

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-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 (P23767)
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-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

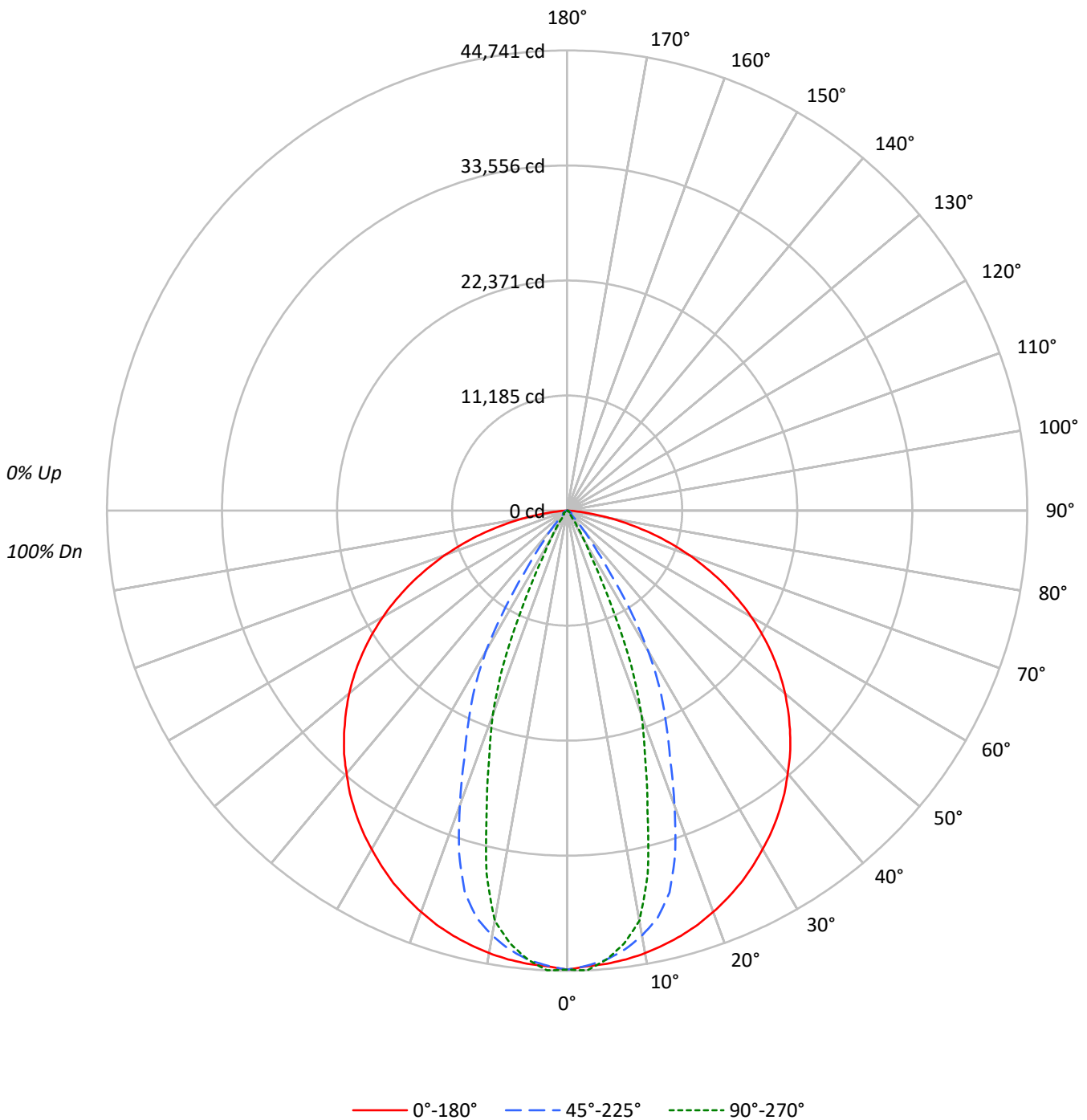
Lumens per Lamp: N/A
Luminaire Lumens: 47439.0 lumens
Efficiency: N/A
Efficacy: 165.8 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	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	76	81	77	74	73					73			
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66					66			
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60					60			
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55					55			
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51					51			
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47					47			
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44					44			
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41					41			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	60053	60053	60053
5°	59732	59204	59178
10°	59694	57307	55296
15°	59610	53538	42083
20°	59471	43644	30292
25°	59320	33747	14922
30°	59058	24526	4839
35°	58918	10881	1245
40°	58610	4419	839
45°	58348	1240	893
50°	57893	880	991
55°	57059	1046	423
60°	55651	1165	257
65°	53362	744	304
70°	49574	660	376
75°	43368	496	519
80°	32426	609	740
85°	16061	787	983



