

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-L850-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-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

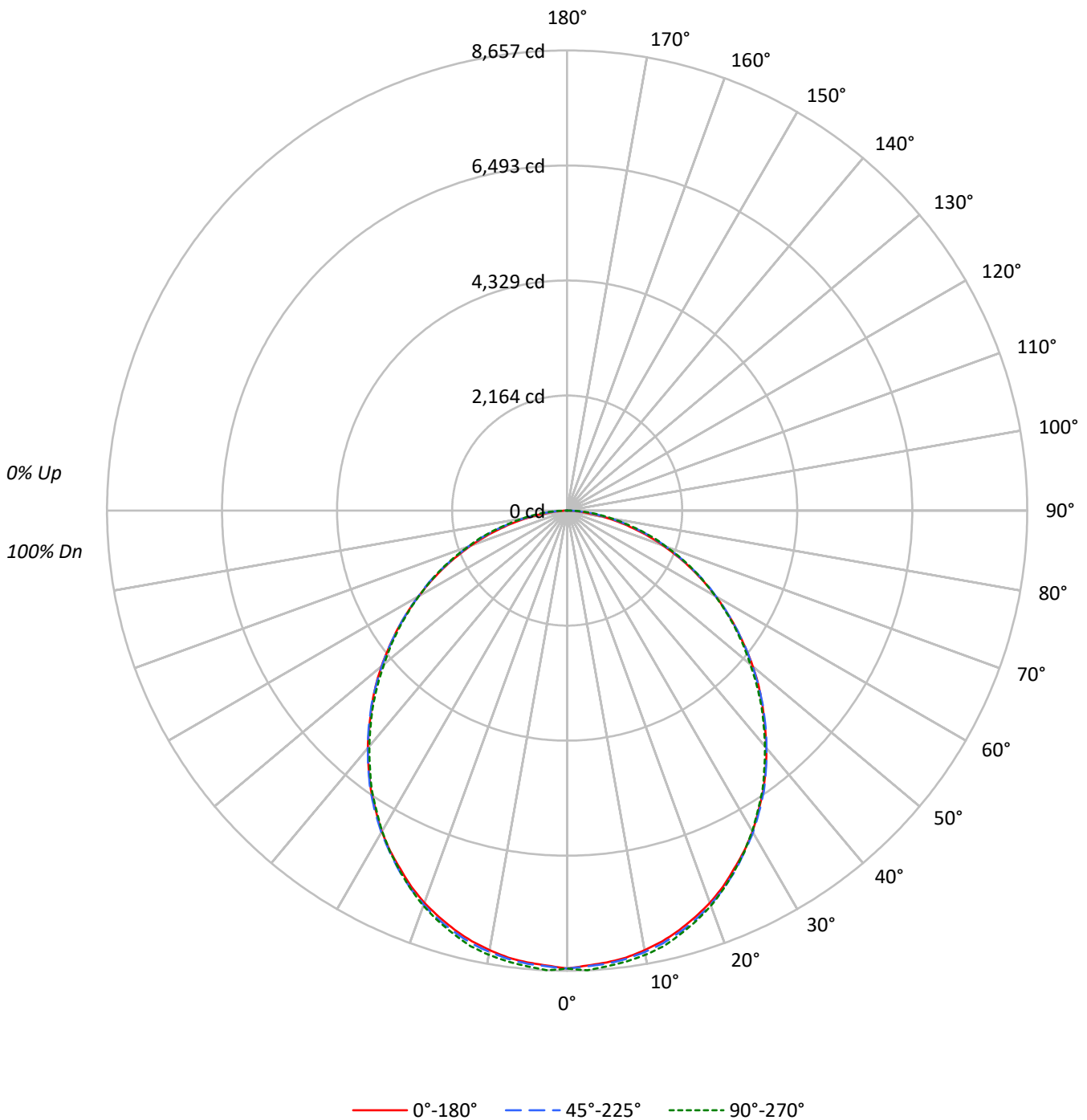
Lumens per Lamp: N/A
Luminaire Lumens: 22504.0 lumens
Efficiency: N/A
Efficacy: 153.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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°	11592	11592	11592
5°	11526	11558	11624
10°	11473	11520	11595
15°	11372	11434	11490
20°	11244	11298	11331
25°	11036	11098	11082
30°	10832	10861	10817
35°	10564	10591	10523
40°	10246	10246	10167
45°	9888	9915	9814
50°	9548	9532	9413
55°	9135	9136	9054
60°	8692	8703	8669
65°	8193	8275	8295
70°	7567	7774	7783
75°	6687	7120	7231
80°	5484	6236	6588
85°	3805	5235	5920



