

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-LD5-18SE-N-CLI-UNV-L840-ED1-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-LD5-18SE-N-CLI-UNV-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

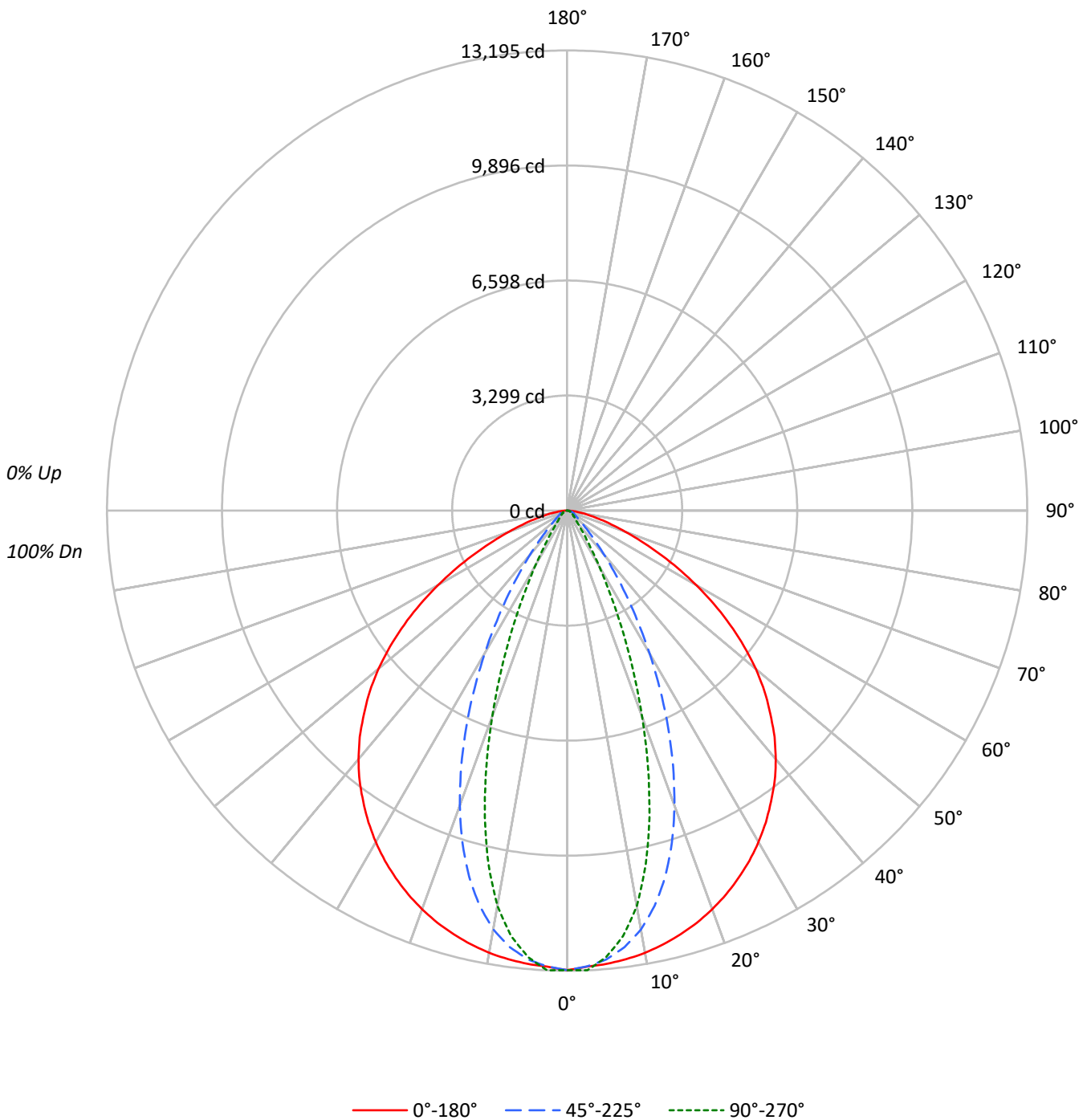
Lumens per Lamp: N/A
Luminaire Lumens: 14426.0 lumens
Efficiency: N/A
Efficacy: 118.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 121.76
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°	17730	17730	17730
5°	17623	17448	17356
10°	17594	16658	15719
15°	17523	15142	12695
20°	17418	12884	8998
25°	17262	10159	5436
30°	17052	7332	2794
35°	16744	4794	1395
40°	16347	2879	814
45°	15668	1719	609
50°	14778	1124	511
55°	13375	853	446
60°	11493	727	407
65°	9245	663	385
70°	6965	710	382
75°	5123	675	394
80°	3748	673	430
85°	2807	814	557



