

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-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 (P23760)
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-UNV-L840-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

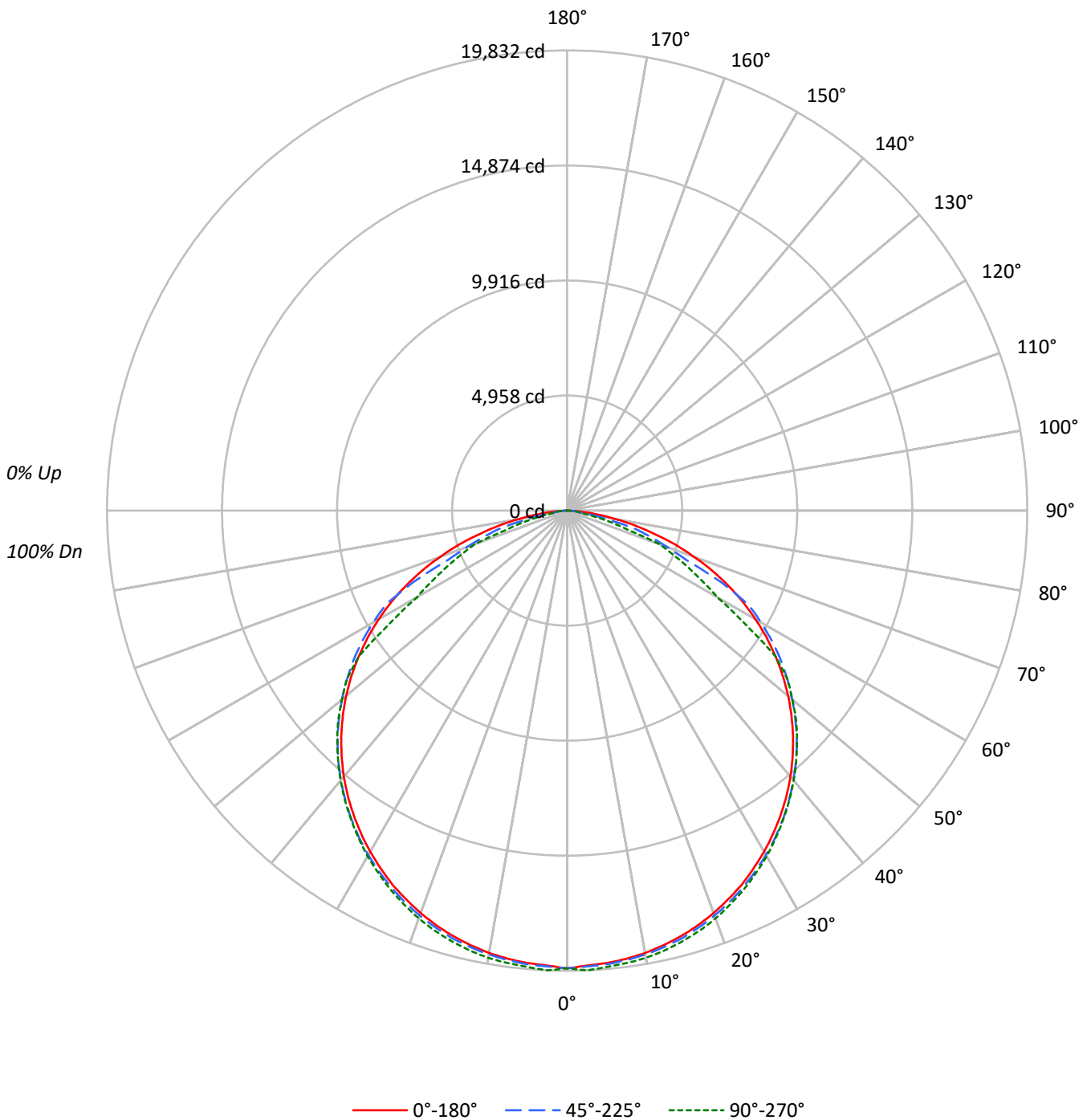
Lumens per Lamp: N/A
Luminaire Lumens: 56953.0 lumens
Efficiency: N/A
Efficacy: 154.3 lumens/watt
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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	102	99	95	98	95	92	94	92	89	91	89	87	85
2	99	91	85	79	97	90	83	78	86	81	76	83	78	75	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	70	66	62	60
4	83	71	62	56	81	70	62	55	67	60	55	65	59	54	63	57	53	51
5	76	63	54	48	74	62	54	48	60	53	47	58	52	47	56	51	46	44
6	70	57	48	42	68	56	48	42	54	47	41	53	46	41	51	45	40	38
7	65	52	43	37	63	51	43	37	49	42	36	48	41	36	46	40	36	34
8	61	47	39	33	59	46	38	33	45	38	32	44	37	32	43	37	32	30
9	57	43	35	29	55	43	35	29	41	34	29	40	34	29	39	33	29	27
10	53	40	32	27	52	39	32	27	38	31	26	37	31	26	36	30	26	24

