

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-UNV-L835-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-LD5-60SE-N-UNV-L835-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

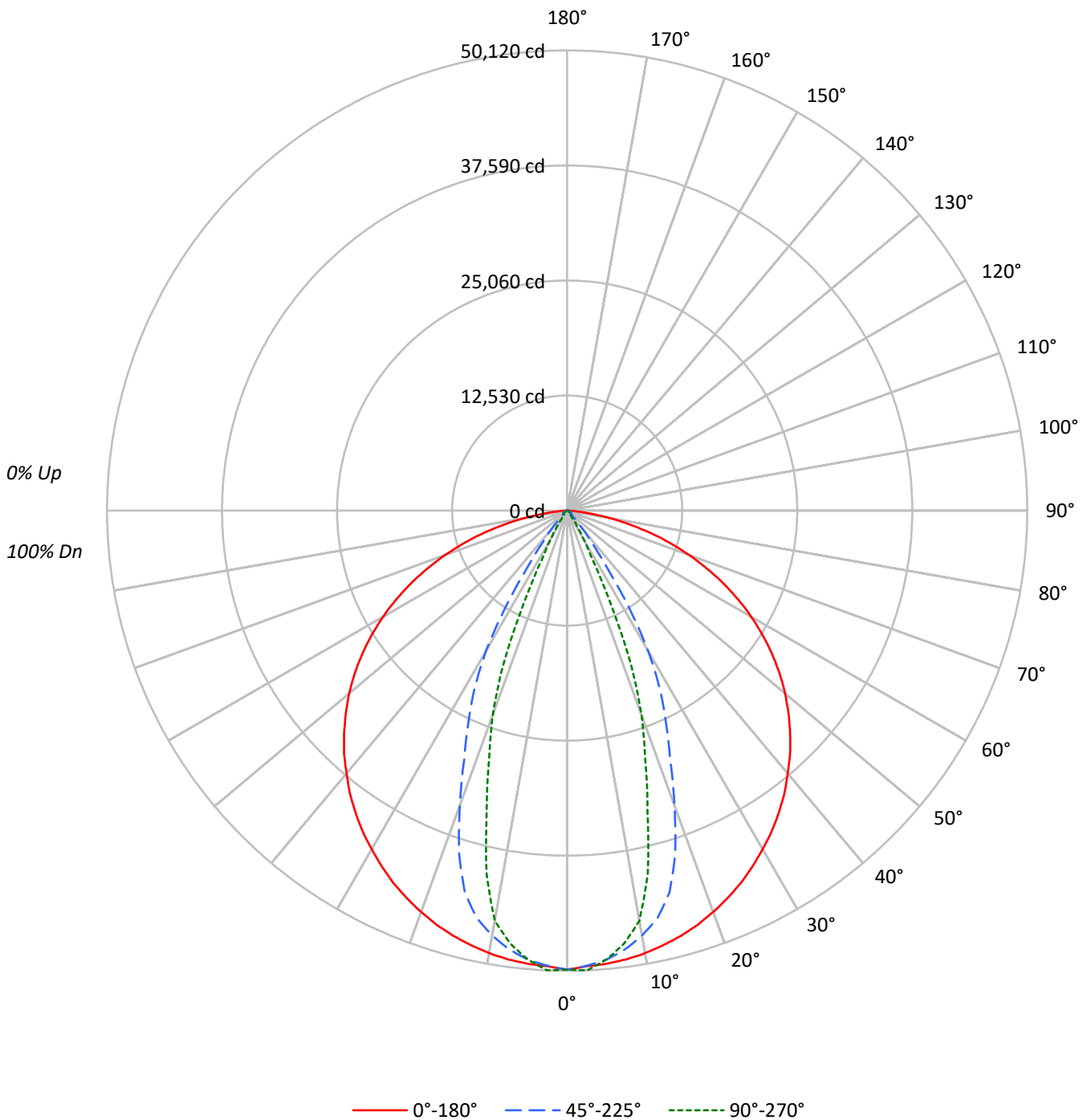
Lumens per Lamp: N/A  
Luminaire Lumens: 53142.0 lumens  
Efficiency: N/A  
Efficacy: 137.7 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-60SE-N-UNV-L835-ED4-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-N-UNV-L835-ED4-U

