

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-LD5-48SE-W-AI-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 (P23765)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-48SE-W-AI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

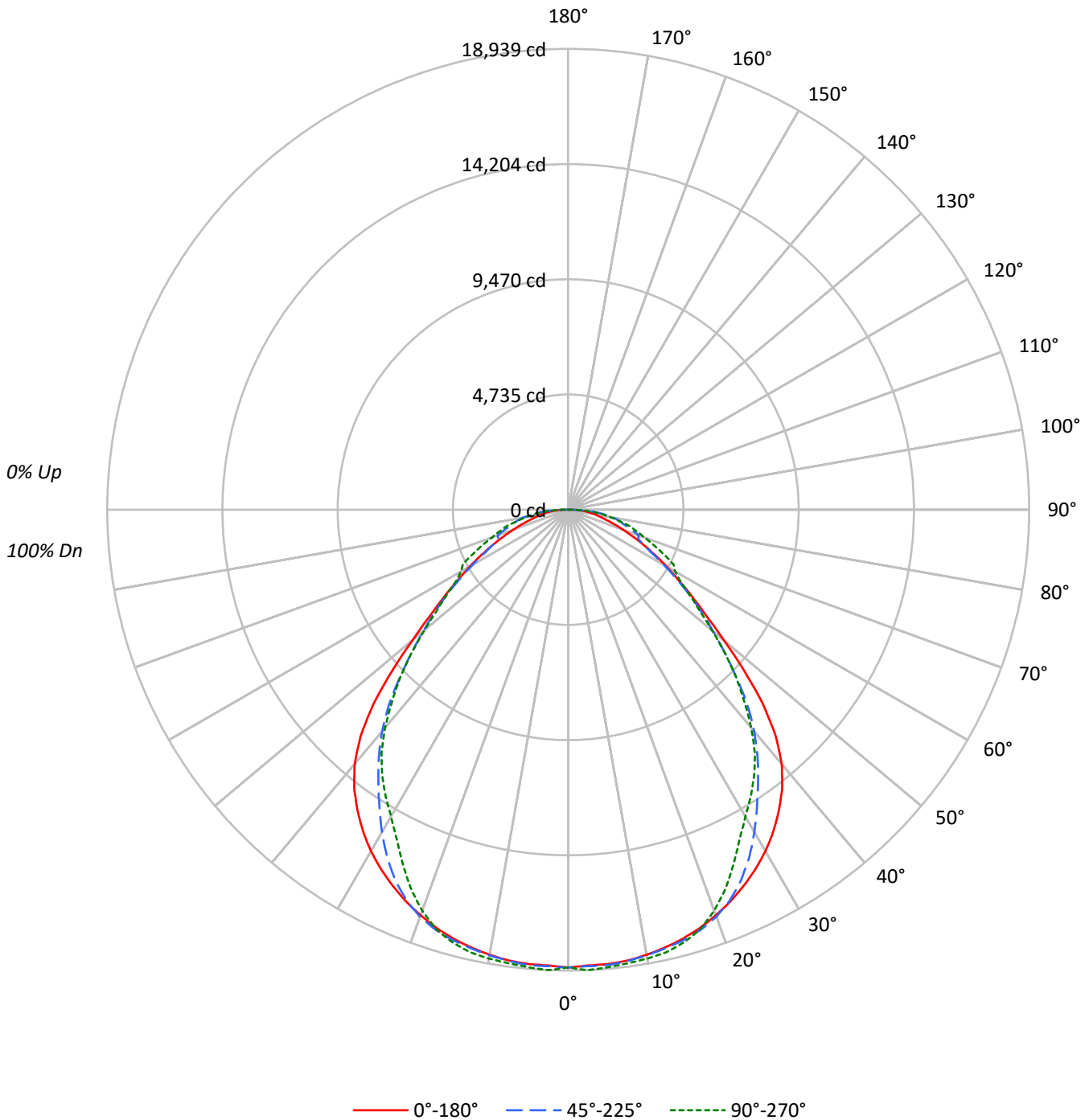
Lumens per Lamp: N/A
Luminaire Lumens: 43547.0 lumens
Efficiency: N/A
Efficacy: 145.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 299.1
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-LD5-48SE-W-AI-UNV-L850-ED4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-W-AI-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	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°	25314	25314	25314
5°	25312	25367	25491
10°	25375	25407	25593
15°	25414	25509	25634
20°	25389	25483	25105
25°	25324	24945	23860
30°	25175	23768	22610
35°	24796	22339	21874
40°	23967	20887	20543
45°	21542	18651	18582
50°	17472	16246	16134
55°	14508	14238	14233
60°	12561	12194	13633
65°	10886	10818	13741
70°	9387	12135	13099
75°	8417	12438	13656
80°	8749	14642	13701
85°	9933	16872	15655



