

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-UNV-L840-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 (P23760)
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-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

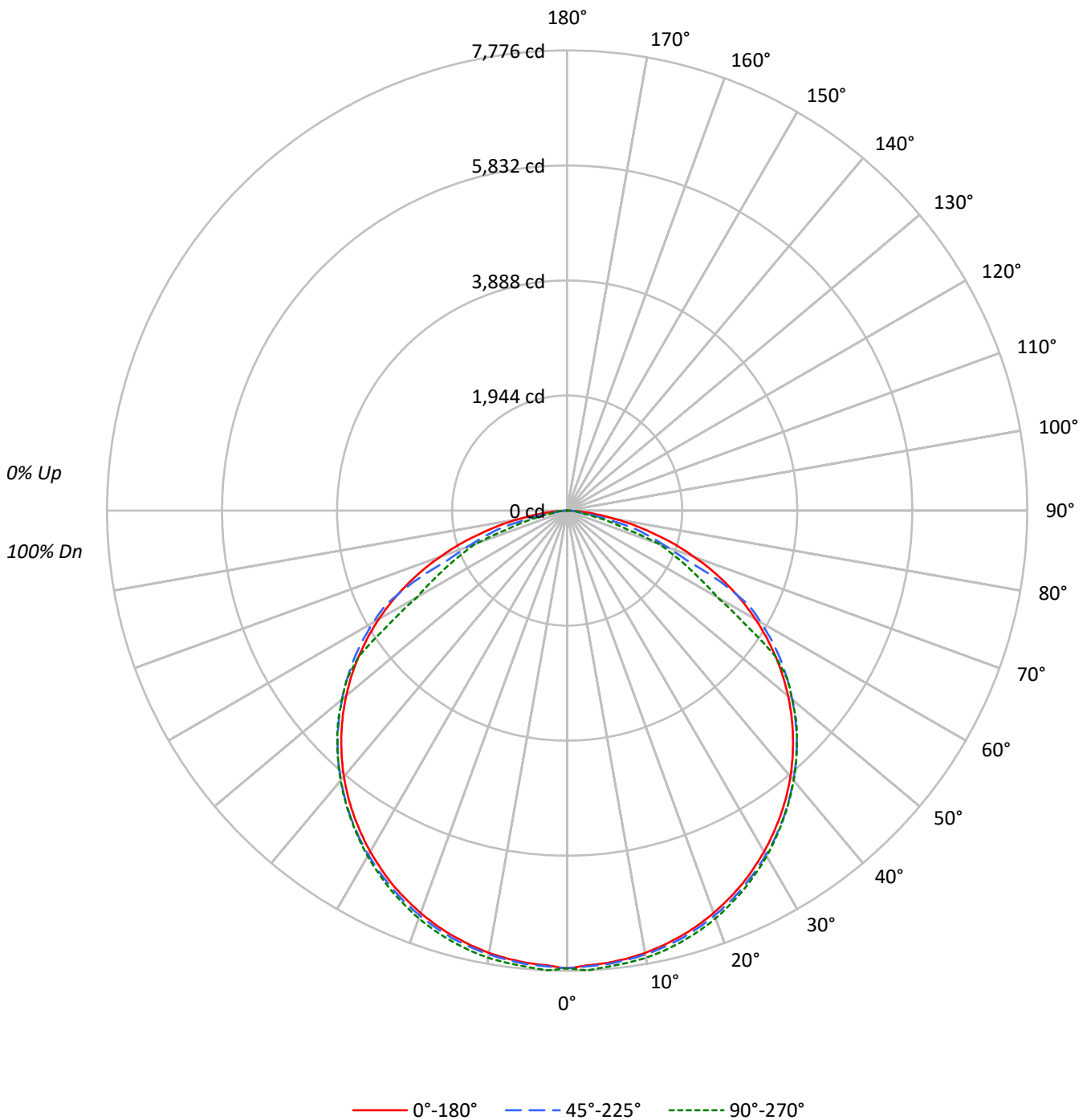
Lumens per Lamp: N/A
Luminaire Lumens: 22330.0 lumens
Efficiency: N/A
Efficacy: 145.0 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	105	101	97	107	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	10407	10407	10407
5°	10364	10393	10452
10°	10370	10407	10485
15°	10367	10423	10495
20°	10362	10429	10502
25°	10358	10433	10491
30°	10340	10441	10480
35°	10327	10446	10460
40°	10309	10445	10462
45°	10270	10441	10453
50°	10208	10397	10395
55°	10089	10342	10085
60°	9902	10189	7890
65°	9571	9170	7109
70°	8967	7056	6552
75°	7940	6151	4083
80°	6539	3622	1825
85°	4309	2218	2391



