

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-A-UNV-L850-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 (P23761)
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-A-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

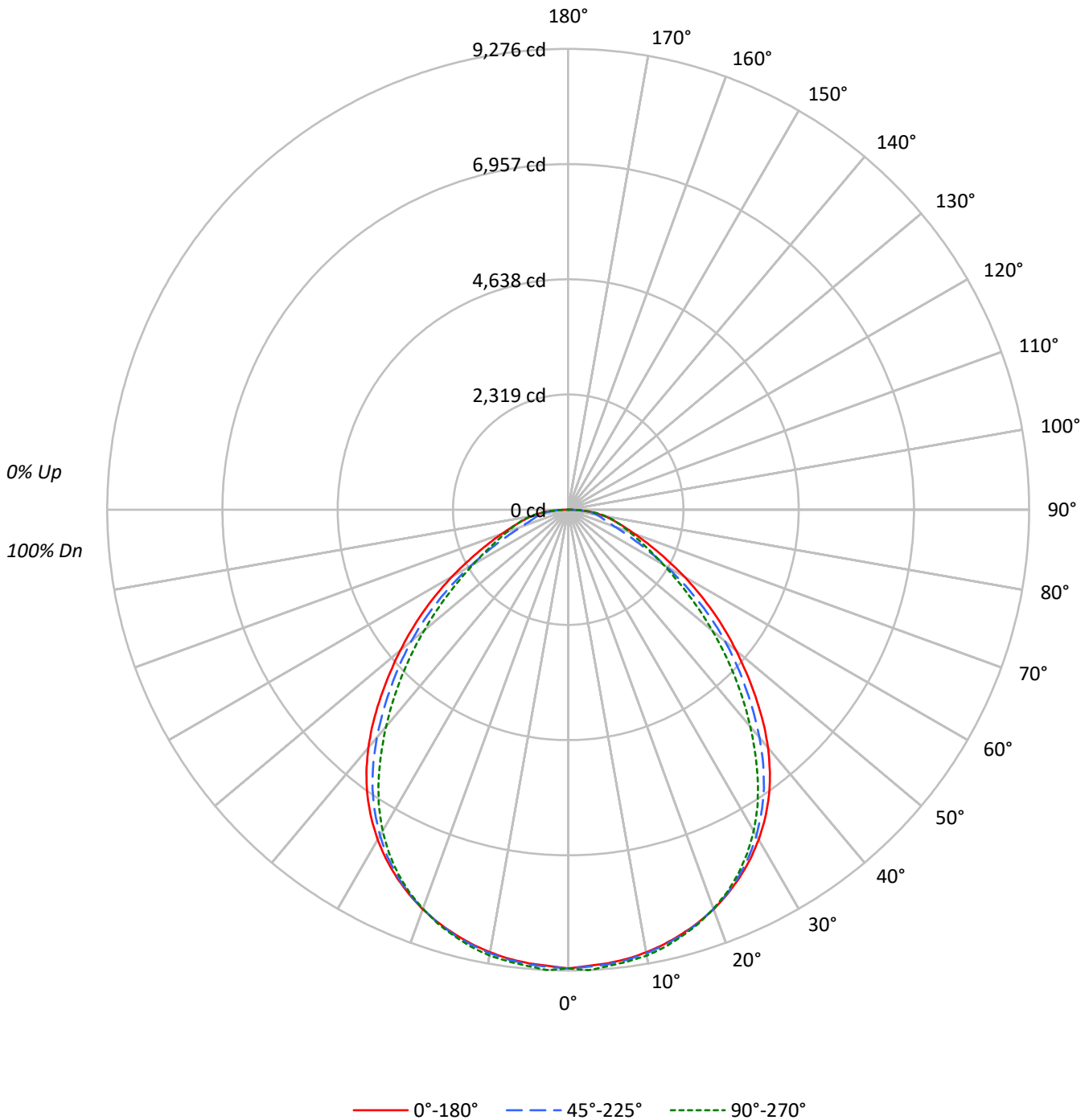
Lumens per Lamp: N/A
Luminaire Lumens: 21207.0 lumens
Efficiency: N/A
Efficacy: 137.7 lumens/watt
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	110	105	101	98	107	103	100	96	99	96	93	95	93	90	91	90	88	86
2	101	93	87	82	98	91	86	81	88	83	79	85	81	77	82	78	75	73
3	93	83	75	70	90	81	75	69	79	73	68	76	71	67	73	69	65	63
4	85	74	66	60	83	73	65	60	71	64	59	68	63	58	66	61	57	55
5	79	67	59	52	77	66	58	52	64	57	52	62	56	51	60	55	51	49
6	73	61	52	46	72	60	52	46	58	51	46	56	50	45	55	49	45	43
7	68	55	47	41	67	55	47	41	53	46	41	52	45	41	50	45	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	37	47	41	36	35
9	60	47	39	34	58	46	39	34	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	36	31	42	35	31	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12421	12421	12421
5°	12377	12405	12456
10°	12360	12388	12451
15°	12318	12343	12372
20°	12254	12245	12236
25°	12121	12079	12011
30°	11912	11768	11596
35°	11565	11275	10928
40°	10990	10518	10014
45°	10153	9587	9006
50°	9229	8632	7922
55°	8299	7473	6848
60°	7262	6108	5942
65°	6261	4803	5363
70°	5583	3920	5169
75°	5347	3827	5402
80°	5784	4526	6018
85°	6493	5448	6558



