

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-L835-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-L835-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

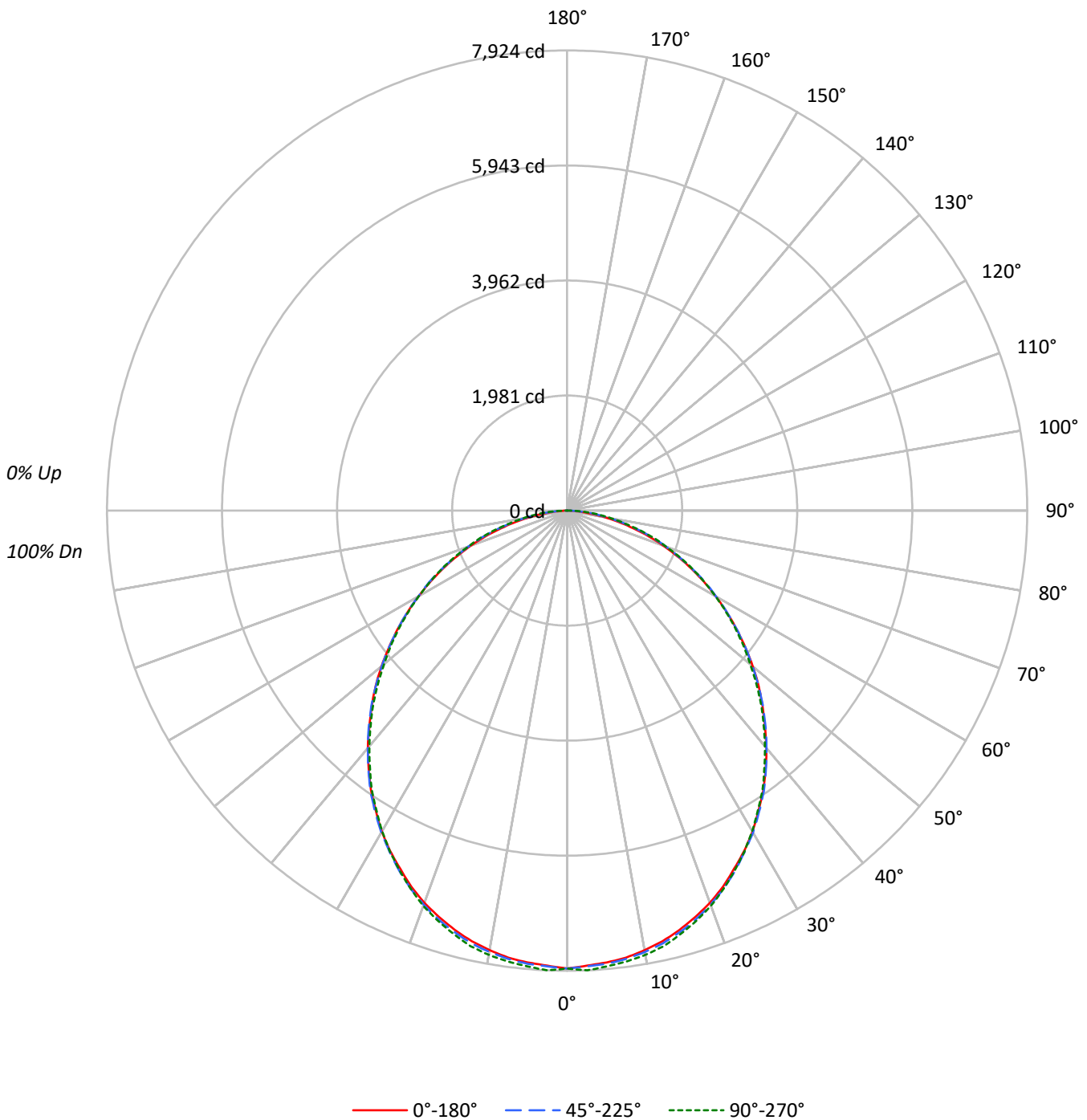
Lumens per Lamp: N/A
Luminaire Lumens: 20599.0 lumens
Efficiency: N/A
Efficacy: 140.8 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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
RW	70	50	30	10	70	50	30	10	50	30	10	50	30	10	50	30	10
RCR																	
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102
1	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10610	10610	10610
5°	10550	10580	10640
10°	10502	10545	10613
15°	10410	10466	10517
20°	10292	10341	10372
25°	10101	10159	10144
30°	9915	9942	9901
35°	9670	9694	9633
40°	9379	9379	9307
45°	9051	9076	8983
50°	8740	8725	8616
55°	8362	8363	8288
60°	7957	7966	7935
65°	7499	7574	7593
70°	6927	7116	7124
75°	6121	6517	6619
80°	5020	5708	6031
85°	3484	4792	5419



