

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-AI-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 (P23765)
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-AI-UNV-L850-ED2-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

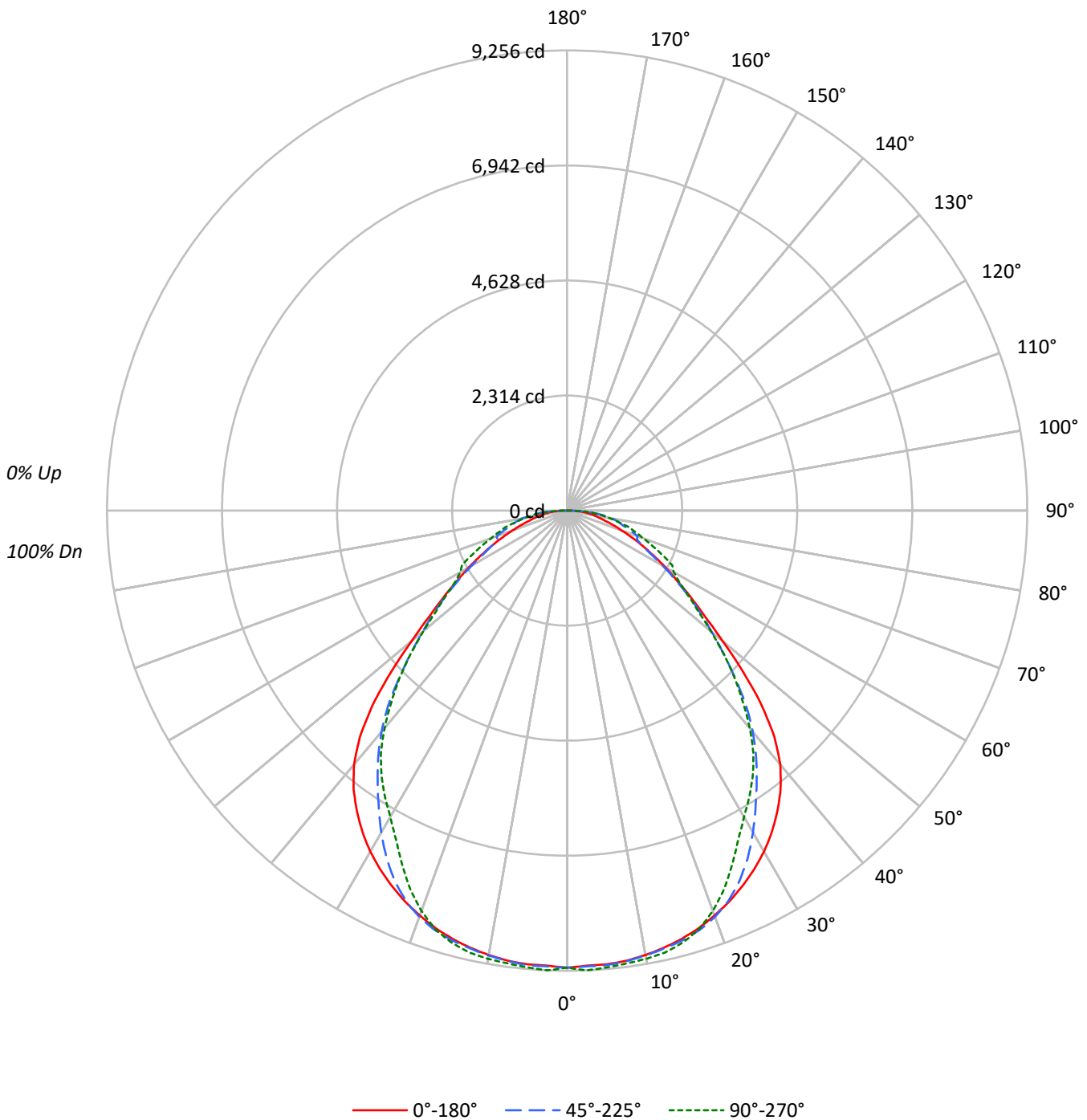
Lumens per Lamp: N/A
Luminaire Lumens: 21282.0 lumens
Efficiency: N/A
Efficacy: 138.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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-AI-UNV-L850-ED2-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-24SE-W-AI-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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	12371	12371	12371
5°	12371	12397	12458
10°	12401	12417	12508
15°	12420	12467	12528
20°	12408	12454	12269
25°	12376	12191	11661
30°	12303	11616	11050
35°	12118	10918	10690
40°	11713	10208	10040
45°	10528	9115	9082
50°	8539	7939	7885
55°	7090	6958	6956
60°	6139	5959	6663
65°	5320	5287	6716
70°	4587	5931	6402
75°	4114	6078	6674
80°	4276	7156	6696
85°	4854	8245	7651



