

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-LD5-24SE-W-AWG-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 (P23764)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-24SE-W-AWG-UNV-L850-ED2-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

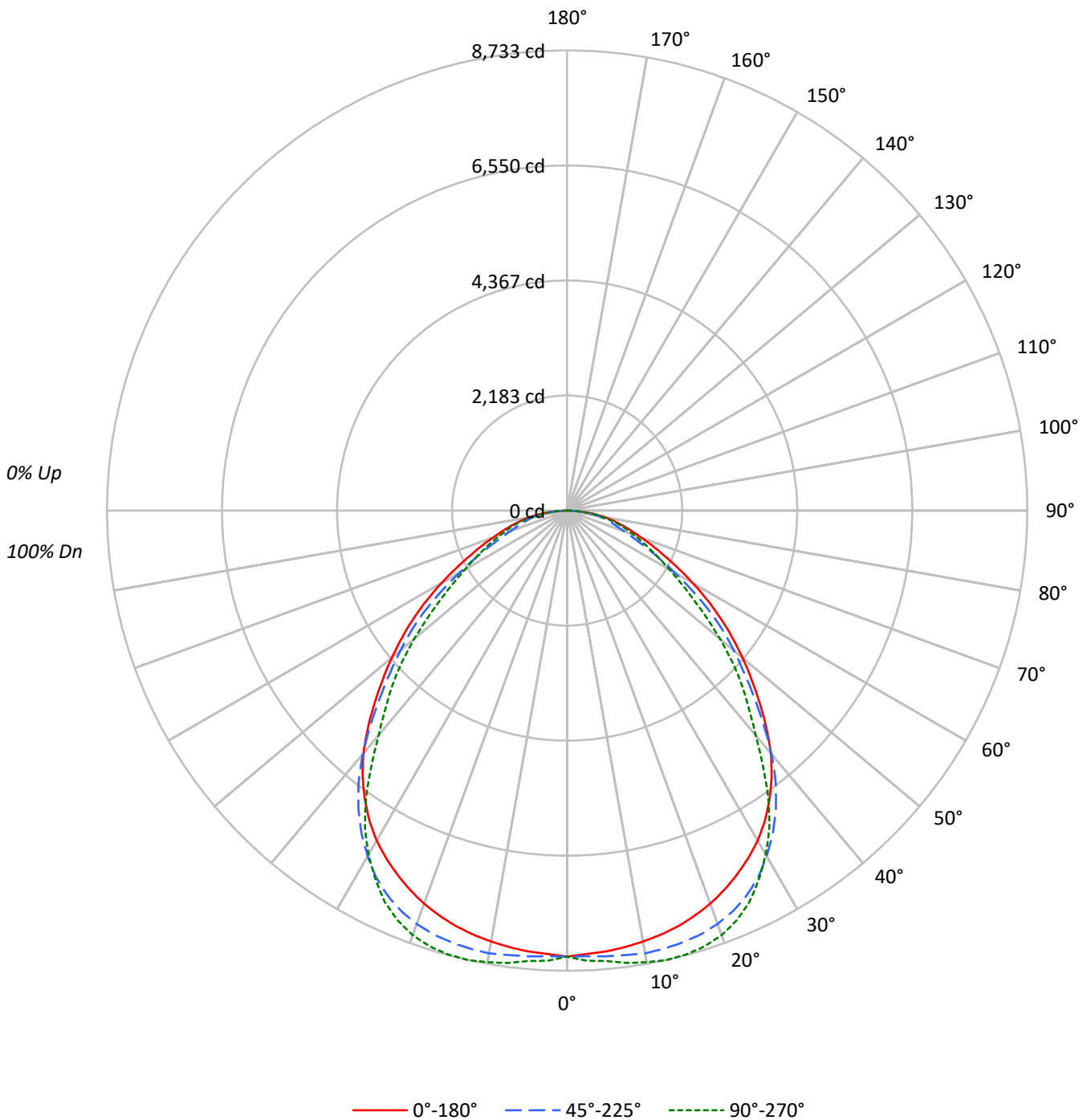
Lumens per Lamp: N/A  
Luminaire Lumens: 20981.0 lumens  
Efficiency: N/A  
Efficacy: 136.2 lumens/watt  
Spacing Criteria (0/90/45): 1.26 / 1.28 / 1.32  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 154  
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-LD5-24SE-W-AWG-UNV-L850-ED2-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-AWG-UNV-L850-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	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	85	81	88	83	79	85	81	77	82	78	75	73					73			
3	92	83	75	69	90	81	74	69	78	72	67	76	70	66	73	69	65	63					63			
4	85	74	66	60	83	73	65	59	70	64	58	68	62	58	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	63	56	51	62	55	51	60	54	50	48					48			
6	73	60	52	46	71	59	51	46	58	51	45	56	50	45	54	49	44	42					42			
7	68	55	47	41	66	54	46	41	53	46	40	51	45	40	50	44	40	38					38			
8	63	50	42	37	62	50	42	37	48	41	36	47	41	36	46	40	36	34					34			
9	59	46	38	33	58	46	38	33	45	38	33	44	37	33	43	37	33	31					31			
10	56	43	35	30	54	42	35	30	41	35	30	40	34	30	40	34	30	28					28			

