

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-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 (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-L850-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

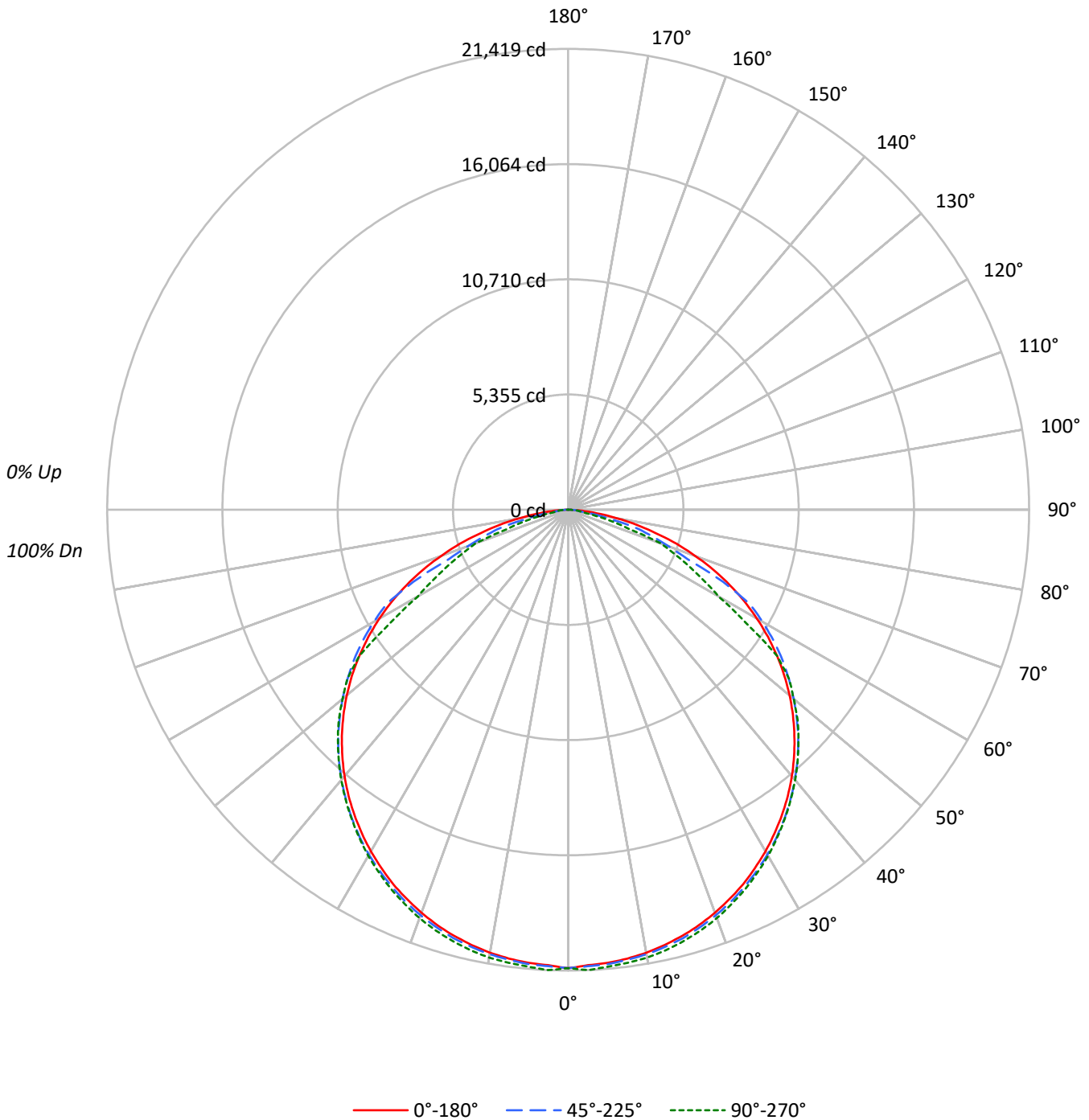
Lumens per Lamp: N/A  
Luminaire Lumens: 61509.0 lumens  
Efficiency: N/A  
Efficacy: 166.7 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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°	28667	28667	28667
5°	28549	28628	28791
10°	28565	28666	28883
15°	28558	28711	28910
20°	28543	28726	28927
25°	28533	28737	28897
30°	28483	28760	28868
35°	28447	28774	28812
40°	28395	28772	28817
45°	28288	28760	28794
50°	28119	28638	28633
55°	27791	28486	27779
60°	27275	28066	21735
65°	26365	25259	19583
70°	24700	19434	18048
75°	21871	16944	11248
80°	18011	9975	5027
85°	11870	6112	6586



