

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-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-LD5-48HE-W-AI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

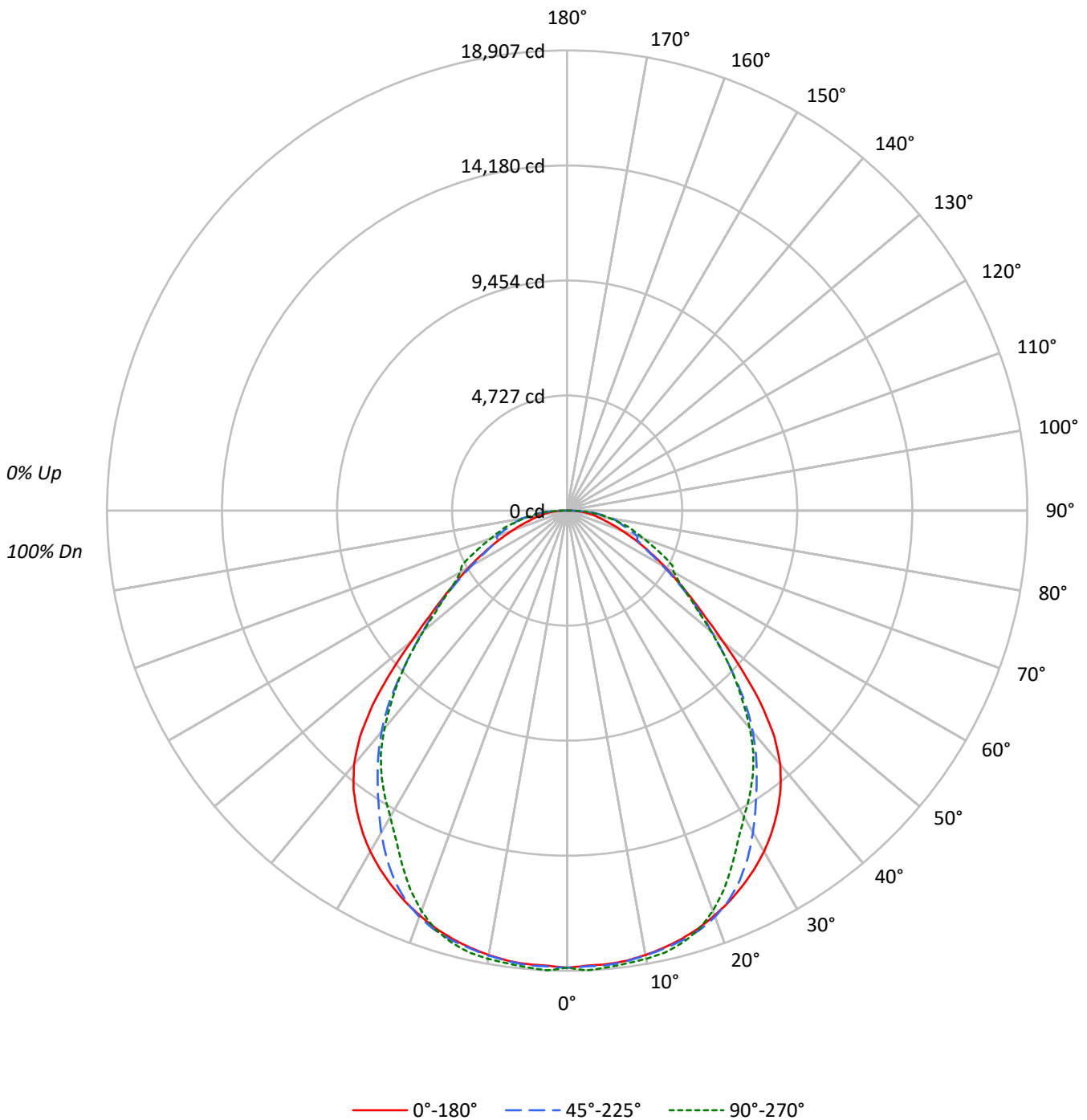
Lumens per Lamp: N/A
Luminaire Lumens: 43472.0 lumens
Efficiency: N/A
Efficacy: 151.9 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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Luminous Intensity Polar Plot





