

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-L840-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-L840-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

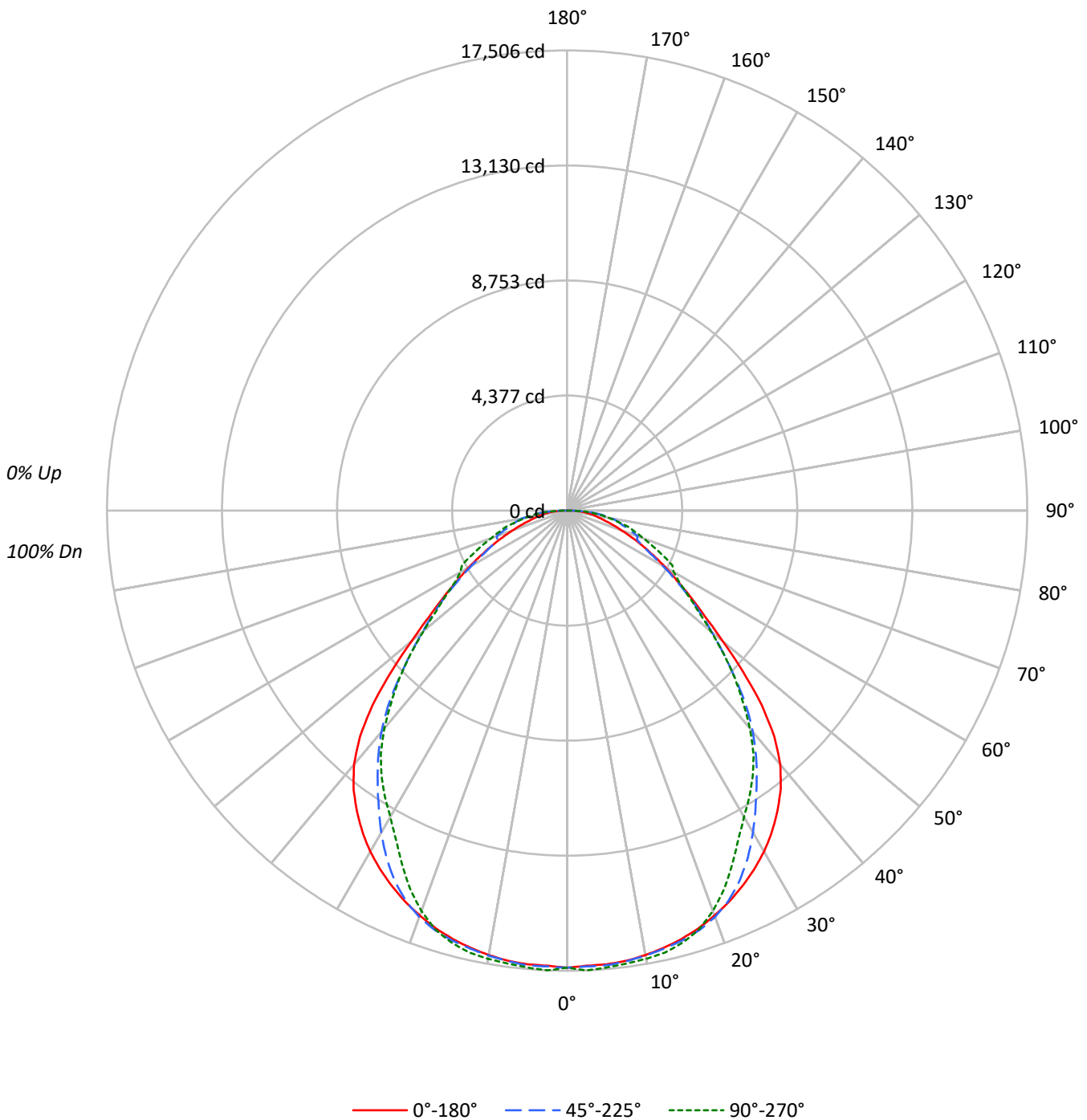
Lumens per Lamp: N/A
Luminaire Lumens: 40252.0 lumens
Efficiency: N/A
Efficacy: 140.6 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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	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°	23398	23398	23398
5°	23397	23448	23562
10°	23455	23485	23657
15°	23491	23579	23694
20°	23467	23555	23205
25°	23408	23057	22055
30°	23270	21970	20899
35°	22920	20649	20219
40°	22153	19307	18989
45°	19912	17240	17176
50°	16150	15016	14913
55°	13410	13161	13156
60°	11610	11271	12601
65°	10062	10000	12702
70°	8676	11217	12108
75°	7780	11496	12622
80°	8087	13534	12664
85°	9181	15595	14470



