

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-LD5-60HE-W-AI-UNV-L840-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 (P23765)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-60HE-W-AI-UNV-L840-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

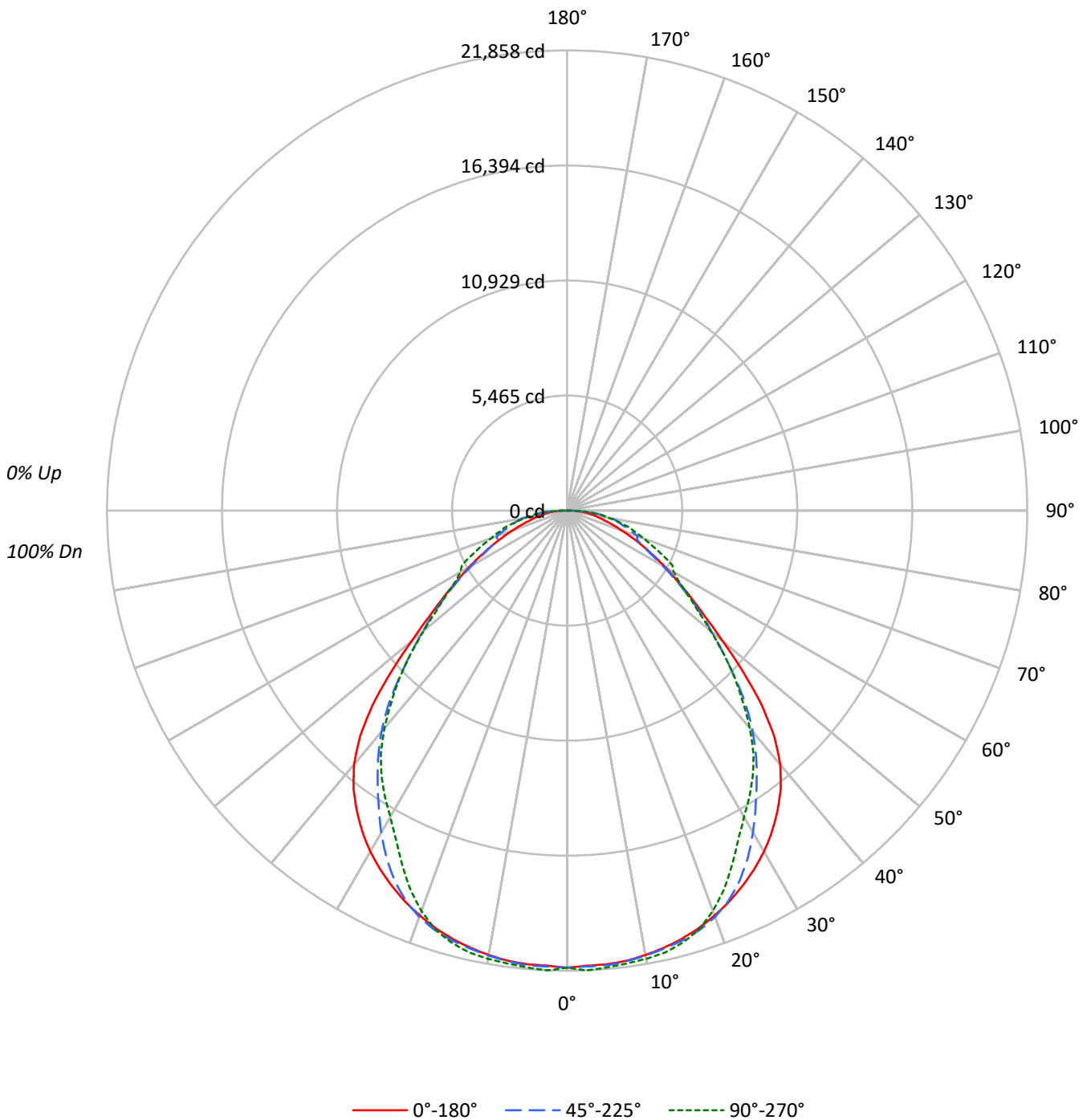
Lumens per Lamp: N/A  
Luminaire Lumens: 50259.0 lumens  
Efficiency: N/A  
Efficacy: 136.2 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 369  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	29215	29215	29215
5°	29214	29277	29420
10°	29286	29323	29538
15°	29331	29441	29585
20°	29302	29411	28974
25°	29228	28790	27538
30°	29055	27432	26095
35°	28618	25783	25245
40°	27661	24107	23709
45°	24862	21526	21447
50°	20165	18750	18621
55°	16744	16432	16427
60°	14497	14073	15734
65°	12564	12486	15860
70°	10833	14006	15119
75°	9715	14354	15761
80°	10098	16898	15813
85°	11464	19473	18068