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-W-AI-UNV-L850-ED4-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1791.3	4.1
10°-20°	5173.4	11.9
20°-30°	7683.6	17.6
30°-40°	8723.1	20.0
40°-50°	7798.1	17.9
50°-60°	5391.6	12.4
60°-70°	3557.7	8.2
70°-80°	2400.2	5.5
80°-90°	1028.0	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°	14648.4	33.6
0°-40°	23371.5	53.7
0°-60°	36561.1	84.0
0°-90°	43547.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	43547.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18814	18814	18814	18814	18814	
5°	18741	18856	18782	18858	18873	###
15°	18245	18332	18313	18415	18402	5150
25°	17058	17220	16802	16302	16072	7860
35°	15096	14779	13600	13402	13317	9414
45°	11321	10362	9802	9877	9766	8609
55°	6185	5646	6070	5984	6067	5617
65°	3419	3036	3398	3973	4316	3412
75°	1619	2037	2392	2556	2627	1768
85°	643	895	1093	1099	1014	671
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-48SE-W-AI-UNV-L850-ED4-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18813.7	18813.7	18813.7	18813.7	18813.7
2.5°	18749.7	18866.9	18779.6	18860.5	18939.3
5°	18741.2	18856.3	18781.7	18858.4	18873.3
7.5°	18688.0	18794.5	18707.1	18781.7	18798.7
10°	18572.9	18698.6	18596.3	18711.4	18732.7
12.5°	18423.8	18551.6	18462.1	18619.8	18628.3
15°	18244.8	18332.2	18313.0	18415.3	18402.5
17.5°	18019.0	18119.1	18104.2	18129.8	18070.1
20°	17731.4	17844.3	17797.4	17680.3	17533.3
22.5°	17422.5	17558.8	17373.5	17077.4	16870.7
25°	17058.2	17220.1	16802.5	16301.9	16071.8
27.5°	16655.5	16800.4	16105.9	15492.3	15253.7
30°	16203.9	16265.7	15298.5	14714.7	14552.8
32.5°	15681.9	15592.5	14435.7	14050.1	13956.3
35°	15096.1	14778.7	13600.5	13402.4	13317.2
37.5°	14435.7	13854.1	12776.1	12684.5	12595.0
40°	13645.3	12786.7	11891.9	11832.3	11696.0
42.5°	12624.8	11625.6	10909.8	10839.5	10718.1
45°	11321.0	10362.3	9802.0	9876.6	9765.8
47.5°	9821.2	9094.7	8738.9	8943.5	8738.9
50°	8346.9	7859.1	7761.1	7946.4	7707.8
52.5°	7139.0	6700.1	6902.5	6934.5	6791.7
55°	6184.6	5645.6	6069.5	5984.3	6067.4
57.5°	5353.7	4750.8	5272.8	5174.8	5460.2
60°	4667.7	3990.3	4531.4	4510.1	5066.1
62.5°	3994.5	3453.4	3888.0	4201.2	4885.0
65°	3419.3	3035.8	3398.0	3973.2	4316.2
67.5°	2867.5	2722.7	3108.3	3427.8	3802.8
70°	2386.1	2460.6	3084.8	3025.2	3329.8
72.5°	1981.3	2234.8	2722.7	2733.3	2948.5
75°	1619.1	2036.7	2392.5	2556.5	2626.8
77.5°	1346.4	1847.1	2160.2	2217.8	2149.6
80°	1129.1	1627.6	1889.7	1864.1	1768.2
82.5°	911.8	1233.5	1489.2	1512.6	1399.7
85°	643.4	894.8	1092.9	1099.3	1014.1
87.5°	345.1	551.8	662.6	681.7	630.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)