

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-AI-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 (P23765)
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-AI-UNV-L840-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

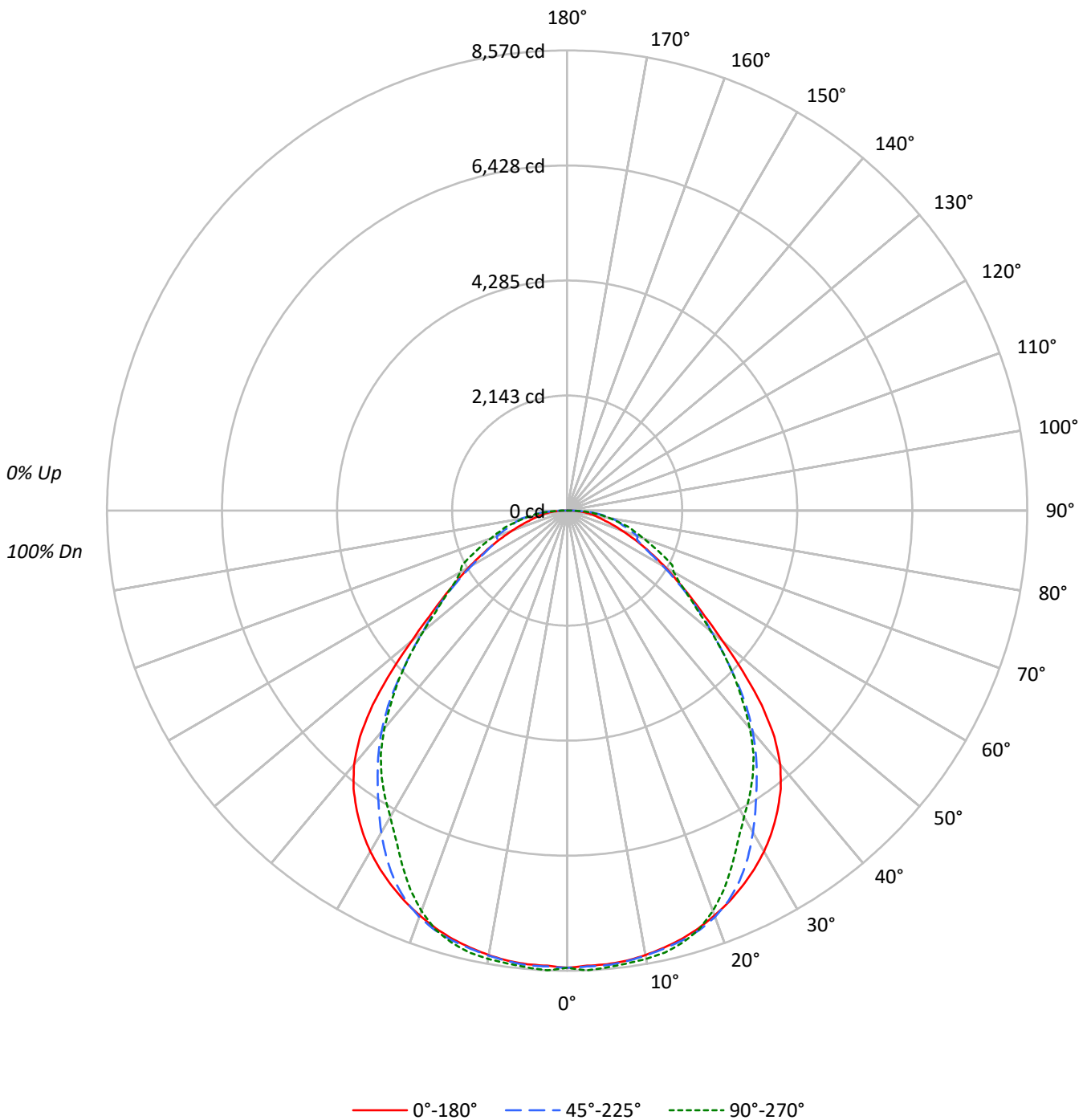
Lumens per Lamp: N/A
Luminaire Lumens: 19706.0 lumens
Efficiency: N/A
Efficacy: 128.0 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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					100			
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	11455	11455	11455
5°	11454	11479	11535
10°	11483	11497	11582
15°	11500	11543	11600
20°	11489	11532	11361
25°	11460	11288	10797
30°	11392	10756	10231
35°	11221	10109	9898
40°	10845	9452	9296
45°	9748	8440	8409
50°	7906	7352	7301
55°	6565	6443	6441
60°	5684	5518	6169
65°	4926	4896	6218
70°	4247	5492	5928
75°	3809	5628	6180
80°	3959	6626	6200
85°	4494	7636	7084



