

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-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-LD5-24HE-W-A-UNV-L850-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

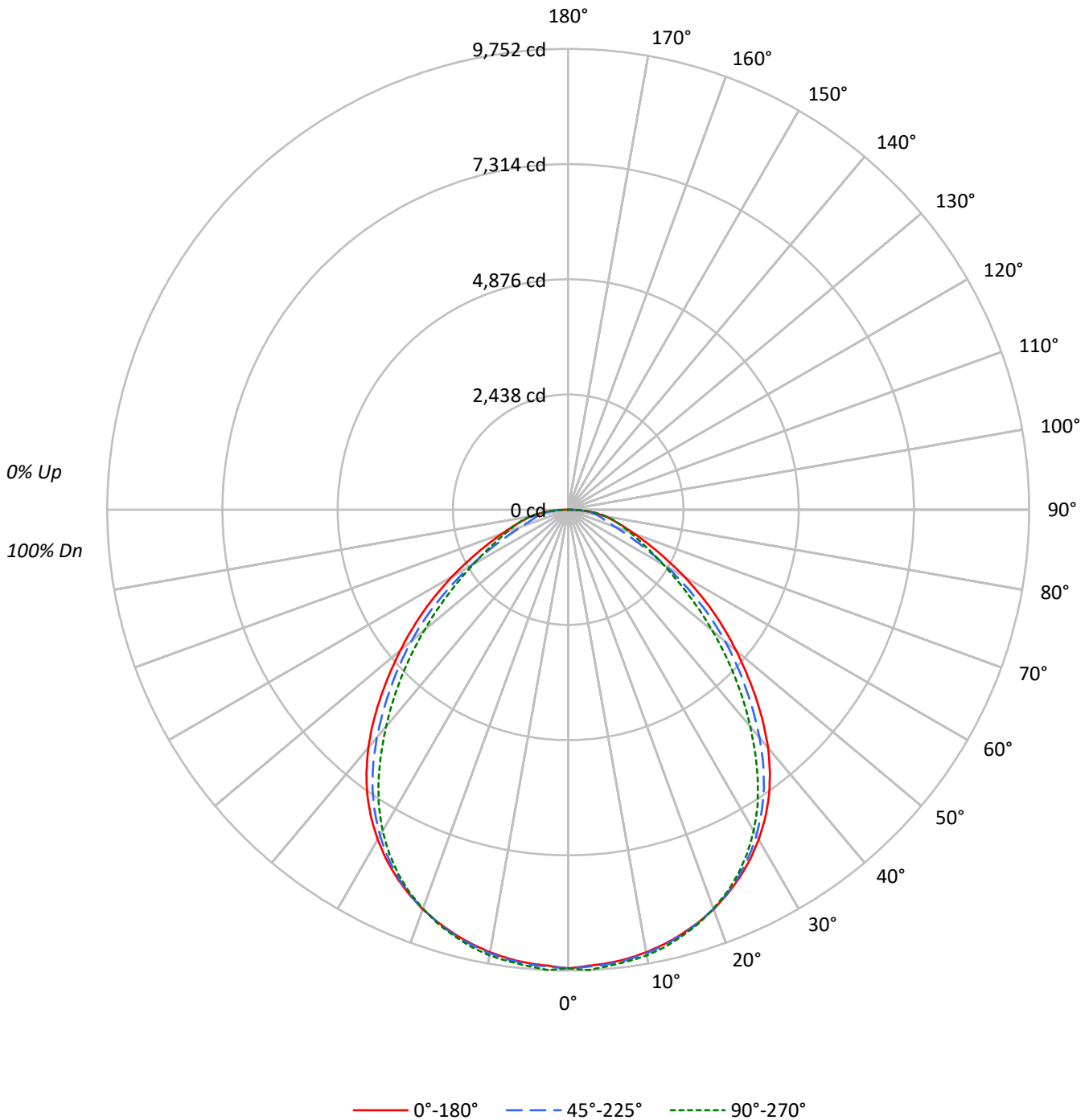
Lumens per Lamp: N/A  
Luminaire Lumens: 22293.0 lumens  
Efficiency: N/A  
Efficacy: 152.4 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	13057	13057	13057
5°	13011	13041	13094
10°	12993	13023	13088
15°	12949	12975	13006
20°	12881	12872	12863
25°	12742	12698	12626
30°	12522	12370	12190
35°	12158	11852	11487
40°	11553	11057	10527
45°	10673	10077	9467
50°	9702	9074	8327
55°	8724	7856	7199
60°	7634	6420	6247
65°	6582	5049	5638
70°	5868	4120	5434
75°	5621	4023	5678
80°	6080	4757	6327
85°	6827	5727	6893



