

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-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-LD5-24SE-W-FLI-UNV-L835-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

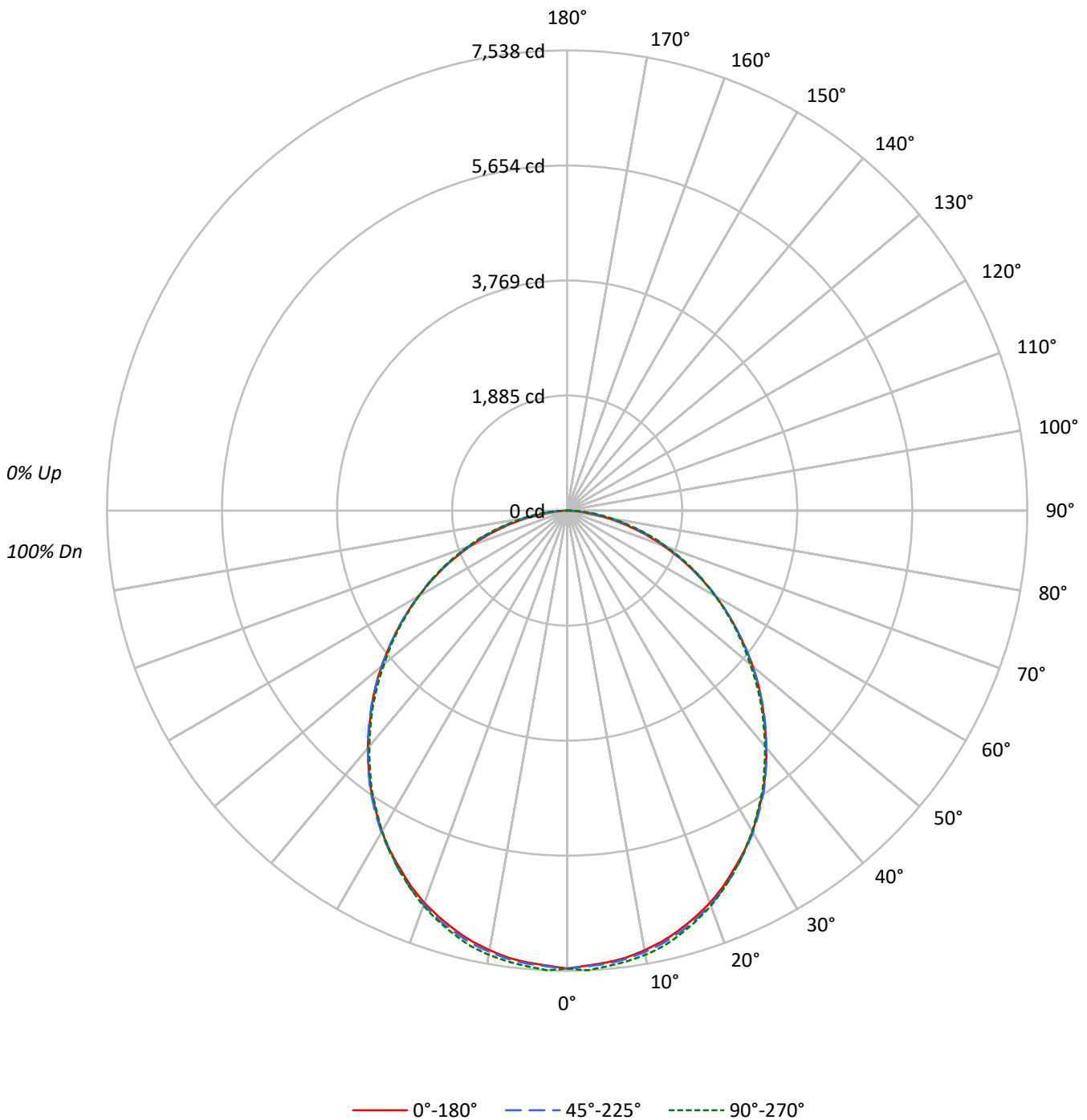
Lumens per Lamp: N/A
Luminaire Lumens: 19595.0 lumens
Efficiency: N/A
Efficacy: 127.2 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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°	10093	10093	10093
5°	10036	10064	10121
10°	9990	10031	10096
15°	9902	9956	10005
20°	9790	9837	9866
25°	9609	9664	9649
30°	9432	9457	9419
35°	9198	9222	9163
40°	8922	8922	8853
45°	8610	8633	8545
50°	8314	8300	8196
55°	7954	7955	7884
60°	7569	7578	7548
65°	7134	7205	7223
70°	6589	6769	6777
75°	5823	6200	6297
80°	4775	5430	5737
85°	3314	4559	5155