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	2021.8	3.3
10°-20°	5833.2	9.5
20°-30°	8943.0	14.5
30°-40°	10967.7	17.8
40°-50°	11645.9	18.9
50°-60°	10637.1	17.3
60°-70°	7407.7	12.0
70°-80°	3454.9	5.6
80°-90°	597.7	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°	16798.1	27.3
0°-40°	27765.8	45.1
0°-60°	50048.7	81.4
0°-90°	61509.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	61509.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	21306	21306	21306	21306	21306	
5°	21138	21286	21196	21298	21316	###
15°	20502	20645	20611	20736	20754	5789
25°	19219	19388	19357	19500	19464	8857
35°	17319	17518	17518	17636	17541	10838
45°	14866	15091	15114	15211	15132	11466
55°	11847	12085	12144	12164	11842	10580
65°	8281	8537	7934	6309	6151	8171
75°	4207	4473	3259	2258	2164	4497
85°	769	506	396	424	427	993
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	21306.2	21306.2	21306.2	21306.2	21306.2
2.5°	21193.8	21329.1	21239.7	21336.8	21418.6
5°	21137.6	21285.7	21196.3	21298.5	21316.4
7.5°	21045.6	21186.1	21104.4	21216.8	21244.9
10°	20907.7	21045.6	20981.8	21114.6	21140.1
12.5°	20721.2	20861.7	20813.2	20958.8	20976.6
15°	20501.5	20644.6	20611.4	20736.5	20754.4
17.5°	20243.5	20391.7	20353.4	20486.2	20499.0
20°	19934.5	20095.4	20062.2	20218.0	20202.7
22.5°	19587.1	19758.2	19732.7	19888.5	19842.5
25°	19219.2	19387.8	19357.2	19500.2	19464.4
27.5°	18787.5	18974.0	18945.9	19083.8	19027.6
30°	18332.8	18521.9	18511.7	18636.8	18580.6
32.5°	17842.4	18044.2	18034.0	18156.6	18069.7
35°	17318.8	17518.0	17518.0	17635.5	17541.0
37.5°	16764.5	16966.3	16968.8	17081.2	16991.8
40°	16166.7	16368.5	16381.3	16488.6	16406.8
42.5°	15538.3	15758.0	15768.2	15865.3	15788.7
45°	14866.5	15091.3	15114.3	15211.4	15132.2
47.5°	14164.1	14391.4	14411.9	14516.6	14460.4
50°	13433.5	13653.2	13681.3	13768.2	13678.8
52.5°	12662.1	12886.9	12925.2	12978.9	12938.0
55°	11847.3	12084.8	12143.6	12164.0	11842.1
57.5°	11004.3	11247.0	11303.2	10833.2	9798.6
60°	10135.8	10375.9	10429.6	8812.6	8077.0
62.5°	9231.6	9466.6	9525.3	7303.0	7068.0
65°	8281.3	8536.8	7933.9	6309.3	6151.0
67.5°	7305.6	7568.7	6000.3	5407.6	5313.1
70°	6278.7	6544.3	4940.2	4610.7	4587.7
72.5°	5292.7	5489.4	4053.8	3494.4	2942.7
75°	4207.1	4472.7	3259.4	2258.1	2163.6
77.5°	3262.0	2820.0	1966.9	1655.2	1305.3
80°	2324.5	1885.1	1287.4	687.1	648.8
82.5°	1473.9	1231.2	505.8	518.5	541.5
85°	768.9	505.8	395.9	424.0	426.6
87.5°	247.8	217.1	237.6	235.0	232.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)