

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-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 (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-L835-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

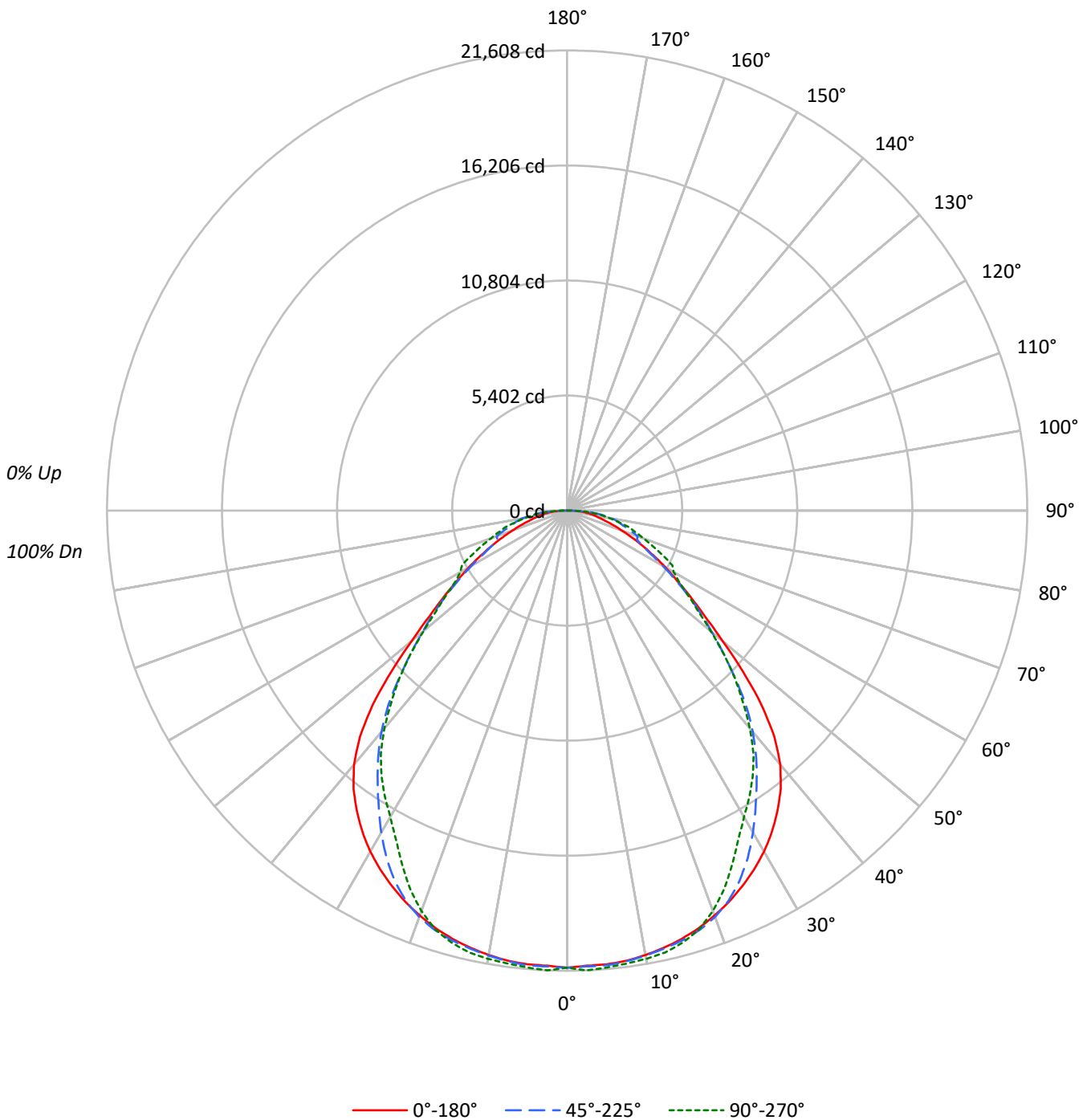
Lumens per Lamp: N/A  
Luminaire Lumens: 49684.0 lumens  
Efficiency: N/A  
Efficacy: 134.6 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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°	28881	28881	28881
5°	28880	28942	29083
10°	28951	28988	29200
15°	28996	29104	29246
20°	28967	29074	28643
25°	28893	28460	27223
30°	28723	27118	25796
35°	28290	25488	24957
40°	27344	23831	23438
45°	24577	21280	21201
50°	19934	18535	18408
55°	16552	16244	16239
60°	14331	13912	15554
65°	12420	12343	15678
70°	10709	13846	14945
75°	9603	14190	15580
80°	9981	16705	15632
85°	11333	19249	17861