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	734.0	3.3
10°-20°	2117.7	9.5
20°-30°	3246.6	14.5
30°-40°	3981.7	17.8
40°-50°	4227.9	18.9
50°-60°	3861.7	17.3
60°-70°	2689.2	12.0
70°-80°	1254.3	5.6
80°-90°	217.0	1.0
90°-100°	0.0	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°	6098.3	27.3
0°-40°	10080.0	45.1
0°-60°	18169.5	81.4
0°-90°	22330.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22330.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7735	7735	7735	7735	7735	
5°	7674	7728	7695	7732	7739	730
15°	7443	7495	7483	7528	7535	2102
25°	6977	7038	7027	7079	7066	3215
35°	6287	6360	6360	6402	6368	3934
45°	5397	5479	5487	5522	5494	4162
55°	4301	4387	4409	4416	4299	3841
65°	3006	3099	2880	2290	2233	2966
75°	1527	1624	1183	820	786	1633
85°	279	184	144	154	155	361
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7734.9	7734.9	7734.9	7734.9	7734.9
2.5°	7694.1	7743.3	7710.8	7746.0	7775.7
5°	7673.7	7727.5	7695.0	7732.1	7738.6
7.5°	7640.3	7691.3	7661.6	7702.5	7712.7
10°	7590.2	7640.3	7617.1	7665.4	7674.6
12.5°	7522.5	7573.6	7555.9	7608.8	7615.3
15°	7442.8	7494.7	7482.7	7528.1	7534.6
17.5°	7349.1	7402.9	7389.0	7437.2	7441.9
20°	7236.9	7295.4	7283.3	7339.9	7334.3
22.5°	7110.8	7172.9	7163.7	7220.2	7203.5
25°	6977.3	7038.5	7027.4	7079.3	7066.3
27.5°	6820.6	6888.3	6878.1	6928.1	6907.7
30°	6655.5	6724.1	6720.4	6765.8	6745.4
32.5°	6477.4	6550.7	6547.0	6591.5	6560.0
35°	6287.3	6359.7	6359.7	6402.3	6368.0
37.5°	6086.1	6159.4	6160.3	6201.1	6168.6
40°	5869.1	5942.4	5947.0	5986.0	5956.3
42.5°	5641.0	5720.7	5724.4	5759.7	5731.9
45°	5397.1	5478.7	5487.0	5522.3	5493.5
47.5°	5142.1	5224.6	5232.0	5270.0	5249.6
50°	4876.9	4956.6	4966.8	4998.3	4965.9
52.5°	4596.8	4678.4	4692.3	4711.8	4697.0
55°	4301.0	4387.2	4408.6	4416.0	4299.1
57.5°	3995.0	4083.1	4103.5	3932.8	3557.3
60°	3679.7	3766.8	3786.3	3199.3	2932.2
62.5°	3351.4	3436.7	3458.0	2651.3	2565.9
65°	3006.4	3099.2	2880.3	2290.5	2233.0
67.5°	2652.2	2747.7	2178.3	1963.2	1928.9
70°	2279.4	2375.8	1793.5	1673.8	1665.5
72.5°	1921.4	1992.8	1471.7	1268.6	1068.3
75°	1527.3	1623.8	1183.3	819.8	785.5
77.5°	1184.2	1023.8	714.0	600.9	473.9
80°	843.9	684.4	467.4	249.5	235.5
82.5°	535.1	447.0	183.6	188.2	196.6
85°	279.1	183.6	143.7	153.9	154.9
87.5°	90.0	78.8	86.2	85.3	84.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)