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	814.8	3.6
10°-20°	2317.9	10.3
20°-30°	3444.5	15.3
30°-40°	4027.5	17.9
40°-50°	4015.6	17.8
50°-60°	3484.0	15.5
60°-70°	2573.4	11.4
70°-80°	1440.8	6.4
80°-90°	384.4	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°	6577.2	29.2
0°-40°	10604.7	47.1
0°-60°	18104.3	80.4
0°-90°	22502.8	100.0
90°-120°	1.2	0.0
90°-150°	1.2	0.0
90°-180°	1.0	0.0
0°-180°	22504.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8615	8615	8615	8615	8615	
5°	8534	8587	8558	8595	8606	811
15°	8164	8221	8209	8248	8249	2303
25°	7433	7493	7476	7492	7465	3427
35°	6431	6488	6448	6447	6407	4017
45°	5196	5252	5211	5189	5158	4012
55°	3894	3921	3895	3888	3860	3482
65°	2573	2598	2599	2612	2606	2545
75°	1286	1325	1370	1380	1391	1370
85°	246	298	339	369	384	299
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



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8615.2	8615.2	8615.2	8615.2	8615.2
2.5°	8568.1	8619.0	8583.4	8617.4	8656.8
5°	8533.5	8587.2	8557.6	8595.4	8606.4
7.5°	8483.1	8535.2	8506.7	8544.5	8556.0
10°	8397.7	8454.1	8431.6	8474.4	8486.4
12.5°	8298.0	8351.1	8336.3	8386.2	8394.4
15°	8164.3	8221.3	8208.7	8248.1	8248.6
17.5°	8016.4	8070.0	8060.7	8091.4	8090.3
20°	7852.5	7910.1	7890.3	7923.8	7913.4
22.5°	7658.6	7720.0	7695.3	7723.2	7696.9
25°	7433.4	7493.1	7475.6	7492.0	7464.7
27.5°	7215.4	7270.2	7234.0	7253.7	7224.7
30°	6972.1	7018.7	6990.7	6997.3	6962.3
32.5°	6698.7	6754.1	6720.1	6719.0	6681.8
35°	6431.4	6487.8	6447.8	6446.7	6406.7
37.5°	6135.5	6188.1	6141.0	6143.8	6097.2
40°	5833.7	5879.1	5833.7	5831.5	5788.7
42.5°	5506.0	5566.3	5524.7	5529.6	5472.6
45°	5196.5	5251.8	5210.7	5189.4	5157.6
47.5°	4888.0	4912.2	4878.2	4872.7	4827.8
50°	4561.5	4579.6	4553.8	4547.3	4496.9
52.5°	4224.0	4255.3	4222.4	4213.6	4180.2
55°	3894.2	3921.1	3894.8	3888.2	3859.7
57.5°	3562.2	3597.3	3570.4	3563.9	3540.8
60°	3230.2	3240.6	3234.0	3243.9	3221.4
62.5°	2900.4	2924.5	2932.2	2929.4	2911.9
65°	2573.3	2598.5	2599.1	2612.2	2605.6
67.5°	2238.6	2271.4	2280.8	2294.5	2300.5
70°	1923.6	1948.8	1976.1	1984.4	1978.3
72.5°	1606.3	1646.9	1677.6	1684.7	1710.4
75°	1286.4	1324.7	1369.7	1379.5	1391.0
77.5°	989.4	1040.4	1080.9	1094.1	1108.3
80°	707.8	764.3	804.8	822.9	850.3
82.5°	464.6	522.1	563.2	581.3	614.7
85°	246.5	298.0	339.1	369.3	383.5
87.5°	72.9	116.7	140.3	149.0	161.6
90°	0.0	5.5	6.6	14.8	13.7
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)