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1655.8	4.1
10°-20°	4782.0	11.9
20°-30°	7102.3	17.6
30°-40°	8063.0	20.0
40°-50°	7208.0	17.9
50°-60°	4983.6	12.4
60°-70°	3288.5	8.2
70°-80°	2218.6	5.5
80°-90°	950.2	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°	13540.0	33.6
0°-40°	21603.0	53.7
0°-60°	33794.7	84.0
0°-90°	40252.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	40252.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	17390	17390	17390	17390	17390	
5°	17323	17430	17361	17432	17445	###
15°	16864	16945	16927	17022	17010	4760
25°	15768	15917	15531	15068	14856	7265
35°	13954	13660	12571	12388	12310	8701
45°	10464	9578	9060	9129	9027	7958
55°	5717	5218	5610	5532	5608	5192
65°	3161	2806	3141	3673	3990	3154
75°	1497	1883	2211	2363	2428	1634
85°	595	827	1010	1016	937	620
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	17390.1	17390.1	17390.1	17390.1	17390.1
2.5°	17331.0	17439.3	17358.6	17433.4	17506.3
5°	17323.2	17429.5	17360.6	17431.5	17445.2
7.5°	17273.9	17372.4	17291.6	17360.6	17376.3
10°	17167.6	17283.8	17189.2	17295.6	17315.3
12.5°	17029.7	17147.9	17065.2	17210.9	17218.8
15°	16864.3	16945.1	16927.3	17021.9	17010.1
17.5°	16655.6	16748.1	16734.4	16758.0	16702.9
20°	16389.7	16494.1	16450.8	16342.5	16206.6
22.5°	16104.2	16230.2	16058.9	15785.2	15594.2
25°	15767.5	15917.1	15531.2	15068.4	14855.7
27.5°	15395.3	15529.2	14887.2	14320.1	14099.6
30°	14977.8	15034.9	14140.9	13601.3	13451.7
32.5°	14495.4	14412.7	13343.4	12987.0	12900.3
35°	13953.8	13660.4	12571.4	12388.3	12309.5
37.5°	13343.4	12805.8	11809.4	11724.7	11642.0
40°	12612.8	11819.2	10992.1	10937.0	10811.0
42.5°	11669.5	10746.0	10084.3	10019.3	9907.1
45°	10464.4	9578.2	9060.3	9129.3	9026.9
47.5°	9078.1	8406.6	8077.7	8266.8	8077.7
50°	7715.4	7264.4	7173.8	7345.2	7124.6
52.5°	6598.8	6193.2	6380.2	6409.8	6277.8
55°	5716.6	5218.4	5610.3	5531.5	5608.3
57.5°	4948.6	4391.3	4873.8	4783.2	5047.1
60°	4314.5	3688.3	4188.5	4168.8	4682.8
62.5°	3692.3	3192.1	3593.8	3883.3	4515.4
65°	3160.6	2806.1	3140.9	3672.6	3989.6
67.5°	2650.6	2516.7	2873.1	3168.5	3515.0
70°	2205.5	2274.4	2851.4	2796.3	3077.9
72.5°	1831.4	2065.7	2516.7	2526.5	2725.4
75°	1496.6	1882.6	2211.4	2363.1	2428.0
77.5°	1244.5	1707.3	1996.8	2049.9	1986.9
80°	1043.7	1504.5	1746.7	1723.1	1634.4
82.5°	842.8	1140.2	1376.5	1398.1	1293.8
85°	594.7	827.1	1010.2	1016.1	937.3
87.5°	319.0	510.0	612.4	630.1	582.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)