750-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-LD5-24HE-W-FLI-UNV-L750-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

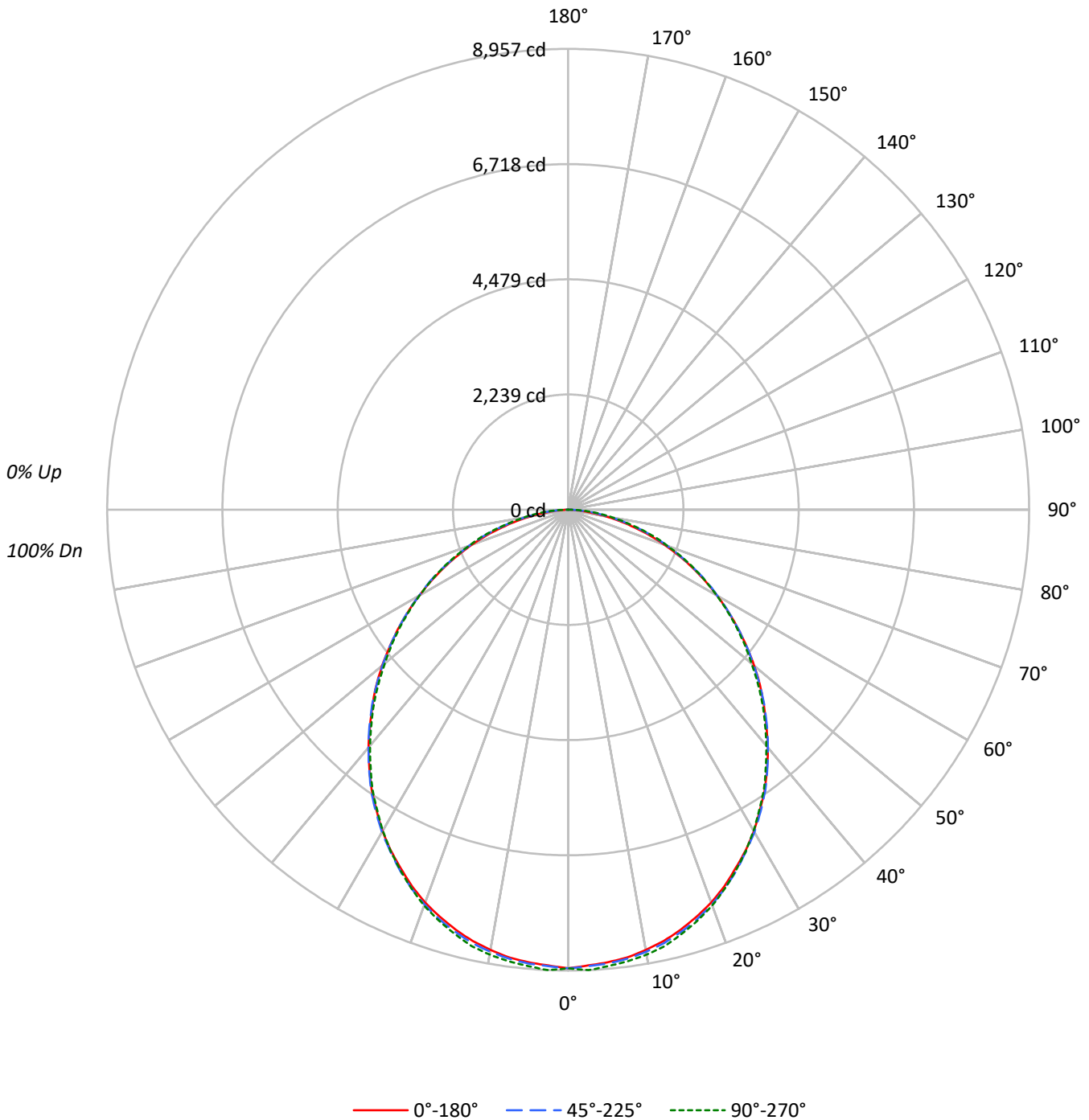
Lumens per Lamp: N/A
Luminaire Lumens: 23285.0 lumens
Efficiency: N/A
Efficacy: 159.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
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°	11994	11994	11994
5°	11926	11959	12027
10°	11871	11920	11997
15°	11767	11831	11889
20°	11634	11690	11724
25°	11419	11483	11466
30°	11208	11238	11192
35°	10930	10958	10889
40°	10602	10602	10520
45°	10231	10259	10155
50°	9880	9863	9739
55°	9452	9453	9368
60°	8994	9005	8970
65°	8477	8562	8584
70°	7830	8044	8053
75°	6919	7367	7482
80°	5675	6452	6817
85°	3938	5417	6126



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	843.1	3.6
10°-20°	2398.3	10.3
20°-30°	3564.1	15.3
30°-40°	4167.3	17.9
40°-50°	4154.9	17.8
50°-60°	3604.9	15.5
60°-70°	2662.7	11.4
70°-80°	1490.8	6.4
80°-90°	397.8	1.7
90°-100°	1.2	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°	6805.4	29.2
0°-40°	10972.7	47.1
0°-60°	18732.6	80.4
0°-90°	23283.8	100.0
90°-120°	1.2	0.0
90°-150°	1.2	0.0
90°-180°	1.0	0.0
0°-180°	23285.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8914	8914	8914	8914	8914	
5°	8830	8885	8855	8894	8905	839
15°	8448	8507	8494	8534	8535	2382
25°	7691	7753	7735	7752	7724	3546
35°	6655	6713	6672	6670	6629	4157
45°	5377	5434	5392	5370	5337	4151
55°	4029	4057	4030	4023	3994	3603
65°	2663	2689	2689	2703	2696	2633
75°	1331	1371	1417	1427	1439	1418
85°	255	308	351	382	397	310
90°	0	6	7	15	14	10