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4142.0	8.7
10°-20°	10357.0	21.8
20°-30°	11218.2	23.6
30°-40°	8307.6	17.5
40°-50°	5983.6	12.6
50°-60°	3705.0	7.8
60°-70°	2278.5	4.8
70°-80°	1201.2	2.5
80°-90°	245.8	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°	25717.2	54.2
0°-40°	34024.8	71.7
0°-60°	43713.5	92.1
0°-90°	47439.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	47439.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	44633	44633	44633	44633	44633	
5°	44225	44389	43834	43866	43815	###
15°	42794	41800	38435	32685	30212	12080
25°	39957	36600	22732	14300	10051	18411
35°	35870	25288	6624	1558	758	22441
45°	30664	14247	652	471	469	23648
55°	24324	2934	446	403	180	21714
65°	16761	310	234	149	96	16537
75°	8342	72	96	125	100	8811
85°	1040	28	51	76	64	###
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	44632.8	44632.8	44632.8	44632.8	44632.8
2.5°	44346.1	44628.5	44295.2	44543.6	44741.1
5°	44225.1	44388.6	43834.4	43866.3	43815.3
7.5°	44012.8	43974.6	43042.5	42634.8	42456.4
10°	43692.2	43439.5	41944.7	41093.3	40473.3
12.5°	43278.1	42713.4	40575.2	37868.1	36186.5
15°	42794.0	41800.4	38435.0	32685.3	30211.7
17.5°	42216.5	40808.8	34935.9	27394.1	25186.0
20°	41534.9	39702.6	30481.3	23306.9	21156.0
22.5°	40774.8	38356.4	26154.2	19370.4	16302.3
25°	39957.4	36600.5	22731.5	14300.1	10051.4
27.5°	39012.5	34343.5	19521.1	8422.9	5129.8
30°	38012.5	31625.8	15786.3	4531.0	3114.8
32.5°	37003.9	28544.9	11170.4	2830.3	1766.5
35°	35870.1	25287.9	6624.5	1558.5	758.0
37.5°	34687.5	22302.6	3915.3	709.2	486.2
40°	33368.9	19574.2	2516.0	471.4	477.7
42.5°	32095.0	17030.6	1416.2	465.0	473.5
45°	30663.9	14247.0	651.8	471.4	469.2
47.5°	29184.0	11361.5	422.5	475.6	475.6
50°	27657.4	8123.5	420.4	486.2	473.5
52.5°	26045.9	5068.2	437.4	484.1	388.6
55°	24323.9	2934.3	445.9	403.4	180.5
57.5°	22540.4	1730.4	450.1	231.4	101.9
60°	20680.4	957.6	433.1	172.0	95.5
62.5°	18763.1	456.5	341.8	161.4	93.4
65°	16760.9	310.0	233.6	148.6	95.5
67.5°	14682.3	239.9	184.7	140.1	97.7
70°	12601.5	178.4	167.7	140.1	95.5
72.5°	10486.7	121.0	140.1	142.3	95.5
75°	8342.2	72.2	95.5	125.3	99.8
77.5°	6216.9	44.6	74.3	129.5	121.0
80°	4184.9	38.2	78.6	121.0	95.5
82.5°	2456.6	34.0	76.4	93.4	76.4
85°	1040.4	27.6	51.0	76.4	63.7
87.5°	195.3	23.4	40.3	61.6	55.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)