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2043.8	4.1
10°-20°	5902.5	11.9
20°-30°	8766.5	17.6
30°-40°	9952.4	20.0
40°-50°	8897.0	17.9
50°-60°	6151.4	12.4
60°-70°	4059.1	8.2
70°-80°	2738.4	5.5
80°-90°	1172.9	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°	16712.8	33.6
0°-40°	26665.2	53.7
0°-60°	41713.6	84.0
0°-90°	49684.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	49684.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21465	21465	21465	21465	21465	
5°	21382	21514	21429	21516	21533	###
15°	20816	20916	20894	21010	20996	5876
25°	19462	19647	19170	18599	18337	8968
35°	17224	16861	15517	15291	15194	10740
45°	12916	11823	11183	11268	11142	9823
55°	7056	6441	6925	6828	6922	6409
65°	3901	3464	3877	4533	4924	3893
75°	1847	2324	2730	2917	2997	2017
85°	734	1021	1247	1254	1157	765
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21465.0	21465.0	21465.0	21465.0	21465.0
2.5°	21392.1	21525.8	21426.1	21518.5	21608.4
5°	21382.4	21513.6	21428.6	21516.1	21533.1
7.5°	21321.6	21443.1	21343.5	21428.6	21448.0
10°	21190.4	21333.8	21217.1	21348.4	21372.7
12.5°	21020.2	21166.1	21064.0	21243.8	21253.6
15°	20816.0	20915.7	20893.8	21010.5	20995.9
17.5°	20558.4	20672.6	20655.6	20684.8	20616.7
20°	20230.3	20359.1	20305.6	20171.9	20004.2
22.5°	19877.8	20033.4	19821.9	19484.0	19248.3
25°	19462.2	19646.9	19170.5	18599.3	18336.8
27.5°	19002.8	19168.1	18375.7	17675.6	17403.4
30°	18487.5	18558.0	17454.5	16788.5	16603.7
32.5°	17892.0	17789.9	16470.0	16030.1	15923.2
35°	17223.5	16861.4	15517.2	15291.2	15194.0
37.5°	16470.0	15806.5	14576.6	14472.1	14370.0
40°	15568.3	14588.7	13567.9	13499.8	13344.2
42.5°	14404.0	13264.0	12447.3	12367.1	12228.6
45°	12916.4	11822.7	11183.4	11268.5	11142.1
47.5°	11205.3	10376.4	9970.5	10203.8	9970.5
50°	9523.3	8966.6	8854.8	9066.3	8794.1
52.5°	8145.1	7644.4	7875.3	7911.7	7748.9
55°	7056.2	6441.2	6924.9	6827.7	6922.5
57.5°	6108.2	5420.3	6015.8	5904.0	6229.7
60°	5325.5	4552.6	5170.0	5145.7	5780.1
62.5°	4557.5	3940.1	4435.9	4793.2	5573.5
65°	3901.2	3463.7	3876.9	4533.2	4924.5
67.5°	3271.6	3106.4	3546.3	3910.9	4338.7
70°	2722.3	2807.4	3519.6	3451.5	3799.1
72.5°	2260.5	2549.7	3106.4	3118.5	3364.0
75°	1847.3	2323.7	2729.6	2916.8	2997.0
77.5°	1536.2	2107.4	2464.7	2530.3	2452.5
80°	1288.2	1857.0	2156.0	2126.8	2017.4
82.5°	1040.3	1407.3	1699.0	1725.8	1596.9
85°	734.1	1020.9	1246.9	1254.2	1157.0
87.5°	393.8	629.5	755.9	777.8	719.5
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)