

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-LD5-48HE-N-CLI-UNV-L850-ED4-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 (P23769)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-48HE-N-CLI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

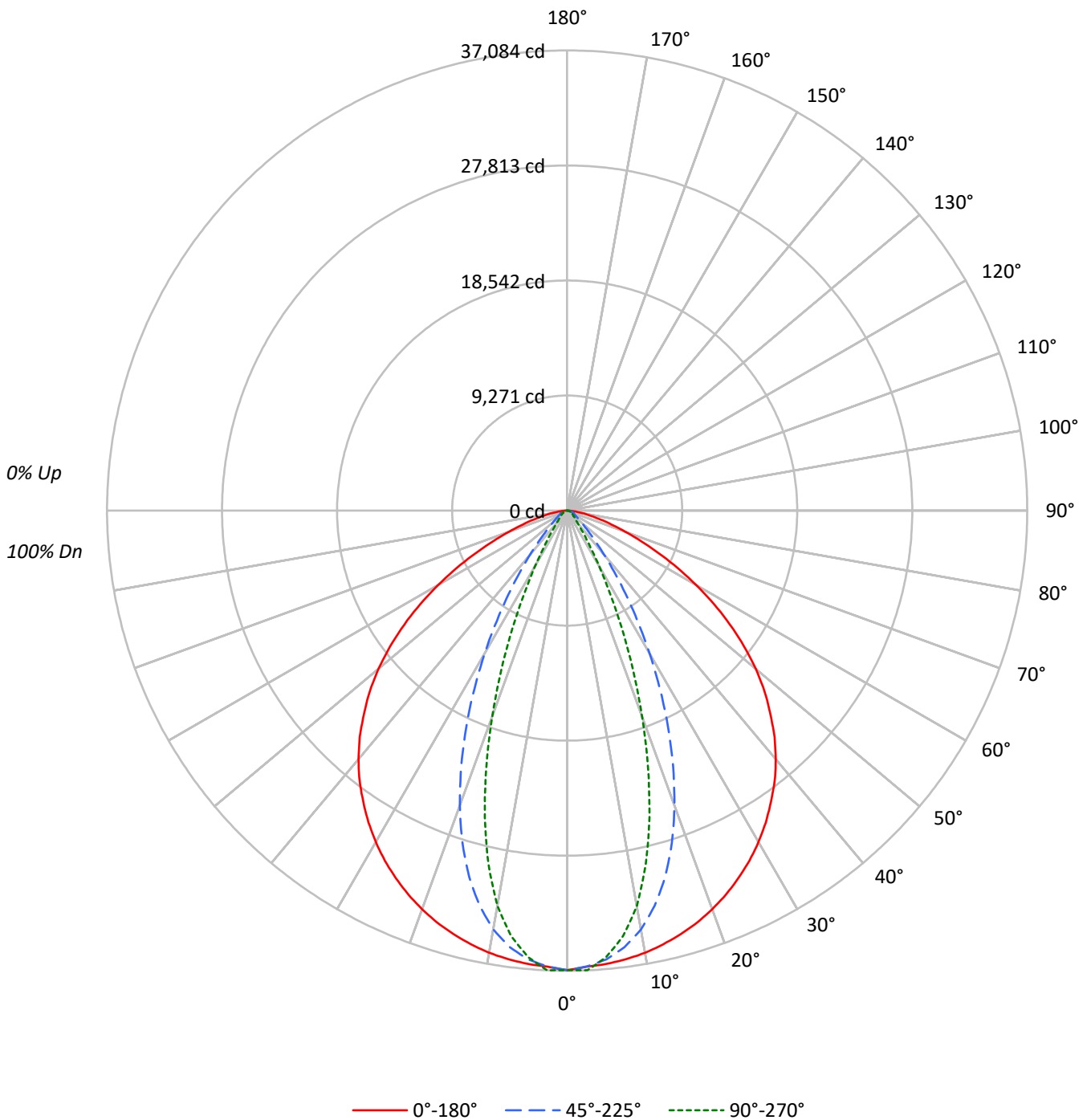
Lumens per Lamp: N/A
Luminaire Lumens: 40543.0 lumens
Efficiency: N/A
Efficacy: 141.7 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 286.2
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-LD5-48HE-N-CLI-UNV-L850-ED4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850-ED4-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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65					65			
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60					60			
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50					50			
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46					46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	49828	49828	49828
5°	49528	49035	48777
10°	49445	46815	44176
15°	49246	42554	35677
20°	48951	36210	25287
25°	48512	28552	15278
30°	47923	20607	7852
35°	47058	13472	3922
40°	45942	8092	2289
45°	44033	4832	1711
50°	41531	3160	1437
55°	37588	2398	1254
60°	32302	2042	1144
65°	25982	1863	1081
70°	19575	1995	1074
75°	14399	1896	1105
80°	10534	1889	1209
85°	7889	2288	1565



