

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-LD5-60SE-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-LD5-60SE-N-CLI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

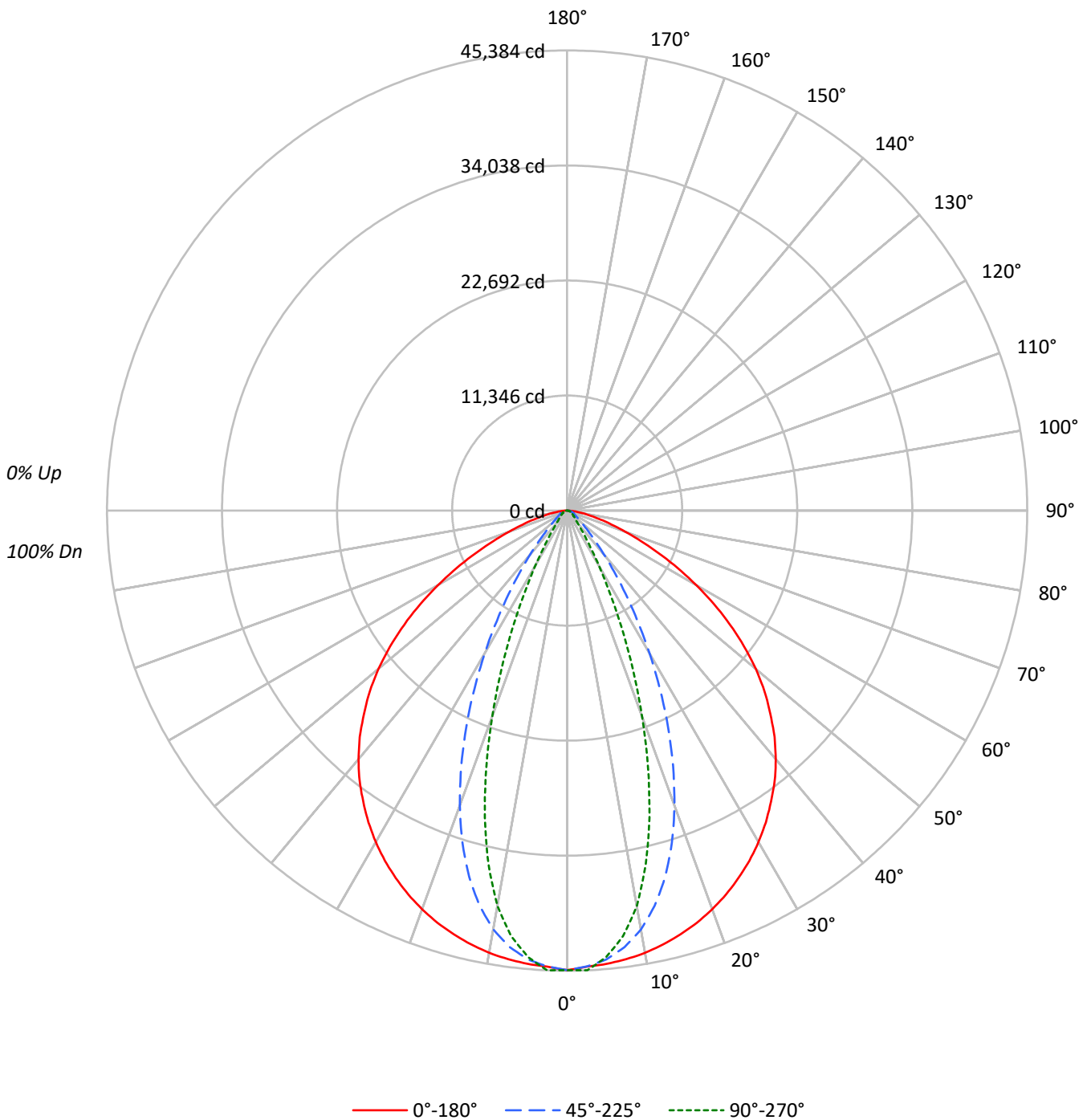
Lumens per Lamp: N/A
Luminaire Lumens: 49618.0 lumens
Efficiency: N/A
Efficacy: 128.5 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 386
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°	60981	60981	60981
5°	60614	60011	59695
10°	60513	57294	54065
15°	60269	52079	43663
20°	59908	44315	30947
25°	59371	34943	18698
30°	58650	25220	9609
35°	57592	16488	4799
40°	56226	9904	2801
45°	53890	5914	2094
50°	50828	3868	1759
55°	46002	2934	1534
60°	39532	2499	1400
65°	31798	2280	1323
70°	23956	2442	1315
75°	17622	2321	1353
80°	12892	2312	1480
85°	9655	2800	1916



