

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-L740-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-L740-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

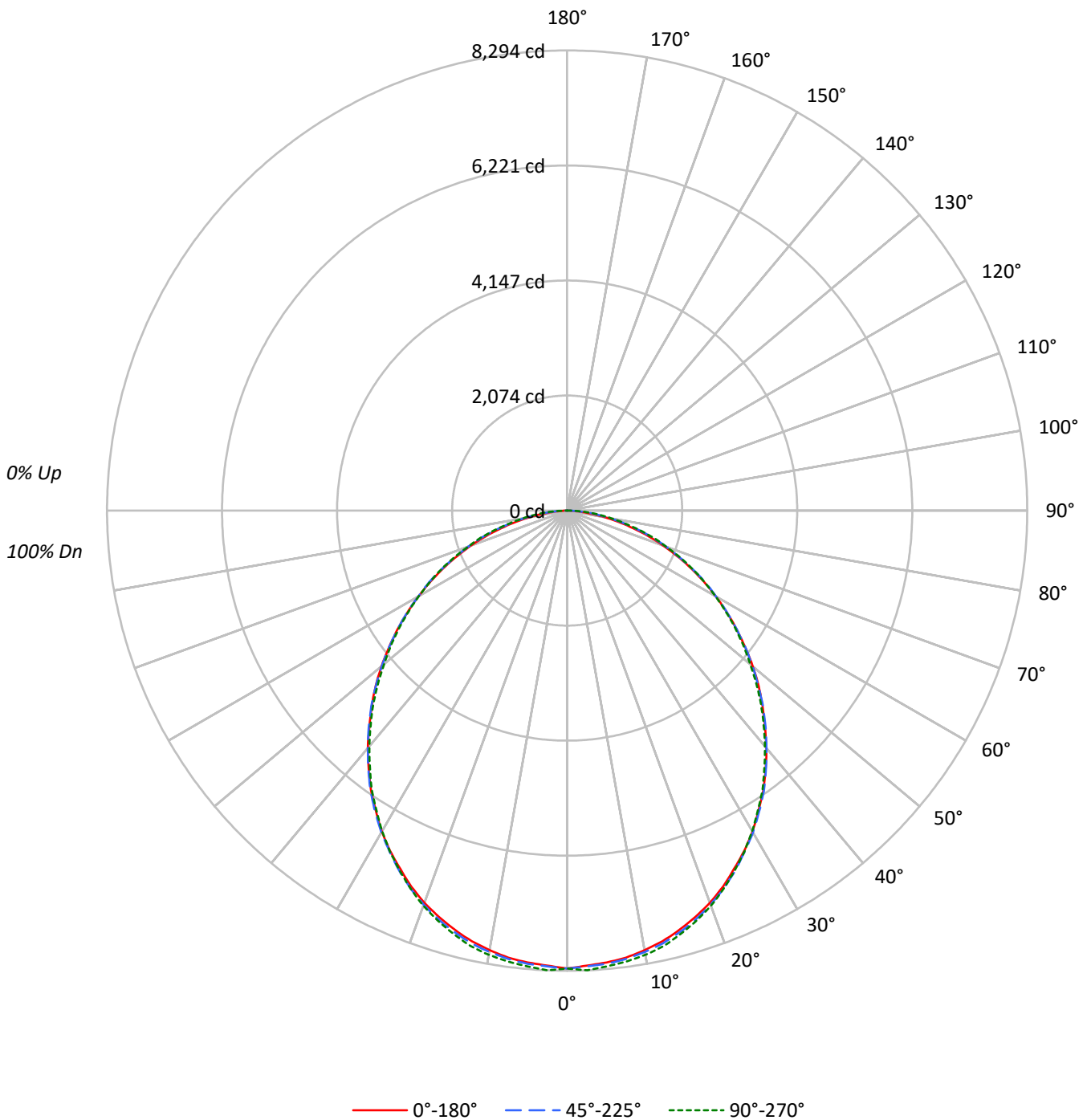
Lumens per Lamp: N/A
Luminaire Lumens: 21560.0 lumens
Efficiency: N/A
Efficacy: 147.4 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	11105	11105	11105
5°	11042	11073	11136
10°	10992	11036	11108
15°	10895	10955	11008
20°	10772	10824	10855
25°	10573	10633	10617
30°	10378	10405	10363
35°	10121	10146	10082
40°	9816	9816	9741
45°	9473	9499	9402
50°	9148	9132	9018
55°	8752	8753	8674
60°	8328	8338	8305
65°	7849	7927	7947
70°	7250	7448	7456
75°	6407	6822	6928
80°	5254	5975	6312
85°	3646	5016	5672