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850-ED4-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3410.5	8.4
10°-20°	8484.7	20.9
20°-30°	9398.1	23.2
30°-40°	7529.5	18.6
40°-50°	5375.1	13.3
50°-60°	3452.5	8.5
60°-70°	1871.0	4.6
70°-80°	799.7	2.0
80°-90°	221.8	0.5
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°	21293.3	52.5
0°-40°	28822.9	71.1
0°-60°	37650.5	92.9
0°-90°	40543.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	40543.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	37033	37033	37033	37033	37033	
5°	36670	36807	36306	36190	36114	###
15°	35354	34248	30550	26998	25613	9975
25°	32678	28814	19232	12530	10291	15054
35°	28650	20723	8202	3308	2388	17913
45°	23141	11963	2540	1081	899	17837
55°	16024	5348	1022	628	534	14280
65°	8161	2196	585	404	339	8173
75°	2770	804	365	254	213	3078
85°	511	213	148	123	101	624
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48HE-N-CLI-UNV-L850-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	37033.1	37033.1	37033.1	37033.1	37033.1
2.5°	36789.3	37019.4	36771.7	36925.8	37083.8
5°	36670.3	36806.8	36305.5	36190.5	36114.4
7.5°	36463.5	36424.5	35482.4	34871.9	34577.4
10°	36190.5	35874.5	34265.3	32923.3	32334.2
12.5°	35800.4	35148.9	32617.1	30260.8	29262.1
15°	35353.7	34247.7	30549.5	26997.5	25612.6
17.5°	34819.2	33194.4	28078.1	23498.2	21670.6
20°	34187.3	31922.7	25288.9	19780.5	17660.3
22.5°	33481.2	30455.9	22302.6	16074.5	13800.1
25°	32677.5	28813.5	19232.4	12530.3	10291.1
27.5°	31809.5	26989.7	16179.8	9362.6	7320.4
30°	30846.0	25015.8	13263.7	6750.8	5053.9
32.5°	29794.6	22917.0	10554.4	4747.6	3456.4
35°	28649.6	20722.6	8202.1	3308.1	2387.5
37.5°	27477.4	18483.4	6194.9	2338.7	1712.6
40°	26156.8	16252.0	4607.2	1712.6	1303.0
42.5°	24738.8	14063.4	3409.6	1318.6	1055.2
45°	23141.3	11962.7	2539.6	1080.6	899.2
47.5°	21592.6	10004.4	1929.1	920.7	782.2
50°	19841.0	8237.2	1509.7	803.6	686.6
52.5°	17982.1	6682.6	1224.9	708.0	604.7
55°	16023.8	5348.4	1022.1	628.1	534.5
57.5°	14040.0	4236.6	873.8	559.8	475.9
60°	12003.7	3388.1	758.8	501.3	425.2
62.5°	10016.1	2709.3	663.2	450.6	380.4
65°	8161.1	2196.3	585.2	403.8	339.4
67.5°	6446.6	1736.0	546.2	362.8	306.2
70°	4975.8	1351.7	507.1	323.8	273.1
72.5°	3770.4	1037.7	448.6	288.7	241.9
75°	2769.8	803.6	364.8	253.6	212.6
77.5°	1981.8	618.3	296.5	220.4	183.4
80°	1359.5	460.3	243.8	189.2	156.0
82.5°	883.6	325.7	197.0	156.0	128.7
85°	511.0	212.6	148.2	122.9	101.4
87.5°	220.4	117.0	101.4	91.7	78.0
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)