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4173.9	8.4
10°-20°	10383.9	20.9
20°-30°	11501.7	23.2
30°-40°	9214.9	18.6
40°-50°	6578.2	13.3
50°-60°	4225.3	8.5
60°-70°	2289.8	4.6
70°-80°	978.7	2.0
80°-90°	271.4	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°	26059.5	52.5
0°-40°	35274.5	71.1
0°-60°	46078.0	92.9
0°-90°	49618.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	49618.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	45322	45322	45322	45322	45322	
5°	44878	45046	44432	44291	44198	###
15°	43267	41914	37388	33041	31346	12208
25°	39992	35263	23537	15335	12595	18424
35°	35062	25361	10038	4049	2922	21923
45°	28321	14640	3108	1322	1100	21830
55°	19610	6546	1251	769	654	17477
65°	9988	2688	716	494	415	10002
75°	3390	984	446	310	260	3767
85°	625	260	181	150	124	764
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	45322.5	45322.5	45322.5	45322.5	45322.5
2.5°	45024.1	45305.7	45002.6	45191.2	45384.5
5°	44878.4	45045.5	44432.1	44291.2	44198.1
7.5°	44625.4	44577.7	43424.7	42677.5	42317.0
10°	44291.2	43904.5	41935.1	40292.7	39571.8
12.5°	43813.8	43016.5	39917.9	37034.3	35812.0
15°	43267.1	41913.6	37387.6	33040.6	31345.7
17.5°	42613.0	40624.5	34363.0	28758.0	26521.3
20°	41839.6	39068.1	30949.4	24208.1	21613.3
22.5°	40975.5	37273.0	27294.7	19672.5	16889.1
25°	39991.9	35263.0	23537.3	15335.1	12594.6
27.5°	38929.7	33031.0	19801.4	11458.3	8959.0
30°	37750.4	30615.2	16232.6	8261.9	6185.1
32.5°	36463.7	28046.6	12916.9	5810.3	4230.0
35°	35062.5	25361.1	10038.0	4048.6	2921.9
37.5°	33627.8	22620.6	7581.6	2862.2	2095.9
40°	32011.7	19889.7	5638.5	2095.9	1594.6
42.5°	30276.2	17211.4	4172.7	1613.7	1291.4
45°	28321.2	14640.4	3108.1	1322.5	1100.5
47.5°	26425.8	12243.7	2360.9	1126.7	957.2
50°	24282.1	10080.9	1847.7	983.5	840.3
52.5°	22007.1	8178.4	1499.1	866.5	740.0
55°	19610.4	6545.6	1250.9	768.7	654.1
57.5°	17182.7	5184.9	1069.4	685.1	582.5
60°	14690.5	4146.5	928.6	613.5	520.4
62.5°	12258.0	3315.8	811.6	551.4	465.5
65°	9987.8	2687.9	716.1	494.1	415.4
67.5°	7889.5	2124.6	668.4	444.0	374.8
70°	6089.6	1654.3	620.7	396.3	334.2
72.5°	4614.4	1270.0	549.0	353.3	296.0
75°	3389.8	983.5	446.4	310.3	260.2
77.5°	2425.3	756.7	362.8	269.7	224.4
80°	1663.8	563.4	298.4	231.6	191.0
82.5°	1081.4	398.7	241.1	191.0	157.6
85°	625.4	260.2	181.4	150.4	124.1
87.5°	269.7	143.2	124.1	112.2	95.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)