

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-L750-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-L750-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

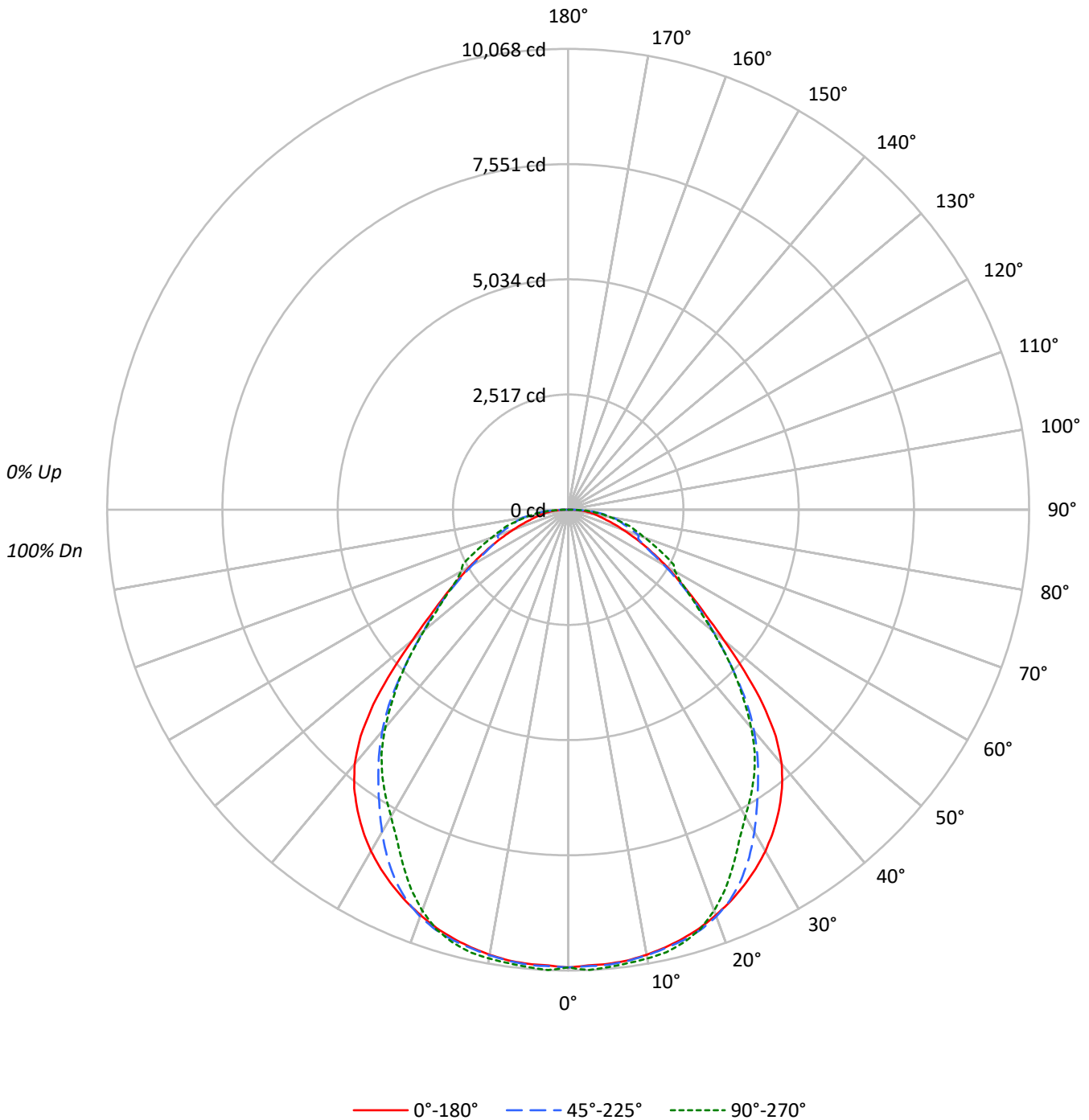
Lumens per Lamp: N/A  
Luminaire Lumens: 23148.0 lumens  
Efficiency: N/A  
Efficacy: 158.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-24HE-W-AI-UNV-L750-ED2-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-W-AI-UNV-L750-ED2-U