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	874.9	4.1
10°-20°	2504.0	11.8
20°-30°	3745.8	17.7
30°-40°	4273.6	20.2
40°-50°	3890.2	18.3
50°-60°	2856.5	13.5
60°-70°	1686.7	8.0
70°-80°	966.6	4.6
80°-90°	408.7	1.9
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°	7124.8	33.6
0°-40°	11398.4	53.7
0°-60°	18145.1	85.6
0°-90°	21207.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21207.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9232	9232	9232	9232	9232	
5°	9164	9221	9185	9221	9222	871
15°	8843	8892	8861	8892	8882	2495
25°	8165	8194	8136	8133	8091	3758
35°	7041	7007	6864	6747	6653	4387
45°	5336	5305	5038	4812	4733	4112
55°	3538	3374	3186	2955	2919	3164
65°	1967	1717	1509	1614	1685	1979
75°	1029	882	736	960	1039	1109
85°	421	388	353	416	425	440
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9231.8	9231.8	9231.8	9231.8	9231.8
2.5°	9189.1	9242.2	9208.9	9245.3	9276.5
5°	9164.1	9221.4	9184.9	9221.4	9222.4
7.5°	9118.3	9171.4	9136.0	9175.5	9171.4
10°	9046.4	9099.5	9067.3	9110.0	9113.1
12.5°	8954.8	9005.8	8972.5	9021.5	9013.1
15°	8843.4	8892.4	8861.1	8892.4	8881.9
17.5°	8712.2	8757.0	8716.4	8750.8	8733.1
20°	8558.1	8595.6	8551.9	8584.2	8545.7
22.5°	8373.9	8407.2	8361.4	8379.1	8339.5
25°	8164.6	8193.8	8136.5	8133.4	8090.7
27.5°	7931.4	7947.0	7874.1	7849.1	7800.2
30°	7666.9	7671.1	7574.3	7527.4	7463.9
32.5°	7370.2	7359.8	7235.9	7166.1	7088.1
35°	7041.2	7006.9	6864.2	6746.6	6652.9
37.5°	6669.5	6615.4	6444.6	6270.8	6181.2
40°	6257.2	6193.7	5988.6	5773.1	5701.3
42.5°	5808.5	5754.4	5512.8	5287.9	5217.1
45°	5335.8	5304.6	5038.1	4812.1	4733.0
47.5°	4863.2	4840.2	4580.0	4349.9	4254.1
50°	4409.2	4359.2	4123.9	3872.0	3784.5
52.5°	3968.8	3866.8	3659.6	3401.4	3336.8
55°	3537.8	3374.3	3185.9	2954.7	2919.3
57.5°	3110.9	2899.6	2716.3	2543.5	2542.5
60°	2698.6	2457.1	2269.7	2179.1	2208.3
62.5°	2312.4	2064.6	1861.6	1867.8	1920.9
65°	1966.7	1716.8	1508.6	1613.8	1684.6
67.5°	1670.0	1431.6	1220.2	1415.9	1483.6
70°	1419.1	1203.6	996.4	1241.0	1313.9
72.5°	1207.7	1026.6	840.2	1095.3	1169.2
75°	1028.6	881.8	736.1	959.9	1039.1
77.5°	882.9	752.7	660.1	830.8	913.1
80°	746.5	632.0	584.1	705.9	776.7
82.5°	591.4	512.2	484.1	573.7	610.1
85°	420.6	388.3	352.9	416.5	424.8
87.5°	231.1	239.5	197.8	239.5	240.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)