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	780.6	3.6
10°-20°	2220.6	10.3
20°-30°	3300.0	15.3
30°-40°	3858.6	17.9
40°-50°	3847.1	17.8
50°-60°	3337.9	15.5
60°-70°	2465.4	11.4
70°-80°	1380.4	6.4
80°-90°	368.3	1.7
90°-100°	1.1	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°	6301.3	29.2
0°-40°	10159.8	47.1
0°-60°	17344.8	80.4
0°-90°	21558.9	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	21560.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8254	8254	8254	8254	8254	
5°	8176	8227	8199	8235	8245	777
15°	7822	7876	7864	7902	7903	2206
25°	7122	7179	7162	7178	7152	3283
35°	6162	6216	6177	6176	6138	3849
45°	4978	5032	4992	4972	4941	3843
55°	3731	3757	3731	3725	3698	3336
65°	2465	2490	2490	2503	2496	2438
75°	1232	1269	1312	1322	1333	1313
85°	236	286	325	354	367	287
90°	0	5	6	14	13	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°	8253.8	8253.8	8253.8	8253.8	8253.8
2.5°	8208.6	8257.5	8223.3	8255.9	8293.7
5°	8175.6	8227.0	8198.7	8234.9	8245.4
7.5°	8127.3	8177.1	8149.9	8186.1	8197.1
10°	8045.4	8099.5	8077.9	8118.9	8130.4
12.5°	7949.9	8000.8	7986.6	8034.4	8042.2
15°	7821.8	7876.4	7864.3	7902.1	7902.6
17.5°	7680.1	7731.5	7722.6	7752.0	7750.9
20°	7523.1	7578.3	7559.4	7591.4	7581.4
22.5°	7337.3	7396.1	7372.5	7399.3	7374.1
25°	7121.6	7178.8	7162.0	7177.8	7151.5
27.5°	6912.7	6965.2	6930.5	6949.4	6921.6
30°	6679.7	6724.3	6697.5	6703.8	6670.2
32.5°	6417.7	6470.8	6438.2	6437.2	6401.5
35°	6161.6	6215.7	6177.3	6176.3	6138.0
37.5°	5878.2	5928.5	5883.4	5886.0	5841.4
40°	5588.9	5632.5	5588.9	5586.8	5545.9
42.5°	5275.1	5332.8	5292.9	5297.6	5243.1
45°	4978.5	5031.5	4992.2	4971.7	4941.2
47.5°	4683.0	4706.1	4673.6	4668.3	4625.3
50°	4370.2	4387.5	4362.8	4356.5	4308.2
52.5°	4046.8	4076.8	4045.3	4036.9	4004.9
55°	3730.9	3756.6	3731.4	3725.1	3697.8
57.5°	3412.8	3446.4	3420.7	3414.4	3392.3
60°	3094.7	3104.7	3098.4	3107.8	3086.3
62.5°	2778.7	2801.8	2809.2	2806.5	2789.8
65°	2465.4	2489.5	2490.0	2502.6	2496.3
67.5°	2144.7	2176.2	2185.1	2198.2	2204.0
70°	1842.9	1867.0	1893.3	1901.1	1895.4
72.5°	1539.0	1577.8	1607.2	1614.0	1638.7
75°	1232.4	1269.2	1312.2	1321.7	1332.7
77.5°	947.9	996.8	1035.6	1048.2	1061.8
80°	678.1	732.2	771.1	788.4	814.6
82.5°	445.1	500.2	539.6	556.9	588.9
85°	236.2	285.5	324.9	353.8	367.4
87.5°	69.8	111.8	134.4	142.8	154.8
90°	0.0	5.2	6.3	14.2	13.1
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)