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1213.5	8.4
10°-20°	3019.0	20.9
20°-30°	3344.0	23.2
30°-40°	2679.2	18.6
40°-50°	1912.6	13.3
50°-60°	1228.5	8.5
60°-70°	665.8	4.6
70°-80°	284.5	2.0
80°-90°	78.9	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°	7576.6	52.5
0°-40°	10255.8	71.1
0°-60°	13396.8	92.9
0°-90°	14426.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	14426.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	13177	13177	13177	13177	13177	
5°	13048	13097	12918	12877	12850	###
15°	12580	12186	10870	9606	9114	3549
25°	11627	10252	6843	4458	3662	5357
35°	10194	7374	2918	1177	850	6374
45°	8234	4257	904	384	320	6347
55°	5702	1903	364	224	190	5081
65°	2904	782	208	144	121	2908
75°	986	286	130	90	76	1095
85°	182	76	53	44	36	222
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	13177.1	13177.1	13177.1	13177.1	13177.1
2.5°	13090.4	13172.3	13084.1	13138.9	13195.2
5°	13048.0	13096.6	12918.2	12877.3	12850.2
7.5°	12974.4	12960.6	12625.3	12408.1	12303.3
10°	12877.3	12764.8	12192.3	11714.8	11505.2
12.5°	12738.5	12506.7	11605.8	10767.4	10412.0
15°	12579.5	12186.0	10870.1	9606.3	9113.5
17.5°	12389.4	11811.2	9990.8	8361.1	7710.8
20°	12164.5	11358.7	8998.3	7038.3	6283.9
22.5°	11913.3	10836.8	7935.7	5719.6	4910.4
25°	11627.3	10252.4	6843.3	4458.5	3661.8
27.5°	11318.5	9603.5	5757.1	3331.4	2604.7
30°	10975.6	8901.1	4719.5	2402.1	1798.3
32.5°	10601.5	8154.3	3755.5	1689.3	1229.8
35°	10194.1	7373.5	2918.5	1177.1	849.5
37.5°	9777.0	6576.8	2204.3	832.2	609.4
40°	9307.1	5782.8	1639.3	609.4	463.6
42.5°	8802.6	5004.1	1213.2	469.2	375.5
45°	8234.1	4256.6	903.6	384.5	320.0
47.5°	7683.1	3559.7	686.4	327.6	278.3
50°	7059.8	2930.9	537.2	285.9	244.3
52.5°	6398.4	2377.8	435.9	251.9	215.2
55°	5701.6	1903.1	363.7	223.5	190.2
57.5°	4995.7	1507.5	310.9	199.2	169.3
60°	4271.1	1205.6	270.0	178.4	151.3
62.5°	3563.9	964.0	236.0	160.3	135.3
65°	2903.9	781.5	208.2	143.7	120.8
67.5°	2293.8	617.7	194.3	129.1	109.0
70°	1770.5	481.0	180.5	115.2	97.2
72.5°	1341.6	369.2	159.6	102.7	86.1
75°	985.5	285.9	129.8	90.2	75.7
77.5°	705.1	220.0	105.5	78.4	65.2
80°	483.7	163.8	86.8	67.3	55.5
82.5°	314.4	115.9	70.1	55.5	45.8
85°	181.8	75.7	52.7	43.7	36.1
87.5°	78.4	41.6	36.1	32.6	27.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)