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

	0°	45°	90°
0°	11388	11388	11388
5°	11344	11470	11587
10°	11347	11655	11889
15°	11368	11816	12149
20°	11366	11952	12273
25°	11317	11967	12161
30°	11233	11768	11706
35°	10995	11342	10929
40°	10565	10595	9771
45°	9834	9552	8932
50°	9090	8638	7915
55°	8321	7655	6830
60°	7420	6354	6031
65°	6507	5229	5542
70°	5875	4504	5277
75°	5615	4415	5262
80°	5661	4674	5134
85°	5014	4281	4482



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-AWG-UNV-L850-ED2-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	813.0	3.9
10°-20°	2395.9	11.4
20°-30°	3675.0	17.5
30°-40°	4226.8	20.1
40°-50°	3855.1	18.4
50°-60°	2889.4	13.8
60°-70°	1777.4	8.5
70°-80°	1018.5	4.9
80°-90°	329.7	1.6
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°	6883.9	32.8
0°-40°	11110.7	53.0
0°-60°	17855.3	85.1
0°-90°	20981.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	20981.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	8464	8464	8464	8464	8464	
5°	8399	8484	8493	8563	8579	799
15°	8161	8343	8483	8664	8722	2304
25°	7623	7842	8061	8185	8192	3513
35°	6694	6824	6905	6792	6654	4175
45°	5168	5280	5020	4761	4694	3988
55°	3547	3415	3263	2975	2912	3169
65°	2044	1828	1642	1693	1741	2055
75°	1080	968	849	972	1012	1155
85°	325	306	277	292	290	362
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-AWG-UNV-L850-ED2-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	8463.6	8463.6	8463.6	8463.6	8463.6
2.5°	8423.6	8484.1	8464.6	8514.3	8551.0
5°	8398.8	8484.1	8492.7	8562.8	8579.0
7.5°	8356.7	8467.9	8506.7	8630.8	8658.9
10°	8304.9	8438.7	8530.5	8664.3	8702.0
12.5°	8242.3	8397.7	8514.3	8679.4	8733.3
15°	8161.4	8342.7	8483.0	8664.3	8721.5
17.5°	8058.9	8269.3	8433.3	8611.4	8670.8
20°	7938.0	8160.3	8347.0	8529.4	8571.5
22.5°	7792.3	8015.7	8228.3	8392.3	8415.0
25°	7622.9	7842.0	8061.1	8185.1	8191.6
27.5°	7438.4	7642.4	7847.4	7914.3	7885.2
30°	7230.1	7412.5	7574.4	7588.4	7534.4
32.5°	6983.0	7147.0	7262.5	7232.3	7141.6
35°	6693.8	6824.4	6905.3	6792.0	6653.9
37.5°	6376.5	6474.7	6501.7	6255.7	6098.1
40°	6015.0	6099.2	6032.3	5690.2	5562.9
42.5°	5598.5	5695.6	5524.0	5186.3	5108.6
45°	5167.9	5280.1	5020.1	4761.1	4694.2
47.5°	4746.0	4848.5	4553.9	4345.6	4246.3
50°	4342.4	4386.6	4126.6	3891.3	3781.2
52.5°	3945.3	3901.0	3716.5	3424.1	3326.9
55°	3547.1	3415.4	3263.3	2975.1	2911.5
57.5°	3147.8	2964.4	2798.2	2576.9	2552.1
60°	2757.2	2531.6	2361.1	2229.5	2241.3
62.5°	2384.9	2155.0	1972.6	1930.6	1975.9
65°	2043.9	1828.0	1642.4	1693.1	1740.6
67.5°	1760.0	1552.9	1364.0	1493.5	1531.3
70°	1493.5	1326.2	1144.9	1312.2	1341.4
72.5°	1280.9	1138.5	980.9	1143.9	1168.7
75°	1080.2	968.0	849.3	972.3	1012.2
77.5°	905.4	812.6	731.6	803.9	847.1
80°	730.6	651.8	603.2	635.6	662.6
82.5°	535.2	484.5	448.9	462.9	467.3
85°	324.8	306.5	277.3	292.4	290.3
87.5°	106.8	121.9	128.4	115.5	109.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)