**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°	13456	13456	13456
5°	13455	13484	13550
10°	13489	13505	13605
15°	13509	13560	13626
20°	13496	13546	13345
25°	13461	13260	12683
30°	13382	12634	12019
35°	13181	11875	11627
40°	12740	11103	10920
45°	11451	9914	9878
50°	9287	8636	8576
55°	7712	7568	7566
60°	6677	6482	7247
65°	5787	5751	7304
70°	4989	6451	6963
75°	4474	6611	7259
80°	4651	7783	7283
85°	5280	8968	8321



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-W-AI-UNV-L750-ED2-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	952.2	4.1
10°-20°	2750.0	11.9
20°-30°	4084.3	17.6
30°-40°	4636.9	20.0
40°-50°	4145.2	17.9
50°-60°	2866.0	12.4
60°-70°	1891.1	8.2
70°-80°	1275.8	5.5
80°-90°	546.4	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°	7786.5	33.6
0°-40°	12423.4	53.7
0°-60°	19434.5	84.0
0°-90°	23148.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	23148.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	10001	10001	10001	10001	10001	
5°	9962	10023	9984	10024	10032	948
15°	9698	9745	9734	9789	9782	2738
25°	9068	9154	8932	8666	8543	4178
35°	8024	7856	7230	7124	7079	5004
45°	6018	5508	5210	5250	5191	4576
55°	3288	3001	3226	3181	3225	2986
65°	1818	1614	1806	2112	2294	1814
75°	861	1083	1272	1359	1396	940
85°	342	476	581	584	539	357
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24HE-W-AI-UNV-L750-ED2-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	10000.7	10000.7	10000.7	10000.7	10000.7
2.5°	9966.7	10029.0	9982.5	10025.6	10067.5
5°	9962.1	10023.3	9983.7	10024.4	10032.4
7.5°	9933.8	9990.5	9944.0	9983.7	9992.7
10°	9872.7	9939.5	9885.1	9946.3	9957.6
12.5°	9793.4	9861.4	9813.8	9897.6	9902.1
15°	9698.3	9744.7	9734.5	9788.9	9782.1
17.5°	9578.2	9631.5	9623.5	9637.1	9605.4
20°	9425.4	9485.4	9460.5	9398.2	9320.1
22.5°	9261.2	9333.6	9235.1	9077.7	8967.9
25°	9067.5	9153.6	8931.6	8665.5	8543.2
27.5°	8853.5	8930.5	8561.3	8235.2	8108.3
30°	8613.4	8646.2	8132.1	7821.8	7735.8
32.5°	8336.0	8288.4	7673.5	7468.5	7418.7
35°	8024.5	7855.8	7229.6	7124.2	7078.9
37.5°	7673.5	7364.3	6791.3	6742.6	6695.0
40°	7253.3	6797.0	6321.3	6289.6	6217.1
42.5°	6710.9	6179.8	5799.3	5761.9	5697.3
45°	6017.8	5508.2	5210.4	5250.0	5191.1
47.5°	5220.6	4834.4	4645.3	4754.0	4645.3
50°	4436.9	4177.6	4125.5	4224.0	4097.2
52.5°	3794.8	3561.6	3669.1	3686.1	3610.2
55°	3287.5	3001.0	3226.3	3181.0	3225.2
57.5°	2845.8	2525.4	2802.8	2750.7	2902.5
60°	2481.2	2121.1	2408.7	2397.4	2693.0
62.5°	2123.3	1835.7	2066.7	2233.2	2596.7
65°	1817.6	1613.7	1806.3	2112.0	2294.3
67.5°	1524.3	1447.3	1652.2	1822.1	2021.4
70°	1268.3	1308.0	1639.8	1608.1	1770.0
72.5°	1053.2	1187.9	1447.3	1452.9	1567.3
75°	860.7	1082.6	1271.7	1358.9	1396.3
77.5°	715.7	981.8	1148.3	1178.9	1142.6
80°	600.2	865.2	1004.5	990.9	939.9
82.5°	484.7	655.7	791.6	804.0	744.0
85°	342.0	475.6	580.9	584.3	539.0
87.5°	183.5	293.3	352.2	362.4	335.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)