

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-LD5-24SE-W-FLI-UNV-L735-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-LD5-24SE-W-FLI-UNV-L735-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

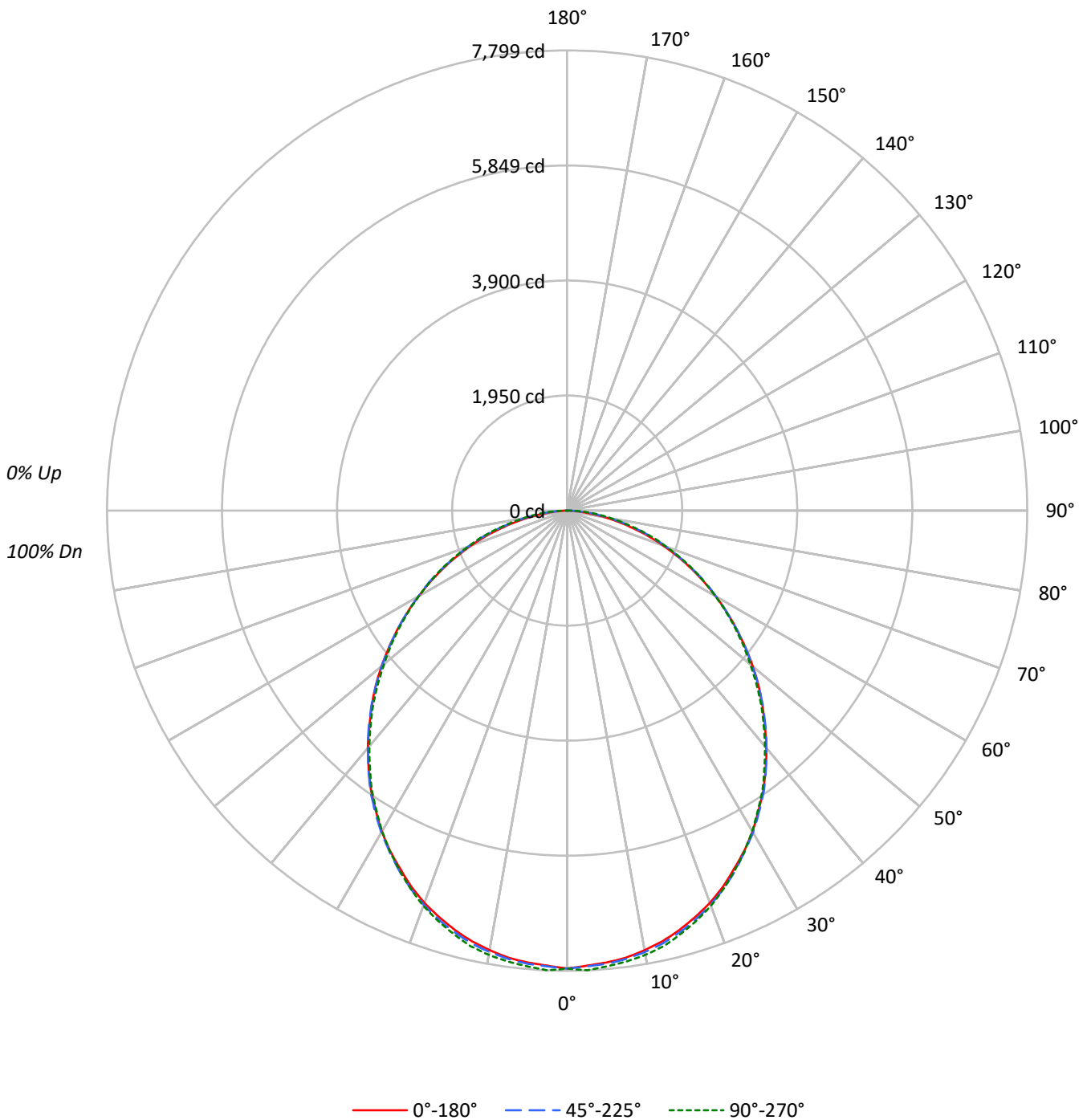
Lumens per Lamp: N/A
Luminaire Lumens: 20274.0 lumens
Efficiency: N/A
Efficacy: 131.6 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 154
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°	10443	10443	10443
5°	10384	10413	10472
10°	10336	10378	10446
15°	10245	10301	10351
20°	10129	10178	10208
25°	9942	9998	9984
30°	9759	9785	9745
35°	9517	9541	9481
40°	9231	9231	9160
45°	8908	8933	8841
50°	8602	8588	8480
55°	8230	8231	8157
60°	7831	7840	7810
65°	7381	7455	7473
70°	6817	7004	7011
75°	6025	6415	6515
80°	4941	5618	5935
85°	3429	4716	5334



