

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-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-LD5-48SE-N-CLI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

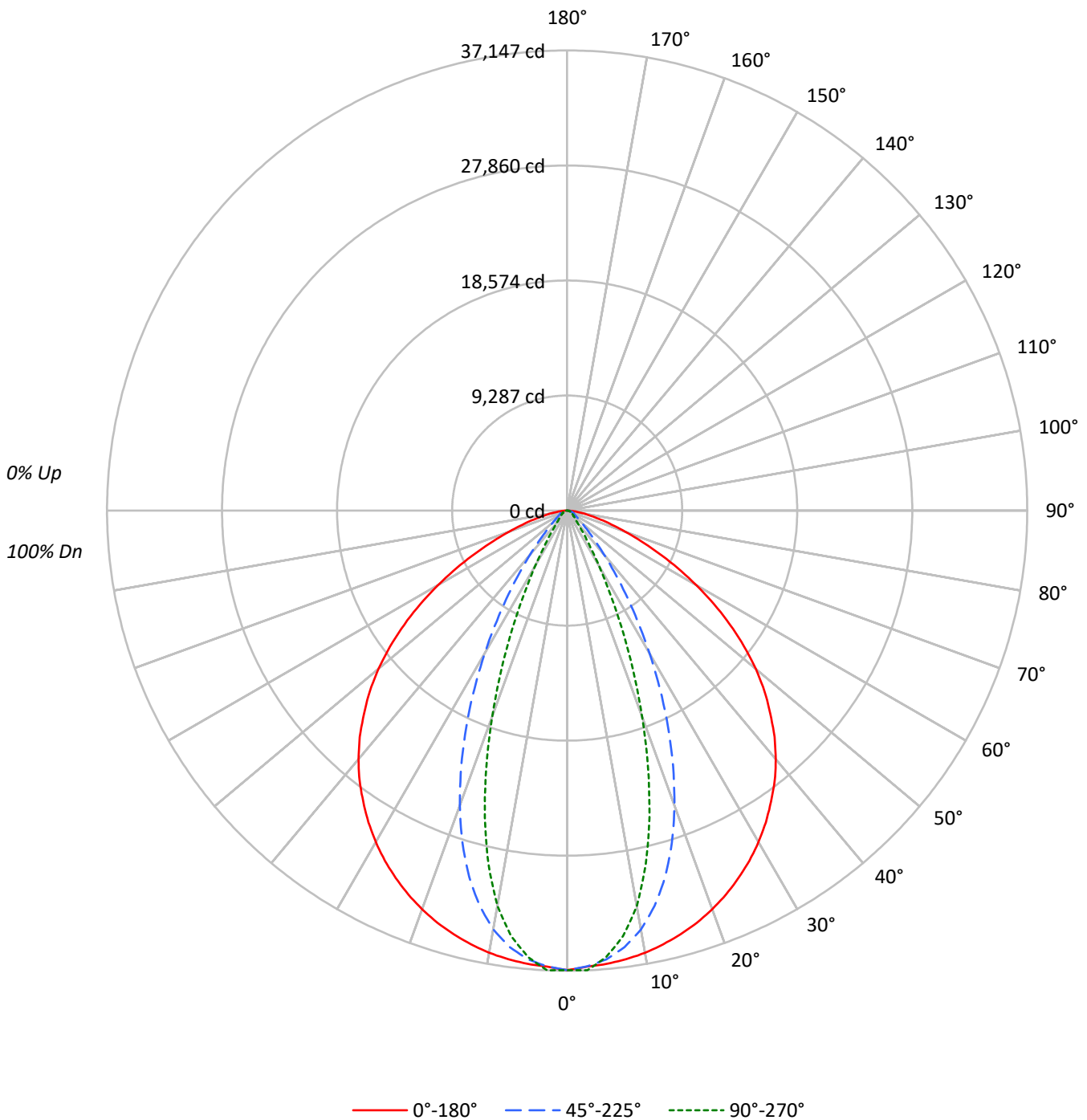
Lumens per Lamp: N/A
Luminaire Lumens: 40612.0 lumens
Efficiency: N/A
Efficacy: 135.8 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 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