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2067.4	4.1
10°-20°	5970.8	11.9
20°-30°	8867.9	17.6
30°-40°	10067.6	20.0
40°-50°	9000.0	17.9
50°-60°	6222.6	12.4
60°-70°	4106.1	8.2
70°-80°	2770.1	5.5
80°-90°	1186.4	2.4
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°	16906.2	33.6
0°-40°	26973.8	53.7
0°-60°	42196.4	84.0
0°-90°	50259.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	50259.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21713	21713	21713	21713	21713	
5°	21630	21763	21677	21765	21782	###
15°	21057	21158	21136	21254	21239	5944
25°	19687	19874	19392	18814	18549	9071
35°	17423	17056	15697	15468	15370	10865
45°	13066	11960	11313	11399	11271	9936
55°	7138	6516	7005	6907	7003	6483
65°	3946	3504	3922	4586	4982	3938
75°	1869	2351	2761	2950	3032	2041
85°	743	1033	1261	1269	1170	774
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21713.4	21713.4	21713.4	21713.4	21713.4
2.5°	21639.7	21774.9	21674.1	21767.5	21858.5
5°	21629.8	21762.6	21676.6	21765.1	21782.3
7.5°	21568.4	21691.3	21590.5	21676.6	21696.2
10°	21435.6	21580.7	21462.6	21595.4	21620.0
12.5°	21263.5	21411.0	21307.7	21489.7	21499.5
15°	21056.9	21157.8	21135.6	21253.7	21238.9
17.5°	20796.3	20911.9	20894.7	20924.2	20855.3
20°	20464.4	20594.7	20540.6	20405.4	20235.7
22.5°	20107.9	20265.2	20051.3	19709.5	19471.0
25°	19687.4	19874.3	19392.4	18814.5	18549.0
27.5°	19222.7	19389.9	18588.3	17880.2	17604.8
30°	18701.4	18772.7	17656.5	16982.8	16795.9
32.5°	18099.0	17995.8	16660.7	16215.6	16107.4
35°	17422.9	17056.5	15696.8	15468.2	15369.8
37.5°	16660.7	15989.4	14745.3	14639.5	14536.3
40°	15748.5	14757.6	13724.9	13656.0	13498.7
42.5°	14570.7	13417.5	12591.4	12510.2	12370.1
45°	13065.9	11959.5	11312.8	11398.9	11271.0
47.5°	11335.0	10496.5	10085.9	10321.9	10085.9
50°	9633.5	9070.4	8957.3	9171.2	8895.8
52.5°	8239.4	7732.8	7966.4	8003.3	7838.6
55°	7137.8	6515.8	7005.1	6906.7	7002.6
57.5°	6178.9	5483.1	6085.5	5972.4	6301.8
60°	5387.2	4605.3	5229.8	5205.2	5847.0
62.5°	4610.2	3985.7	4487.3	4848.7	5638.0
65°	3946.3	3503.8	3921.7	4585.6	4981.5
67.5°	3309.5	3142.3	3587.4	3956.2	4388.9
70°	2753.8	2839.9	3560.3	3491.5	3843.1
72.5°	2286.7	2579.3	3142.3	3154.6	3402.9
75°	1868.7	2350.6	2761.2	2950.5	3031.7
77.5°	1553.9	2131.8	2493.2	2559.6	2480.9
80°	1303.2	1878.5	2180.9	2151.4	2040.8
82.5°	1052.4	1423.6	1718.7	1745.7	1615.4
85°	742.6	1032.7	1261.4	1268.7	1170.4
87.5°	398.3	636.8	764.7	786.8	727.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)