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	745.8	3.6
10°-20°	2121.7	10.3
20°-30°	3152.9	15.3
30°-40°	3686.6	17.9
40°-50°	3675.6	17.8
50°-60°	3189.1	15.5
60°-70°	2355.5	11.4
70°-80°	1318.8	6.4
80°-90°	351.9	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°	6020.4	29.2
0°-40°	9707.0	47.1
0°-60°	16571.7	80.4
0°-90°	20598.0	100.0
90°-120°	1.1	0.0
90°-150°	1.1	0.0
90°-180°	1.0	0.0
0°-180°	20599.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7886	7886	7886	7886	7886	
5°	7811	7860	7833	7868	7878	742
15°	7473	7525	7514	7550	7550	2108
25°	6804	6859	6843	6858	6833	3137
35°	5887	5939	5902	5901	5864	3677
45°	4757	4807	4770	4750	4721	3672
55°	3565	3589	3565	3559	3533	3187
65°	2356	2379	2379	2391	2385	2330
75°	1178	1213	1254	1263	1273	1254
85°	226	273	310	338	351	274
90°	0	5	6	14	12	9
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°	7885.9	7885.9	7885.9	7885.9	7885.9
2.5°	7842.8	7889.4	7856.8	7887.9	7924.0
5°	7811.2	7860.3	7833.2	7867.8	7877.9
7.5°	7765.0	7812.7	7786.6	7821.2	7831.7
10°	7686.8	7738.4	7717.9	7757.0	7768.0
12.5°	7595.5	7644.2	7630.6	7676.3	7683.8
15°	7473.2	7525.3	7513.8	7549.9	7550.4
17.5°	7337.8	7386.9	7378.4	7406.5	7405.5
20°	7187.8	7240.5	7222.4	7253.0	7243.5
22.5°	7010.3	7066.4	7043.9	7069.5	7045.4
25°	6804.2	6858.8	6842.8	6857.8	6832.8
27.5°	6604.6	6654.7	6621.6	6639.7	6613.1
30°	6381.9	6424.5	6399.0	6405.0	6372.9
32.5°	6131.7	6182.3	6151.2	6150.2	6116.1
35°	5887.0	5938.6	5902.0	5901.0	5864.4
37.5°	5616.2	5664.3	5621.2	5623.7	5581.0
40°	5339.8	5381.5	5339.8	5337.8	5298.7
42.5°	5039.9	5095.1	5057.0	5061.5	5009.4
45°	4756.6	4807.3	4769.6	4750.1	4721.0
47.5°	4474.3	4496.3	4465.2	4460.2	4419.1
50°	4175.4	4191.9	4168.4	4162.3	4116.2
52.5°	3866.5	3895.0	3865.0	3856.9	3826.3
55°	3564.6	3589.1	3565.1	3559.1	3533.0
57.5°	3260.7	3292.8	3268.2	3262.2	3241.1
60°	2956.8	2966.3	2960.3	2969.3	2948.7
62.5°	2654.9	2676.9	2684.0	2681.4	2665.4
65°	2355.5	2378.6	2379.1	2391.1	2385.1
67.5°	2049.1	2079.2	2087.7	2100.2	2105.7
70°	1760.7	1783.8	1808.9	1816.4	1810.9
72.5°	1470.4	1507.5	1535.6	1542.1	1565.6
75°	1177.5	1212.6	1253.7	1262.7	1273.3
77.5°	905.7	952.3	989.4	1001.5	1014.5
80°	647.9	699.6	736.7	753.2	778.3
82.5°	425.3	477.9	515.5	532.1	562.7
85°	225.7	272.8	310.4	338.0	351.0
87.5°	66.7	106.8	128.4	136.4	147.9
90°	0.0	5.0	6.0	13.5	12.5
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)