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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	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°	49912	49912	49912
5°	49612	49119	48860
10°	49529	46894	44252
15°	49330	42626	35738
20°	49034	36271	25330
25°	48595	28601	15304
30°	48005	20642	7865
35°	47138	13495	3928
40°	46020	8106	2292
45°	44108	4841	1714
50°	41602	3166	1440
55°	37652	2402	1256
60°	32357	2045	1146
65°	26027	1866	1082
70°	19608	1998	1076
75°	14423	1900	1107
80°	10552	1892	1211
85°	7903	2293	1568



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	3416.3	8.4
10°-20°	8499.2	20.9
20°-30°	9414.1	23.2
30°-40°	7542.3	18.6
40°-50°	5384.3	13.3
50°-60°	3458.4	8.5
60°-70°	1874.2	4.6
70°-80°	801.1	2.0
80°-90°	222.2	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°	21329.6	52.5
0°-40°	28871.9	71.1
0°-60°	37714.6	92.9
0°-90°	40612.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	40612.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	37096	37096	37096	37096	37096	
5°	36733	36870	36367	36252	36176	###
15°	35414	34306	30602	27044	25656	9992
25°	32733	28862	19265	12552	10309	15080
35°	28698	20758	8216	3314	2392	17943
45°	23181	11983	2544	1082	901	17867
55°	16051	5358	1024	629	535	14304
65°	8175	2200	586	404	340	8186
75°	2774	805	365	254	213	3083
85°	512	213	148	123	102	625
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	37096.1	37096.1	37096.1	37096.1	37096.1
2.5°	36851.9	37082.5	36834.3	36988.7	37146.9
5°	36732.7	36869.5	36367.3	36252.1	36175.9
7.5°	36525.6	36486.5	35542.8	34931.2	34636.2
10°	36252.1	35935.5	34323.6	32979.3	32389.3
12.5°	35861.3	35208.7	32672.6	30312.3	29311.9
15°	35413.8	34306.0	30601.5	27043.5	25656.2
17.5°	34878.5	33250.9	28125.9	23538.2	21707.5
20°	34245.4	31977.0	25331.9	19814.2	17690.3
22.5°	33538.1	30507.7	22340.5	16101.8	13823.6
25°	32733.1	28862.5	19265.1	12551.6	10308.6
27.5°	31863.7	27035.7	16207.3	9378.6	7332.9
30°	30898.5	25058.4	13286.3	6762.3	5062.5
32.5°	29845.3	22956.0	10572.4	4755.7	3462.3
35°	28698.4	20757.9	8216.0	3313.8	2391.5
37.5°	27524.1	18514.8	6205.5	2342.7	1715.5
40°	26201.4	16279.6	4615.0	1715.5	1305.2
42.5°	24780.9	14087.4	3415.4	1320.8	1057.0
45°	23180.7	11983.1	2543.9	1082.4	900.7
47.5°	21629.3	10021.4	1932.4	922.2	783.5
50°	19874.7	8251.2	1512.3	805.0	687.8
52.5°	18012.7	6693.9	1227.0	709.3	605.7
55°	16051.0	5357.5	1023.8	629.1	535.4
57.5°	14063.9	4243.8	875.3	560.8	476.7
60°	12024.1	3393.9	760.1	502.1	425.9
62.5°	10033.1	2713.9	664.3	451.3	381.0
65°	8175.0	2200.1	586.2	404.5	340.0
67.5°	6457.5	1738.9	547.1	363.4	306.8
70°	4984.3	1354.0	508.0	324.3	273.5
72.5°	3776.8	1039.5	449.4	289.2	242.3
75°	2774.5	805.0	365.4	254.0	213.0
77.5°	1985.1	619.4	297.0	220.8	183.7
80°	1361.8	461.1	244.2	189.5	156.3
82.5°	885.1	326.3	197.3	156.3	129.0
85°	511.9	213.0	148.5	123.1	101.6
87.5°	220.8	117.2	101.6	91.8	78.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)