

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-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-LD5-24HE-W-AI-UNV-L840-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

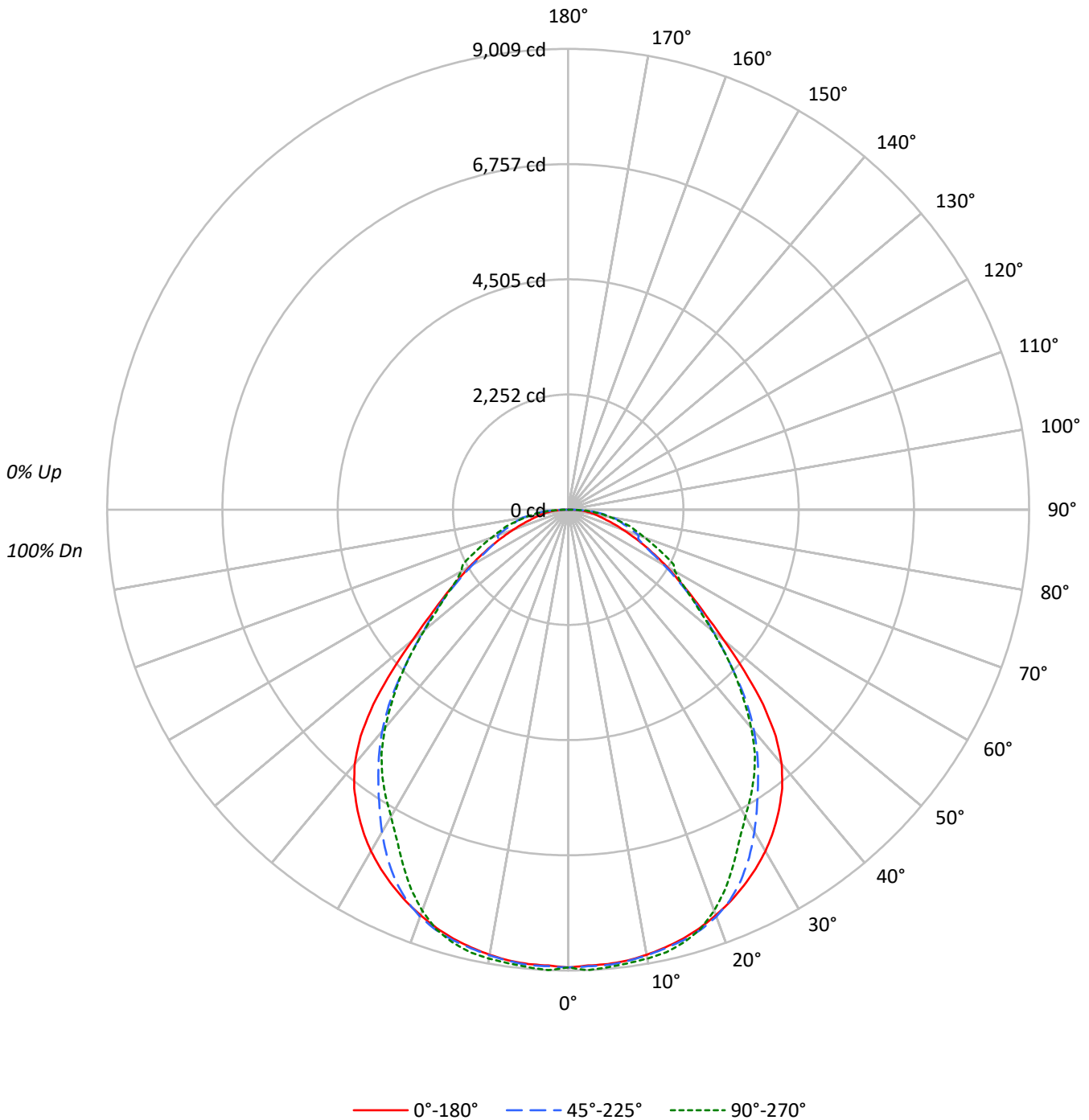
Lumens per Lamp: N/A  
Luminaire Lumens: 20715.0 lumens  
Efficiency: N/A  
Efficacy: 141.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	12041	12041	12041
5°	12041	12067	12126
10°	12071	12086	12175
15°	12089	12135	12194
20°	12077	12122	11942
25°	12047	11866	11350
30°	11976	11306	10755
35°	11795	10627	10405
40°	11401	9936	9772
45°	10247	8872	8840
50°	8311	7728	7675
55°	6901	6773	6770
60°	5975	5800	6485
65°	5178	5146	6537
70°	4465	5773	6231
75°	4004	5916	6496
80°	4162	6965	6517
85°	4725	8026	7447