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	734.0	3.6
10°-20°	2088.2	10.3
20°-30°	3103.2	15.3
30°-40°	3628.4	17.9
40°-50°	3617.6	17.8
50°-60°	3138.8	15.5
60°-70°	2318.3	11.4
70°-80°	1298.0	6.4
80°-90°	346.3	1.7
90°-100°	1.0	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°	5925.4	29.2
0°-40°	9553.8	47.1
0°-60°	16310.2	80.4
0°-90°	20272.9	100.0
90°-120°	1.0	0.0
90°-150°	1.0	0.0
90°-180°	1.0	0.0
0°-180°	20274.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7762	7762	7762	7762	7762	
5°	7688	7736	7710	7744	7754	730
15°	7355	7407	7395	7431	7431	2074
25°	6697	6751	6735	6750	6725	3087
35°	5794	5845	5809	5808	5772	3619
45°	4682	4731	4694	4675	4646	3614
55°	3508	3532	3509	3503	3477	3137
65°	2318	2341	2342	2353	2347	2293
75°	1159	1194	1234	1243	1253	1234
85°	222	268	306	333	346	270
90°	0	5	6	13	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°	7761.5	7761.5	7761.5	7761.5	7761.5
2.5°	7719.0	7764.9	7732.8	7763.4	7799.0
5°	7687.9	7736.3	7709.6	7743.7	7753.6
7.5°	7642.5	7689.4	7663.7	7697.8	7708.2
10°	7565.5	7616.3	7596.1	7634.6	7645.5
12.5°	7475.7	7523.6	7510.2	7555.1	7562.5
15°	7355.2	7406.6	7395.2	7430.8	7431.3
17.5°	7222.0	7270.4	7262.0	7289.6	7288.6
20°	7074.4	7126.2	7108.5	7138.6	7129.2
22.5°	6899.7	6955.0	6932.7	6957.9	6934.2
25°	6696.8	6750.6	6734.8	6749.6	6725.0
27.5°	6500.4	6549.7	6517.2	6534.9	6508.8
30°	6281.2	6323.2	6298.0	6303.9	6272.3
32.5°	6034.9	6084.8	6054.2	6053.2	6019.6
35°	5794.1	5844.9	5808.9	5807.9	5771.9
37.5°	5527.5	5574.9	5532.5	5534.9	5493.0
40°	5255.6	5296.5	5255.6	5253.6	5215.1
42.5°	4960.4	5014.7	4977.2	4981.6	4930.3
45°	4681.6	4731.4	4694.4	4675.1	4646.5
47.5°	4403.7	4425.4	4394.8	4389.9	4349.4
50°	4109.5	4125.8	4102.6	4096.7	4051.3
52.5°	3805.5	3833.6	3804.0	3796.1	3766.0
55°	3508.3	3532.5	3508.8	3502.9	3477.2
57.5°	3209.2	3240.8	3216.6	3210.7	3190.0
60°	2910.1	2919.5	2913.6	2922.5	2902.2
62.5°	2613.0	2634.7	2641.6	2639.1	2623.3
65°	2318.3	2341.0	2341.5	2353.4	2347.4
67.5°	2016.7	2046.4	2054.8	2067.1	2072.5
70°	1732.9	1755.6	1780.3	1787.7	1782.3
72.5°	1447.2	1483.7	1511.3	1517.7	1540.9
75°	1158.9	1193.5	1233.9	1242.8	1253.2
77.5°	891.4	937.3	973.8	985.7	998.5
80°	637.7	688.5	725.1	741.3	766.0
82.5°	418.6	470.4	507.4	523.7	553.8
85°	222.1	268.5	305.5	332.7	345.5
87.5°	65.6	105.1	126.4	134.3	145.6
90°	0.0	4.9	5.9	13.3	12.3
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)