

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-LD5-24HE-W-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 (P23760)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-24HE-W-UNV-L835-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

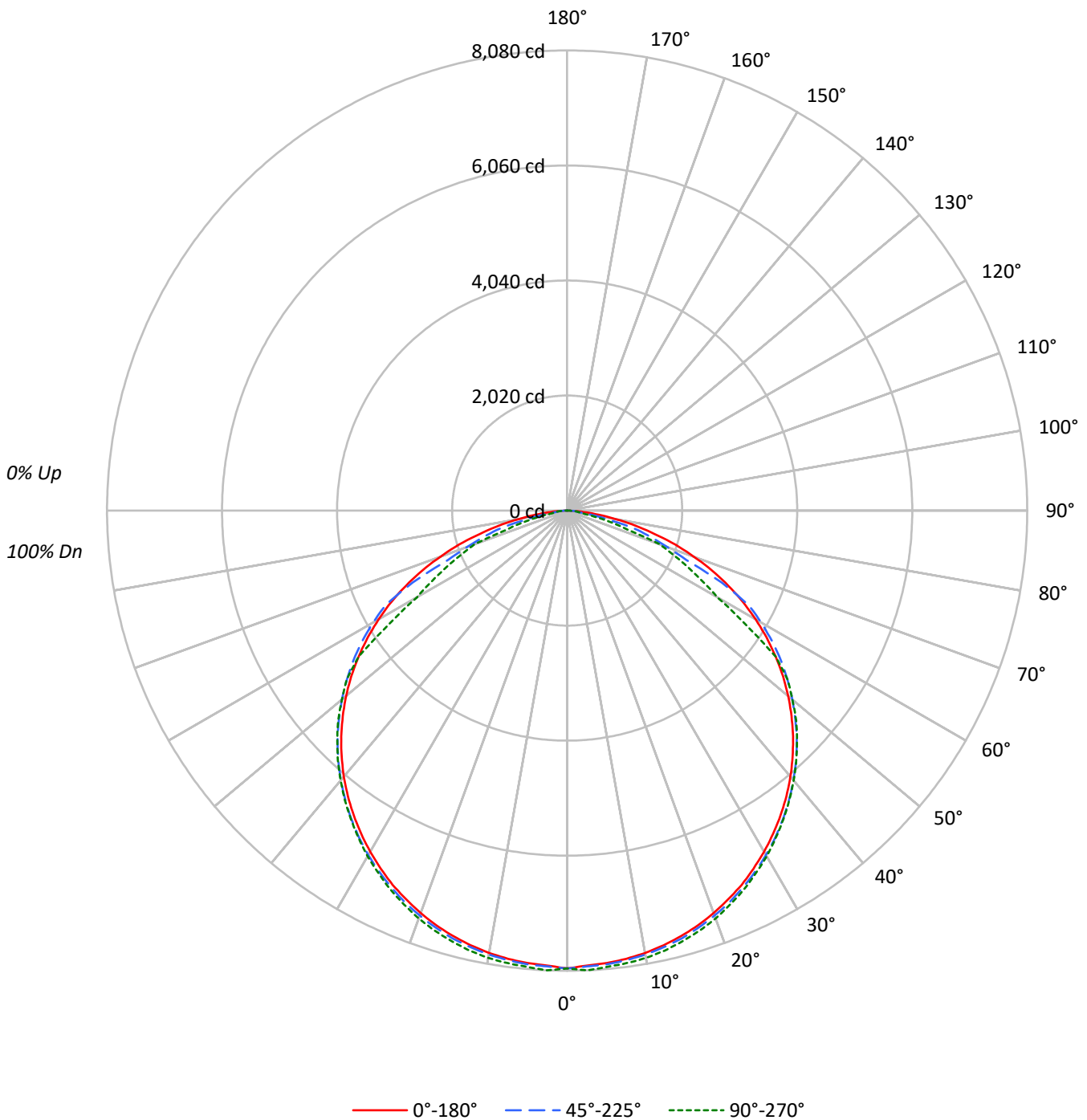
Lumens per Lamp: N/A
Luminaire Lumens: 23205.0 lumens
Efficiency: N/A
Efficacy: 158.6 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 146.3
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°	10815	10815	10815
5°	10770	10800	10862
10°	10777	10815	10896
15°	10774	10831	10907
20°	10768	10837	10913
25°	10764	10841	10902
30°	10745	10850	10891
35°	10732	10855	10870
40°	10713	10855	10872
45°	10672	10850	10863
50°	10608	10804	10802
55°	10485	10747	10480
60°	10290	10588	8200
65°	9947	9529	7388
70°	9318	7332	6809
75°	8251	6392	4243
80°	6795	3763	1897
85°	4478	2306	2484



