

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-FLI-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 (P26703)  
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-FLI-UNV-L840-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

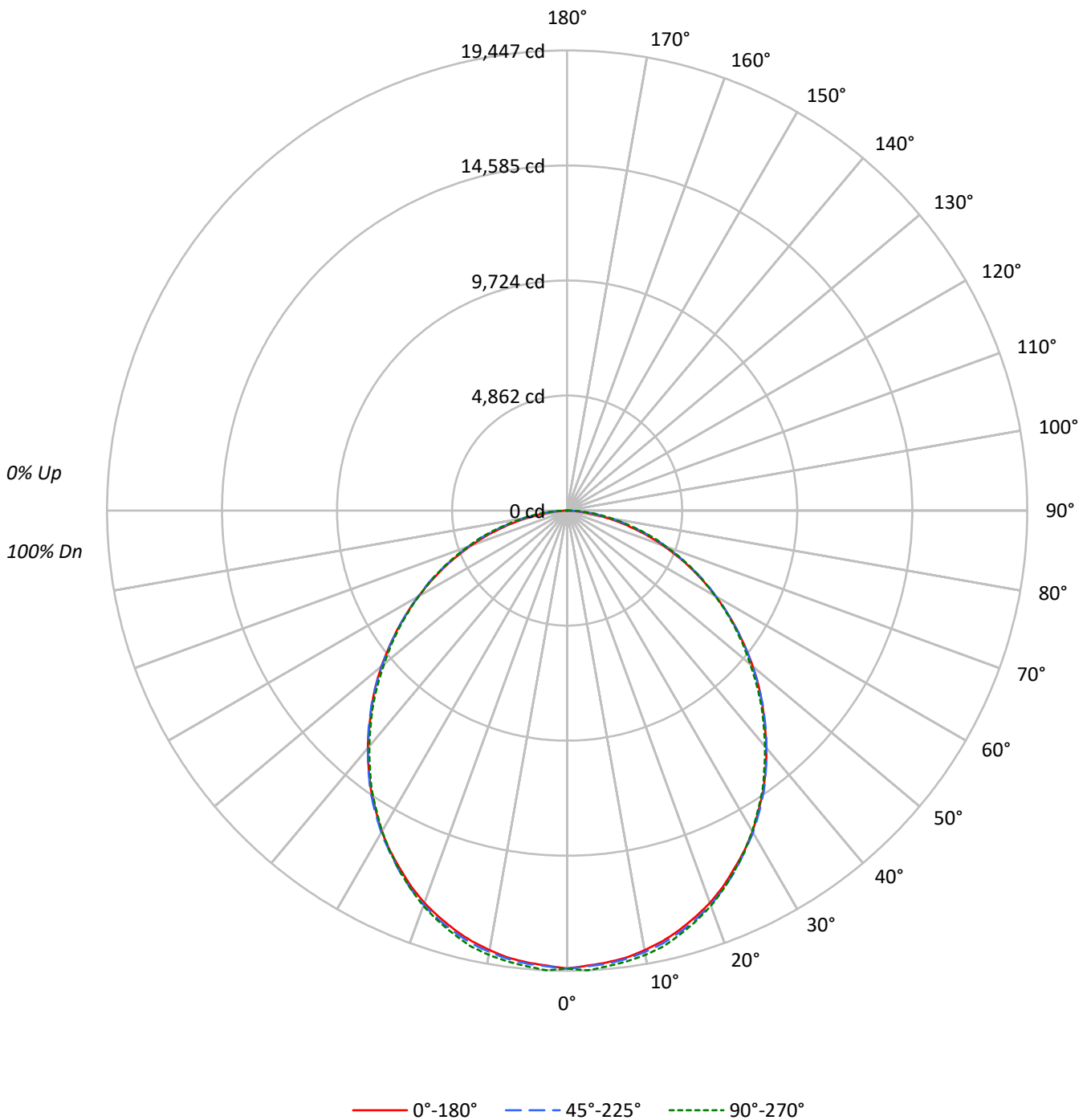
Lumens per Lamp: N/A  
Luminaire Lumens: 50555.0 lumens  
Efficiency: N/A  
Efficacy: 137.0 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

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	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	109	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84					84			
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71					71			
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60					60			
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51					51			
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45					45			
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39					39			
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35					35			
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31					31			
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28					28			
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25					25			

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

	0°	45°	90°
0°	26040	26040	26040
5°	25892	25965	26113
10°	25775	25879	26047
15°	25548	25687	25812
20°	25259	25380	25454
25°	24791	24932	24895
30°	24334	24399	24300
35°	23731	23792	23640
40°	23018	23018	22841
45°	22213	22274	22047
50°	21450	21414	21146
55°	20522	20525	20340
60°	19527	19550	19474
65°	18405	18589	18636
70°	16999	17464	17484
75°	15023	15995	16245
80°	12321	14009	14801
85°	8549	11760	13300