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	852.1	4.1
10°-20°	2461.0	11.9
20°-30°	3655.1	17.6
30°-40°	4149.5	20.0
40°-50°	3709.5	17.9
50°-60°	2564.7	12.4
60°-70°	1692.4	8.2
70°-80°	1141.8	5.5
80°-90°	489.0	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°	6968.1	33.6
0°-40°	11117.6	53.7
0°-60°	17391.9	84.0
0°-90°	20715.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20715.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8950	8950	8950	8950	8950	
5°	8915	8970	8934	8971	8978	849
15°	8679	8720	8711	8760	8754	2450
25°	8114	8192	7993	7755	7645	3739
35°	7181	7030	6470	6375	6335	4478
45°	5385	4929	4663	4698	4646	4095
55°	2942	2686	2887	2847	2886	2672
65°	1626	1444	1616	1890	2053	1623
75°	770	969	1138	1216	1250	841
85°	306	426	520	523	482	319
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8949.5	8949.5	8949.5	8949.5	8949.5
2.5°	8919.1	8974.9	8933.3	8971.8	9009.3
5°	8915.1	8969.8	8934.3	8970.8	8977.9
7.5°	8889.7	8940.4	8898.8	8934.3	8942.4
10°	8835.0	8894.8	8846.2	8900.9	8911.0
12.5°	8764.1	8824.9	8782.3	8857.3	8861.4
15°	8678.9	8720.5	8711.4	8760.0	8753.9
17.5°	8571.5	8619.1	8612.1	8624.2	8595.8
20°	8434.7	8488.4	8466.1	8410.4	8340.5
22.5°	8287.8	8352.6	8264.4	8123.6	8025.3
25°	8114.5	8191.5	7992.9	7754.7	7645.2
27.5°	7922.9	7991.8	7661.5	7369.6	7256.1
30°	7708.1	7737.5	7277.4	6999.7	6922.7
32.5°	7459.8	7417.2	6866.9	6683.5	6638.9
35°	7181.1	7030.1	6469.7	6375.4	6334.9
37.5°	6866.9	6590.3	6077.5	6033.9	5991.3
40°	6491.0	6082.6	5656.9	5628.5	5563.7
42.5°	6005.5	5530.2	5189.7	5156.3	5098.5
45°	5385.3	4929.3	4662.7	4698.2	4645.5
47.5°	4671.9	4326.3	4157.1	4254.3	4157.1
50°	3970.6	3738.5	3691.9	3780.1	3666.6
52.5°	3396.0	3187.2	3283.5	3298.7	3230.8
55°	2942.0	2685.6	2887.2	2846.7	2886.2
57.5°	2546.7	2259.9	2508.2	2461.6	2597.4
60°	2220.4	1898.1	2155.5	2145.4	2409.9
62.5°	1900.2	1642.8	1849.5	1998.5	2323.8
65°	1626.5	1444.1	1616.4	1890.0	2053.2
67.5°	1364.1	1295.2	1478.6	1630.6	1809.0
70°	1135.0	1170.5	1467.4	1439.1	1584.0
72.5°	942.5	1063.1	1295.2	1300.2	1402.6
75°	770.2	968.8	1138.1	1216.1	1249.5
77.5°	640.5	878.6	1027.6	1055.0	1022.5
80°	537.1	774.3	898.9	886.7	841.1
82.5°	433.7	586.8	708.4	719.5	665.8
85°	306.1	425.6	519.9	522.9	482.4
87.5°	164.2	262.5	315.2	324.3	300.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)