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	709.5	3.6
10°-20°	2018.3	10.3
20°-30°	2999.3	15.3
30°-40°	3506.9	17.9
40°-50°	3496.5	17.8
50°-60°	3033.7	15.5
60°-70°	2240.7	11.4
70°-80°	1254.5	6.4
80°-90°	334.7	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°	5727.0	29.2
0°-40°	9233.9	47.1
0°-60°	15764.0	80.4
0°-90°	19594.0	100.0
90°-120°	1.0	0.0
90°-150°	1.0	0.0
90°-180°	1.0	0.0
0°-180°	19595.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7502	7502	7502	7502	7502	
5°	7430	7477	7451	7484	7494	706
15°	7109	7158	7148	7182	7182	2005
25°	6472	6524	6509	6524	6500	2984
35°	5600	5649	5614	5613	5579	3498
45°	4525	4573	4537	4519	4491	3493
55°	3391	3414	3391	3386	3361	3032
65°	2241	2263	2263	2274	2269	2216
75°	1120	1154	1193	1201	1211	1193
85°	215	260	295	322	334	261
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°	7501.5	7501.5	7501.5	7501.5	7501.5
2.5°	7460.5	7504.9	7473.9	7503.4	7537.8
5°	7430.4	7477.2	7451.4	7484.3	7493.9
7.5°	7386.6	7431.9	7407.1	7440.0	7450.0
10°	7312.1	7361.3	7341.7	7378.9	7389.4
12.5°	7225.3	7271.6	7258.7	7302.1	7309.3
15°	7108.9	7158.5	7147.6	7181.9	7182.4
17.5°	6980.1	7026.9	7018.8	7045.5	7044.5
20°	6837.5	6887.6	6870.4	6899.5	6890.4
22.5°	6668.6	6722.0	6700.6	6724.9	6702.0
25°	6472.5	6524.5	6509.3	6523.6	6499.7
27.5°	6282.7	6330.4	6298.9	6316.1	6290.8
30°	6070.9	6111.4	6087.1	6092.8	6062.3
32.5°	5832.8	5881.0	5851.4	5850.5	5818.0
35°	5600.0	5649.2	5614.3	5613.4	5578.6
37.5°	5342.4	5388.2	5347.2	5349.6	5309.0
40°	5079.6	5119.2	5079.6	5077.7	5040.4
42.5°	4794.3	4846.8	4810.5	4814.8	4765.2
45°	4524.8	4572.9	4537.2	4518.6	4490.9
47.5°	4256.2	4277.2	4247.6	4242.8	4203.7
50°	3971.9	3987.6	3965.2	3959.5	3915.6
52.5°	3678.0	3705.2	3676.6	3668.9	3639.8
55°	3390.8	3414.2	3391.3	3385.6	3360.8
57.5°	3101.7	3132.3	3108.9	3103.2	3083.1
60°	2812.7	2821.7	2816.0	2824.6	2805.0
62.5°	2525.5	2546.5	2553.1	2550.8	2535.5
65°	2240.7	2262.6	2263.1	2274.5	2268.8
67.5°	1949.2	1977.8	1985.9	1997.9	2003.1
70°	1674.9	1696.8	1720.7	1727.9	1722.6
72.5°	1398.7	1434.0	1460.7	1466.9	1489.3
75°	1120.1	1153.5	1192.6	1201.2	1211.2
77.5°	861.5	905.9	941.2	952.7	965.1
80°	616.3	665.5	700.8	716.5	740.4
82.5°	404.5	454.6	490.4	506.1	535.2
85°	214.7	259.5	295.3	321.5	333.9
87.5°	63.4	101.6	122.1	129.8	140.7
90°	0.0	4.8	5.7	12.9	11.9
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)