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	810.6	4.1
10°-20°	2341.1	11.9
20°-30°	3477.0	17.6
30°-40°	3947.4	20.0
40°-50°	3528.8	17.9
50°-60°	2439.8	12.4
60°-70°	1609.9	8.2
70°-80°	1086.1	5.5
80°-90°	465.2	2.4
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°	6628.7	33.6
0°-40°	10576.1	53.7
0°-60°	16544.7	84.0
0°-90°	19706.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	19706.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8514	8514	8514	8514	8514	
5°	8481	8533	8499	8534	8541	807
15°	8256	8296	8287	8333	8328	2330
25°	7719	7792	7604	7377	7273	3557
35°	6831	6688	6155	6065	6026	4260
45°	5123	4689	4436	4469	4419	3896
55°	2799	2555	2747	2708	2746	2542
65°	1547	1374	1538	1798	1953	1544
75°	733	922	1083	1157	1189	800
85°	291	405	495	498	459	304
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8513.6	8513.6	8513.6	8513.6	8513.6
2.5°	8484.7	8537.7	8498.2	8534.8	8570.5
5°	8480.8	8532.9	8499.1	8533.8	8540.6
7.5°	8456.7	8504.9	8465.4	8499.1	8506.9
10°	8404.7	8461.5	8415.3	8467.3	8477.0
12.5°	8337.2	8395.0	8354.5	8425.9	8429.7
15°	8256.2	8295.7	8287.0	8333.3	8327.5
17.5°	8154.0	8199.3	8192.6	8204.1	8177.1
20°	8023.9	8075.0	8053.7	8000.7	7934.2
22.5°	7884.1	7945.8	7861.9	7727.9	7634.4
25°	7719.2	7792.5	7603.5	7377.0	7272.9
27.5°	7537.0	7602.6	7288.3	7010.6	6902.7
30°	7332.6	7360.6	6922.9	6658.8	6585.5
32.5°	7096.4	7055.9	6532.5	6358.0	6315.5
35°	6831.3	6687.7	6154.6	6064.9	6026.3
37.5°	6532.5	6269.3	5781.5	5740.0	5699.5
40°	6174.8	5786.3	5381.4	5354.4	5292.7
42.5°	5713.0	5260.9	4936.9	4905.1	4850.2
45°	5123.0	4689.2	4435.6	4469.4	4419.2
47.5°	4444.3	4115.6	3954.6	4047.1	3954.6
50°	3777.2	3556.4	3512.1	3595.9	3488.0
52.5°	3230.6	3032.0	3123.5	3138.0	3073.4
55°	2798.7	2554.8	2746.6	2708.0	2745.6
57.5°	2422.7	2149.9	2386.0	2341.7	2470.9
60°	2112.3	1805.7	2050.6	2040.9	2292.5
62.5°	1807.6	1562.7	1759.4	1901.1	2210.6
65°	1547.3	1373.8	1537.7	1798.0	1953.2
67.5°	1297.6	1232.1	1406.6	1551.2	1720.8
70°	1079.7	1113.5	1396.0	1369.0	1506.8
72.5°	896.6	1011.3	1232.1	1236.9	1334.3
75°	732.7	921.6	1082.6	1156.9	1188.7
77.5°	609.3	835.8	977.6	1003.6	972.7
80°	511.0	736.5	855.1	843.6	800.2
82.5°	412.6	558.2	673.9	684.5	633.4
85°	291.1	404.9	494.6	497.5	458.9
87.5°	156.2	249.7	299.8	308.5	285.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)