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	762.8	3.3
10°-20°	2200.6	9.5
20°-30°	3373.9	14.5
30°-40°	4137.7	17.8
40°-50°	4393.6	18.9
50°-60°	4013.0	17.3
60°-70°	2794.6	12.0
70°-80°	1303.4	5.6
80°-90°	225.5	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°	6337.3	27.3
0°-40°	10475.0	45.1
0°-60°	18881.5	81.4
0°-90°	23205.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23205.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	8038	8038	8038	8038	8038	
5°	7974	8030	7997	8035	8042	759
15°	7734	7788	7776	7823	7830	2184
25°	7251	7314	7303	7357	7343	3341
35°	6534	6609	6609	6653	6618	4089
45°	5609	5693	5702	5739	5709	4326
55°	4470	4559	4581	4589	4468	3992
65°	3124	3221	2993	2380	2320	3083
75°	1587	1687	1230	852	816	1697
85°	290	191	149	160	161	375
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	8038.0	8038.0	8038.0	8038.0	8038.0
2.5°	7995.6	8046.7	8012.9	8049.6	8080.4
5°	7974.4	8030.3	7996.6	8035.1	8041.9
7.5°	7939.7	7992.7	7961.9	8004.3	8014.9
10°	7887.7	7939.7	7915.6	7965.7	7975.4
12.5°	7817.3	7870.3	7852.0	7906.9	7913.7
15°	7734.4	7788.4	7775.9	7823.1	7829.8
17.5°	7637.1	7693.0	7678.6	7728.7	7733.5
20°	7520.5	7581.2	7568.7	7627.5	7621.7
22.5°	7389.4	7454.0	7444.4	7503.2	7485.8
25°	7250.7	7314.3	7302.7	7356.7	7343.2
27.5°	7087.8	7158.2	7147.6	7199.6	7178.4
30°	6916.3	6987.6	6983.7	7031.0	7009.8
32.5°	6731.3	6807.4	6803.5	6849.8	6817.0
35°	6533.7	6608.9	6608.9	6653.2	6617.5
37.5°	6324.6	6400.7	6401.7	6444.1	6410.4
40°	6099.1	6175.2	6180.0	6220.5	6189.7
42.5°	5862.0	5944.9	5948.8	5985.4	5956.5
45°	5608.6	5693.4	5702.1	5738.7	5708.8
47.5°	5343.6	5429.3	5437.0	5476.6	5455.4
50°	5068.0	5150.8	5161.4	5194.2	5160.5
52.5°	4776.9	4861.7	4876.2	4896.4	4881.0
55°	4469.5	4559.1	4581.3	4589.0	4467.6
57.5°	4151.5	4243.1	4264.3	4086.9	3696.7
60°	3823.9	3914.4	3934.7	3324.7	3047.1
62.5°	3482.7	3571.4	3593.5	2755.1	2666.5
65°	3124.2	3220.6	2993.2	2380.3	2320.5
67.5°	2756.1	2855.4	2263.7	2040.1	2004.4
70°	2368.7	2468.9	1863.7	1739.4	1730.8
72.5°	1996.7	2070.9	1529.3	1318.3	1110.2
75°	1587.2	1687.4	1229.6	851.9	816.2
77.5°	1230.6	1063.9	742.0	624.5	492.4
80°	876.9	711.2	485.7	259.2	244.8
82.5°	556.0	464.5	190.8	195.6	204.3
85°	290.1	190.8	149.4	160.0	160.9
87.5°	93.5	81.9	89.6	88.7	87.7
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)