**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°	67272	67272	67272
5°	66912	66321	66293
10°	66870	64196	61944
15°	66776	59974	47143
20°	66621	48891	33934
25°	66451	37804	16716
30°	66157	27475	5421
35°	66001	12189	1395
40°	65656	4950	940
45°	65362	1389	1000
50°	64852	986	1110
55°	63918	1172	474
60°	62341	1306	288
65°	59777	833	341
70°	55533	739	421
75°	48581	556	581
80°	36324	682	829
85°	17993	881	1102



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-N-UNV-L835-ED4-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	4639.9	8.7
10°-20°	11602.1	21.8
20°-30°	12566.9	23.6
30°-40°	9306.3	17.5
40°-50°	6703.0	12.6
50°-60°	4150.4	7.8
60°-70°	2552.5	4.8
70°-80°	1345.6	2.5
80°-90°	275.4	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°	28808.9	54.2
0°-40°	38115.2	71.7
0°-60°	48968.6	92.1
0°-90°	53142.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	53142.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	49998	49998	49998	49998	49998	
5°	49542	49725	49104	49140	49083	###
15°	47939	46826	43056	36615	33844	13533
25°	44761	41000	25464	16019	11260	20625
35°	40182	28328	7421	1746	849	25139
45°	34350	15960	730	528	526	26491
55°	27248	3287	500	452	202	24324
65°	18776	347	262	166	107	18525
75°	9345	81	107	140	112	9870
85°	1166	31	57	86	71	###
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-N-UNV-L835-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	49998.4	49998.4	49998.4	49998.4	49998.4
2.5°	49677.3	49993.7	49620.2	49898.5	50119.7
5°	49541.7	49724.9	49104.1	49139.8	49082.7
7.5°	49303.9	49261.1	48216.9	47760.2	47560.4
10°	48944.7	48661.7	46987.2	46033.5	45338.9
12.5°	48480.9	47848.2	45453.1	42420.5	40536.7
15°	47938.6	46825.5	43055.6	36614.6	33843.6
17.5°	47291.7	45714.7	39135.8	30687.4	28213.7
20°	46528.2	44475.5	34145.7	26108.8	23699.4
22.5°	45676.7	42967.6	29298.3	21699.0	18262.1
25°	44761.0	41000.5	25464.2	16019.2	11259.8
27.5°	43702.5	38472.2	21867.9	9435.5	5746.5
30°	42582.3	35427.7	17684.1	5075.7	3489.3
32.5°	41452.5	31976.5	12513.3	3170.5	1978.9
35°	40182.3	28327.9	7420.9	1745.8	849.1
37.5°	38857.5	24983.7	4386.0	794.4	544.7
40°	37380.5	21927.4	2818.5	528.0	535.2
42.5°	35953.4	19077.9	1586.5	520.9	530.4
45°	34350.3	15959.7	730.2	528.0	525.6
47.5°	32692.5	12727.3	473.3	532.8	532.8
50°	30982.3	9100.1	470.9	544.7	530.4
52.5°	29177.0	5677.5	490.0	542.3	435.3
55°	27248.1	3287.1	499.5	451.9	202.2
57.5°	25250.1	1938.5	504.2	259.3	114.2
60°	23166.6	1072.7	485.2	192.7	107.0
62.5°	21018.8	511.4	382.9	180.8	104.7
65°	18775.9	347.3	261.6	166.5	107.0
67.5°	16447.3	268.8	206.9	157.0	109.4
70°	14116.4	199.8	187.9	157.0	107.0
72.5°	11747.4	135.6	157.0	159.4	107.0
75°	9345.1	80.9	107.0	140.3	111.8
77.5°	6964.2	49.9	83.2	145.1	135.6
80°	4688.0	42.8	88.0	135.6	107.0
82.5°	2751.9	38.1	85.6	104.7	85.6
85°	1165.5	30.9	57.1	85.6	71.4
87.5°	218.8	26.2	45.2	69.0	61.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)