

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-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 (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-L835-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

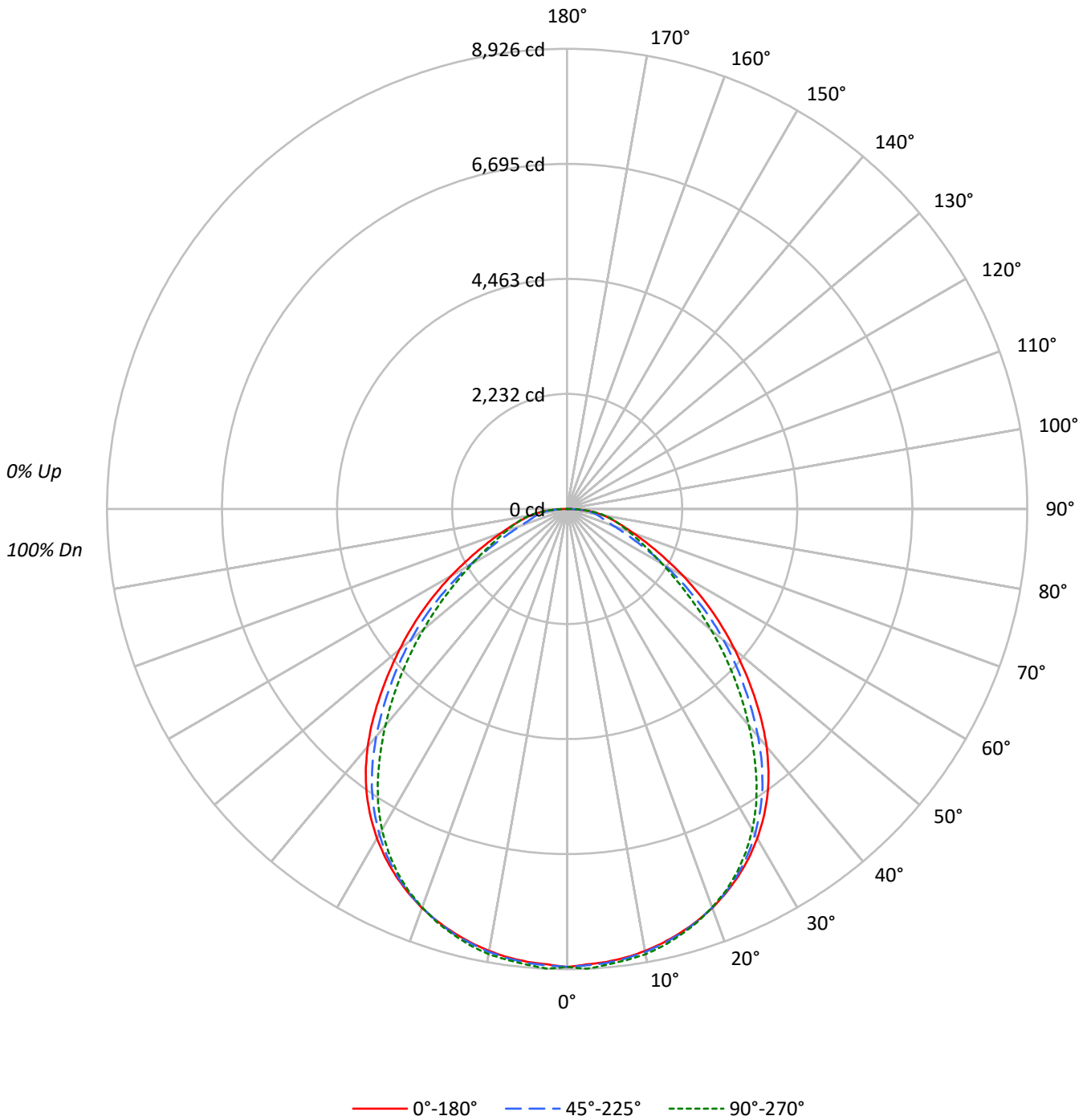
Lumens per Lamp: N/A  
Luminaire Lumens: 20406.0 lumens  
Efficiency: N/A  
Efficacy: 139.5 lumens/watt  
Spacing Criteria (0/90/45): 1.23 / 1.2 / 1.27  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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°	11952	11952	11952
5°	11910	11937	11986
10°	11893	11920	11980
15°	11853	11877	11905
20°	11791	11782	11774
25°	11663	11623	11558
30°	11462	11323	11158
35°	11129	10849	10515
40°	10575	10121	9635
45°	9770	9224	8666
50°	8881	8306	7623
55°	7986	7191	6590
60°	6988	5877	5718
65°	6025	4621	5160
70°	5372	3771	4974
75°	5146	3682	5198
80°	5566	4355	5791
85°	6248	5243	6309