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-LD5-24HE-W-FLI-UNV-L750-ED2-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8914.2	8914.2	8914.2	8914.2	8914.2
2.5°	8865.4	8918.1	8881.3	8916.4	8957.2
5°	8829.7	8885.2	8854.6	8893.7	8905.1
7.5°	8777.5	8831.4	8801.9	8841.0	8852.9
10°	8689.1	8747.5	8724.3	8768.5	8780.9
12.5°	8585.9	8640.9	8625.6	8677.2	8685.7
15°	8447.6	8506.6	8493.5	8534.3	8534.9
17.5°	8294.6	8350.1	8340.5	8372.2	8371.1
20°	8125.1	8184.6	8164.2	8198.8	8188.0
22.5°	7924.4	7987.9	7962.4	7991.3	7964.1
25°	7691.4	7753.2	7735.0	7752.1	7723.7
27.5°	7465.8	7522.5	7485.1	7505.5	7475.4
30°	7214.1	7262.3	7233.4	7240.2	7203.9
32.5°	6931.2	6988.5	6953.3	6952.2	6913.6
35°	6654.6	6713.0	6671.6	6670.5	6629.1
37.5°	6348.5	6402.9	6354.1	6357.0	6308.8
40°	6036.1	6083.2	6036.1	6033.8	5989.6
42.5°	5697.1	5759.5	5716.4	5721.5	5662.5
45°	5376.8	5434.1	5391.6	5369.5	5336.6
47.5°	5057.7	5082.6	5047.5	5041.8	4995.3
50°	4719.8	4738.5	4711.9	4705.1	4652.9
52.5°	4370.6	4402.9	4368.9	4359.9	4325.3
55°	4029.4	4057.1	4029.9	4023.1	3993.7
57.5°	3685.8	3722.1	3694.3	3687.5	3663.7
60°	3342.3	3353.1	3346.3	3356.5	3333.2
62.5°	3001.1	3026.0	3033.9	3031.1	3013.0
65°	2662.6	2688.7	2689.3	2702.9	2696.1
67.5°	2316.3	2350.3	2359.9	2374.1	2380.3
70°	1990.3	2016.4	2044.7	2053.2	2047.0
72.5°	1662.1	1704.0	1735.8	1743.1	1769.8
75°	1331.0	1370.7	1417.2	1427.4	1439.3
77.5°	1023.8	1076.5	1118.5	1132.1	1146.8
80°	732.4	790.8	832.7	851.5	879.8
82.5°	480.7	540.2	582.8	601.5	636.0
85°	255.1	308.4	350.9	382.1	396.8
87.5°	75.4	120.7	145.1	154.2	167.2
90°	0.0	5.7	6.8	15.3	14.2
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)