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	919.8	4.1
10°-20°	2632.3	11.8
20°-30°	3937.6	17.7
30°-40°	4492.5	20.2
40°-50°	4089.4	18.3
50°-60°	3002.8	13.5
60°-70°	1773.0	8.0
70°-80°	1016.1	4.6
80°-90°	429.6	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°	7489.6	33.6
0°-40°	11982.1	53.7
0°-60°	19074.3	85.6
0°-90°	22293.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	22293.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9704	9704	9704	9704	9704	
5°	9633	9694	9655	9694	9695	916
15°	9296	9348	9315	9348	9337	2623
25°	8583	8613	8553	8550	8505	3951
35°	7402	7366	7216	7092	6994	4612
45°	5609	5576	5296	5059	4975	4323
55°	3719	3547	3349	3106	3069	3326
65°	2067	1805	1586	1696	1771	2080
75°	1081	927	774	1009	1092	1166
85°	442	408	371	438	446	462
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9704.5	9704.5	9704.5	9704.5	9704.5
2.5°	9659.6	9715.5	9680.4	9718.7	9751.6
5°	9633.4	9693.6	9655.3	9693.6	9694.7
7.5°	9585.2	9641.0	9603.8	9645.4	9641.0
10°	9509.7	9565.5	9531.6	9576.5	9579.8
12.5°	9413.4	9467.0	9432.0	9483.4	9474.7
15°	9296.3	9347.7	9314.9	9347.7	9336.8
17.5°	9158.4	9205.4	9162.8	9198.9	9180.3
20°	8996.4	9035.8	8989.8	9023.8	8983.3
22.5°	8802.7	8837.7	8789.6	8808.2	8766.6
25°	8582.7	8613.3	8553.2	8549.9	8505.0
27.5°	8337.5	8354.0	8277.4	8251.1	8199.6
30°	8059.6	8063.9	7962.1	7912.9	7846.1
32.5°	7747.6	7736.7	7606.5	7533.1	7451.0
35°	7401.8	7365.7	7215.7	7092.1	6993.6
37.5°	7011.1	6954.2	6774.7	6591.9	6497.8
40°	6577.7	6510.9	6295.3	6068.7	5993.2
42.5°	6106.0	6049.0	5795.1	5558.7	5484.3
45°	5609.1	5576.2	5296.1	5058.6	4975.4
47.5°	5112.2	5088.1	4814.5	4572.6	4471.9
50°	4635.0	4582.5	4335.1	4070.3	3978.3
52.5°	4172.1	4064.8	3847.0	3575.6	3507.7
55°	3719.0	3547.1	3349.0	3106.1	3068.8
57.5°	3270.2	3048.1	2855.4	2673.7	2672.7
60°	2836.8	2582.9	2385.9	2290.7	2321.3
62.5°	2430.8	2170.3	1956.9	1963.4	2019.3
65°	2067.4	1804.8	1585.9	1696.4	1770.8
67.5°	1755.5	1504.9	1282.7	1488.5	1559.6
70°	1491.7	1265.2	1047.4	1304.6	1381.2
72.5°	1269.6	1079.1	883.2	1151.4	1229.1
75°	1081.3	927.0	773.8	1009.1	1092.3
77.5°	928.1	791.3	693.9	873.4	959.8
80°	784.7	664.3	614.0	742.0	816.5
82.5°	621.6	538.5	508.9	603.0	641.3
85°	442.2	408.2	371.0	437.8	446.5
87.5°	243.0	251.7	207.9	251.7	252.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)