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	841.9	4.1
10°-20°	2409.4	11.8
20°-30°	3604.3	17.7
30°-40°	4112.2	20.2
40°-50°	3743.3	18.3
50°-60°	2748.6	13.5
60°-70°	1623.0	8.0
70°-80°	930.1	4.6
80°-90°	393.2	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°	6855.6	33.6
0°-40°	10967.8	53.7
0°-60°	17459.7	85.6
0°-90°	20406.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20406.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8883	8883	8883	8883	8883	
5°	8818	8873	8838	8873	8874	838
15°	8509	8556	8526	8556	8546	2401
25°	7856	7884	7829	7826	7785	3616
35°	6775	6742	6605	6492	6402	4221
45°	5134	5104	4848	4630	4554	3957
55°	3404	3247	3066	2843	2809	3044
65°	1892	1652	1452	1553	1621	1904
75°	990	848	708	924	1000	1067
85°	405	374	340	401	409	423
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8883.1	8883.1	8883.1	8883.1	8883.1
2.5°	8842.0	8893.1	8861.0	8896.1	8926.2
5°	8818.0	8873.1	8838.0	8873.1	8874.1
7.5°	8773.9	8825.0	8790.9	8829.0	8825.0
10°	8704.8	8755.8	8724.8	8765.9	8768.9
12.5°	8616.6	8665.7	8633.6	8680.7	8672.7
15°	8509.4	8556.5	8526.4	8556.5	8546.5
17.5°	8383.2	8426.2	8387.2	8420.2	8403.2
20°	8234.9	8271.0	8228.9	8259.9	8222.9
22.5°	8057.6	8089.6	8045.6	8062.6	8024.5
25°	7856.2	7884.3	7829.2	7826.2	7785.1
27.5°	7631.8	7646.8	7576.7	7552.7	7505.6
30°	7377.4	7381.4	7288.2	7243.1	7182.0
32.5°	7091.8	7081.8	6962.6	6895.5	6820.3
35°	6775.3	6742.2	6605.0	6491.7	6401.6
37.5°	6417.6	6365.5	6201.2	6033.9	5947.8
40°	6020.9	5959.8	5762.4	5555.1	5485.9
42.5°	5589.1	5537.0	5304.6	5088.2	5020.1
45°	5134.3	5104.2	4847.8	4630.4	4554.2
47.5°	4679.5	4657.4	4407.0	4185.6	4093.4
50°	4242.7	4194.6	3968.2	3725.7	3641.6
52.5°	3818.9	3720.7	3521.4	3272.9	3210.8
55°	3404.2	3246.9	3065.5	2843.1	2809.1
57.5°	2993.4	2790.0	2613.7	2447.4	2446.4
60°	2596.7	2364.3	2184.0	2096.8	2124.8
62.5°	2225.0	1986.6	1791.2	1797.3	1848.3
65°	1892.4	1652.0	1451.6	1552.8	1620.9
67.5°	1606.9	1377.5	1174.1	1362.5	1427.6
70°	1365.5	1158.1	958.7	1194.2	1264.3
72.5°	1162.1	987.8	808.5	1053.9	1125.0
75°	989.8	848.5	708.3	923.7	999.8
77.5°	849.5	724.3	635.1	799.4	878.6
80°	718.3	608.1	562.0	679.2	747.4
82.5°	569.0	492.9	465.8	552.0	587.1
85°	404.7	373.7	339.6	400.7	408.7
87.5°	222.4	230.4	190.3	230.4	231.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)