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1830.4	3.6
10°-20°	5207.1	10.3
20°-30°	7738.1	15.3
30°-40°	9047.8	17.9
40°-50°	9020.9	17.8
50°-60°	7826.8	15.5
60°-70°	5781.0	11.4
70°-80°	3236.7	6.4
80°-90°	863.6	1.7
90°-100°	2.6	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°	14775.5	29.2
0°-40°	23823.3	47.1
0°-60°	40671.1	80.4
0°-90°	50552.4	100.0
90°-120°	2.6	0.0
90°-150°	2.6	0.0
90°-180°	3.0	0.0
0°-180°	50555.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	19354	19354	19354	19354	19354	
5°	19170	19291	19225	19310	19334	###
15°	18341	18469	18441	18529	18530	5173
25°	16699	16833	16794	16831	16769	7699
35°	14448	14575	14485	14482	14393	9025
45°	11674	11798	11706	11658	11586	9012
55°	8748	8809	8750	8735	8671	7823
65°	5781	5838	5839	5868	5854	5717
75°	2890	2976	3077	3099	3125	3078
85°	554	670	762	830	862	673
90°	0	12	15	33	31	22
95°	0	0	0	0	0	0
105°	0	0	0	0	0	0
115°	0	0	0	0	0	0
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60HE-W-FLI-UNV-L840-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	19353.9	19353.9	19353.9	19353.9	19353.9
2.5°	19248.0	19362.5	19282.5	19358.8	19447.4
5°	19170.5	19291.1	19224.7	19309.6	19334.2
7.5°	19057.3	19174.2	19110.2	19195.1	19221.0
10°	18865.3	18992.0	18941.6	19037.6	19064.7
12.5°	18641.3	18760.7	18727.4	18839.4	18857.9
15°	18341.0	18469.0	18440.6	18529.3	18530.5
17.5°	18008.6	18129.3	18108.3	18177.3	18174.8
20°	17640.6	17769.9	17725.6	17800.6	17777.3
22.5°	17205.0	17342.8	17287.4	17350.2	17291.1
25°	16699.1	16833.3	16793.9	16830.8	16769.3
27.5°	16209.3	16332.3	16251.1	16295.4	16230.2
30°	15662.8	15767.4	15704.6	15719.4	15640.6
32.5°	15048.6	15173.0	15096.6	15094.2	15010.5
35°	14448.0	14574.8	14485.0	14482.5	14392.6
37.5°	13783.4	13901.6	13795.7	13801.9	13697.3
40°	13105.3	13207.4	13105.3	13100.3	13004.3
42.5°	12369.3	12504.6	12411.1	12422.2	12294.2
45°	11673.9	11798.2	11705.9	11657.9	11586.5
47.5°	10980.9	11035.1	10958.8	10946.5	10845.6
50°	10247.4	10288.0	10230.2	10215.4	10102.2
52.5°	9489.2	9559.4	9485.6	9465.9	9390.8
55°	8748.3	8808.6	8749.6	8734.8	8670.8
57.5°	8002.5	8081.2	8020.9	8006.2	7954.5
60°	7256.6	7280.0	7265.2	7287.4	7236.9
62.5°	6515.7	6569.9	6587.1	6580.9	6541.6
65°	5780.9	5837.5	5838.8	5868.3	5853.5
67.5°	5028.9	5102.8	5123.7	5154.5	5168.0
70°	4321.2	4377.9	4439.4	4457.9	4444.3
72.5°	3608.6	3699.7	3768.6	3784.6	3842.5
75°	2889.9	2976.0	3076.9	3099.1	3124.9
77.5°	2222.8	2337.2	2428.3	2457.9	2489.9
80°	1590.2	1716.9	1808.0	1848.6	1910.2
82.5°	1043.7	1172.9	1265.2	1305.8	1380.9
85°	553.8	669.5	761.8	829.5	861.5
87.5°	163.7	262.2	315.1	334.8	363.1
90°	0.0	12.3	14.8	33.2	30.8
92.5°	0.0	0.0	0.0	0.0	0.0
95°	0.0	0.0	0.0	0.0	0.0
97.5°	0.0	0.0	0.0	0.0	0.0
100°	0.0	0.0	0.0	0.0	0.0
102.5°	0.0	0.0	0.0	0.0	0.0
105°	0.0	0.0	0.0	0.0	0.0
107.5°	0.0	0.0	0.0	0.0	0.0
110°	0.0	0.0	0.0	0.0	0.0



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.0	0.0	0.0	0.0	0.0
115°	0.0	0.0	0.0	0.0	0.0
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)