TEST NUMBER: P#

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	875.4	4.1
10°-20°	2528.3	11.9
20°-30°	3755.1	17.6
30°-40°	4263.1	20.0
40°-50°	3811.0	17.9
50°-60°	2634.9	12.4
60°-70°	1738.7	8.2
70°-80°	1173.0	5.5
80°-90°	502.4	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°	7158.9	33.6
0°-40°	11421.9	53.7
0°-60°	17867.9	84.0
0°-90°	21282.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	21282.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	9194	9194	9194	9194	9194	
5°	9159	9215	9179	9216	9224	872
15°	8916	8959	8950	9000	8994	2517
25°	8337	8416	8212	7967	7854	3841
35°	7378	7222	6647	6550	6508	4601
45°	5533	5064	4790	4827	4773	4208
55°	3022	2759	2966	2925	2965	2745
65°	1671	1484	1661	1942	2109	1668
75°	791	995	1169	1249	1284	864
85°	314	437	534	537	496	328
90°	0	0	0	0	0	



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	9194.5	9194.5	9194.5	9194.5	9194.5
2.5°	9163.2	9220.5	9177.8	9217.4	9255.9
5°	9159.1	9215.3	9178.9	9216.3	9223.6
7.5°	9133.1	9185.1	9142.4	9178.9	9187.2
10°	9076.8	9138.3	9088.3	9144.5	9154.9
12.5°	9003.9	9066.4	9022.7	9099.7	9103.9
15°	8916.5	8959.2	8949.8	8999.8	8993.5
17.5°	8806.1	8855.1	8847.8	8860.3	8831.1
20°	8665.6	8720.8	8697.8	8640.6	8568.7
22.5°	8514.6	8581.2	8490.7	8345.9	8244.9
25°	8336.6	8415.7	8211.6	7967.0	7854.5
27.5°	8139.8	8210.6	7871.2	7571.3	7454.7
30°	7919.1	7949.3	7476.6	7191.3	7112.2
32.5°	7664.0	7620.2	7054.9	6866.4	6820.6
35°	7377.7	7222.5	6646.8	6549.9	6508.3
37.5°	7054.9	6770.7	6243.8	6199.1	6155.3
40°	6668.6	6249.0	5811.8	5782.6	5716.0
42.5°	6169.9	5681.6	5331.8	5297.4	5238.1
45°	5532.7	5064.2	4790.4	4826.8	4772.7
47.5°	4799.7	4444.7	4270.8	4370.8	4270.8
50°	4079.3	3840.8	3792.9	3883.5	3766.9
52.5°	3488.9	3274.4	3373.4	3389.0	3319.2
55°	3022.5	2759.1	2966.3	2924.6	2965.2
57.5°	2616.4	2321.8	2576.9	2529.0	2668.5
60°	2281.2	1950.1	2214.5	2204.1	2475.9
62.5°	1952.2	1687.7	1900.1	2053.2	2387.4
65°	1671.1	1483.7	1660.6	1941.8	2109.4
67.5°	1401.4	1330.6	1519.1	1675.2	1858.5
70°	1166.1	1202.5	1507.6	1478.4	1627.3
72.5°	968.3	1092.2	1330.6	1335.8	1441.0
75°	791.3	995.3	1169.2	1249.4	1283.8
77.5°	658.0	902.7	1055.7	1083.8	1050.5
80°	551.8	795.4	923.5	911.0	864.2
82.5°	445.6	602.8	727.8	739.2	684.0
85°	314.4	437.3	534.1	537.2	495.6
87.5°	168.7	269.7	323.8	333.2	308.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)