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	26544	26544	26544
5°	26434	26508	26658
10°	26449	26543	26743
15°	26442	26584	26769
20°	26429	26598	26784
25°	26419	26609	26756
30°	26373	26630	26729
35°	26340	26643	26678
40°	26292	26641	26683
45°	26193	26629	26661
50°	26036	26517	26512
55°	25733	26376	25722
60°	25255	25987	20125
65°	24412	23388	18132
70°	22870	17995	16711
75°	20251	15689	10414
80°	16677	9237	4655
85°	10990	5659	6098



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1872.1	3.3
10°-20°	5401.1	9.5
20°-30°	8280.6	14.5
30°-40°	10155.3	17.8
40°-50°	10783.3	18.9
50°-60°	9849.2	17.3
60°-70°	6859.0	12.0
70°-80°	3199.0	5.6
80°-90°	553.4	1.0
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°	15553.8	27.3
0°-40°	25709.1	45.1
0°-60°	46341.6	81.4
0°-90°	56953.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	56953.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	19728	19728	19728	19728	19728	
5°	19572	19709	19626	19721	19738	###
15°	18983	19115	19085	19201	19217	5360
25°	17796	17952	17923	18056	18023	8201
35°	16036	16220	16220	16329	16242	10035
45°	13765	13974	13995	14085	14011	10616
55°	10970	11190	11244	11263	10965	9797
65°	7668	7904	7346	5842	5695	7566
75°	3896	4141	3018	2091	2003	4164
85°	712	468	367	393	395	920
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	19728.0	19728.0	19728.0	19728.0	19728.0
2.5°	19623.9	19749.3	19666.5	19756.4	19832.1
5°	19571.9	19709.1	19626.3	19720.9	19737.5
7.5°	19486.8	19616.8	19541.2	19645.2	19671.2
10°	19359.0	19486.8	19427.6	19550.6	19574.3
12.5°	19186.4	19316.5	19271.5	19406.3	19422.9
15°	18983.0	19115.4	19084.7	19200.6	19217.1
17.5°	18744.1	18881.3	18845.8	18968.8	18980.6
20°	18457.9	18606.9	18576.2	18720.4	18706.2
22.5°	18136.2	18294.7	18271.0	18415.3	18372.8
25°	17795.6	17951.7	17923.4	18055.8	18022.7
27.5°	17395.9	17568.6	17542.6	17670.3	17618.3
30°	16974.9	17150.0	17140.5	17256.4	17204.3
32.5°	16520.8	16707.7	16698.2	16811.7	16731.3
35°	16035.9	16220.4	16220.4	16329.2	16241.7
37.5°	15522.7	15709.6	15711.9	15816.0	15733.2
40°	14969.3	15156.1	15167.9	15267.3	15191.6
42.5°	14387.4	14590.8	14600.3	14690.2	14619.2
45°	13765.4	13973.5	13994.8	14084.7	14011.4
47.5°	13114.9	13325.4	13344.4	13441.3	13389.3
50°	12438.5	12641.9	12667.9	12748.3	12665.6
52.5°	11724.2	11932.4	11967.8	12017.5	11979.7
55°	10969.7	11189.7	11244.1	11263.0	10965.0
57.5°	10189.2	10413.9	10465.9	10030.7	9072.8
60°	9385.1	9607.4	9657.0	8159.9	7478.7
62.5°	8547.8	8765.4	8819.8	6762.1	6544.5
65°	7667.9	7904.4	7346.3	5842.0	5695.4
67.5°	6764.4	7008.0	5555.8	5007.1	4919.6
70°	5813.6	6059.6	4574.3	4269.2	4247.9
72.5°	4900.7	5082.8	3753.5	3235.6	2724.7
75°	3895.5	4141.4	3018.0	2090.8	2003.3
77.5°	3020.3	2611.2	1821.2	1532.6	1208.6
80°	2152.3	1745.5	1192.1	636.2	600.8
82.5°	1364.7	1140.0	468.3	480.1	501.4
85°	711.9	468.3	366.6	392.6	395.0
87.5°	229.4	201.0	220.0	217.6	215.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)