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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°	25270	25270	25270
5°	25269	25323	25447
10°	25331	25363	25549
15°	25370	25465	25590
20°	25345	25439	25062
25°	25281	24902	23819
30°	25132	23727	22571
35°	24753	22301	21836
40°	23925	20851	20508
45°	21505	18619	18550
50°	17442	16218	16106
55°	14483	14213	14208
60°	12539	12173	13609
65°	10867	10800	13718
70°	9370	12115	13077
75°	8402	12416	13632
80°	8734	14617	13677
85°	9916	16843	15628



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1788.2	4.1
10°-20°	5164.5	11.9
20°-30°	7670.4	17.6
30°-40°	8708.1	20.0
40°-50°	7784.6	17.9
50°-60°	5382.3	12.4
60°-70°	3551.6	8.2
70°-80°	2396.1	5.5
80°-90°	1026.2	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°	14623.2	33.6
0°-40°	23331.2	53.7
0°-60°	36498.2	84.0
0°-90°	43472.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	43472.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	18781	18781	18781	18781	18781	
5°	18709	18824	18749	18826	18841	###
15°	18213	18301	18282	18384	18371	5141
25°	17029	17190	16774	16274	16044	7846
35°	15070	14753	13577	13379	13294	9398
45°	11302	10344	9785	9860	9749	8595
55°	6174	5636	6059	5974	6057	5608
65°	3413	3031	3392	3966	4309	3406
75°	1616	2033	2388	2552	2622	1765
85°	642	893	1091	1097	1012	670
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	18781.2	18781.2	18781.2	18781.2	18781.2
2.5°	18717.4	18834.4	18747.2	18828.0	18906.7
5°	18708.9	18823.8	18749.3	18825.9	18840.8
7.5°	18655.8	18762.1	18674.9	18749.3	18766.4
10°	18540.9	18666.4	18564.3	18679.2	18700.4
12.5°	18392.1	18519.7	18430.3	18587.7	18596.2
15°	18213.4	18300.6	18281.5	18383.5	18370.8
17.5°	17988.0	18087.9	18073.0	18098.6	18039.0
20°	17700.9	17813.6	17766.8	17649.8	17503.1
22.5°	17392.5	17528.6	17343.6	17048.0	16841.7
25°	17028.8	17190.4	16773.6	16273.8	16044.1
27.5°	16626.9	16771.5	16078.2	15465.7	15227.5
30°	16176.0	16237.7	15272.1	14689.4	14527.8
32.5°	15654.9	15565.6	14410.8	14025.9	13932.3
35°	15070.1	14753.2	13577.1	13379.3	13294.3
37.5°	14410.8	13830.2	12754.1	12662.6	12573.3
40°	13621.8	12764.7	11871.5	11811.9	11675.8
42.5°	12603.1	11605.6	10891.0	10820.9	10699.6
45°	11301.5	10344.5	9785.1	9859.6	9749.0
47.5°	9804.3	9079.1	8723.9	8928.1	8723.9
50°	8332.6	7845.5	7747.7	7932.7	7694.5
52.5°	7126.7	6688.6	6890.6	6922.5	6780.0
55°	6173.9	5635.9	6059.1	5974.0	6057.0
57.5°	5344.5	4742.6	5263.7	5165.9	5450.8
60°	4659.7	3983.4	4523.6	4502.3	5057.4
62.5°	3987.6	3447.4	3881.3	4193.9	4876.6
65°	3413.4	3030.6	3392.2	3966.4	4308.8
67.5°	2862.6	2718.0	3102.9	3421.9	3796.2
70°	2381.9	2456.4	3079.5	3020.0	3324.1
72.5°	1977.9	2231.0	2718.0	2728.6	2943.4
75°	1616.3	2033.2	2388.3	2552.1	2622.3
77.5°	1344.1	1843.9	2156.5	2213.9	2145.9
80°	1127.2	1624.8	1886.4	1860.9	1765.2
82.5°	910.2	1231.4	1486.6	1510.0	1397.3
85°	642.3	893.2	1091.0	1097.4	1012.3
87.5°	344.5	550.8	661.4	680.6	629.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)