

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-LD5-60SE-W-FLI-UNV-L740-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-LD5-60SE-W-FLI-UNV-L740-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

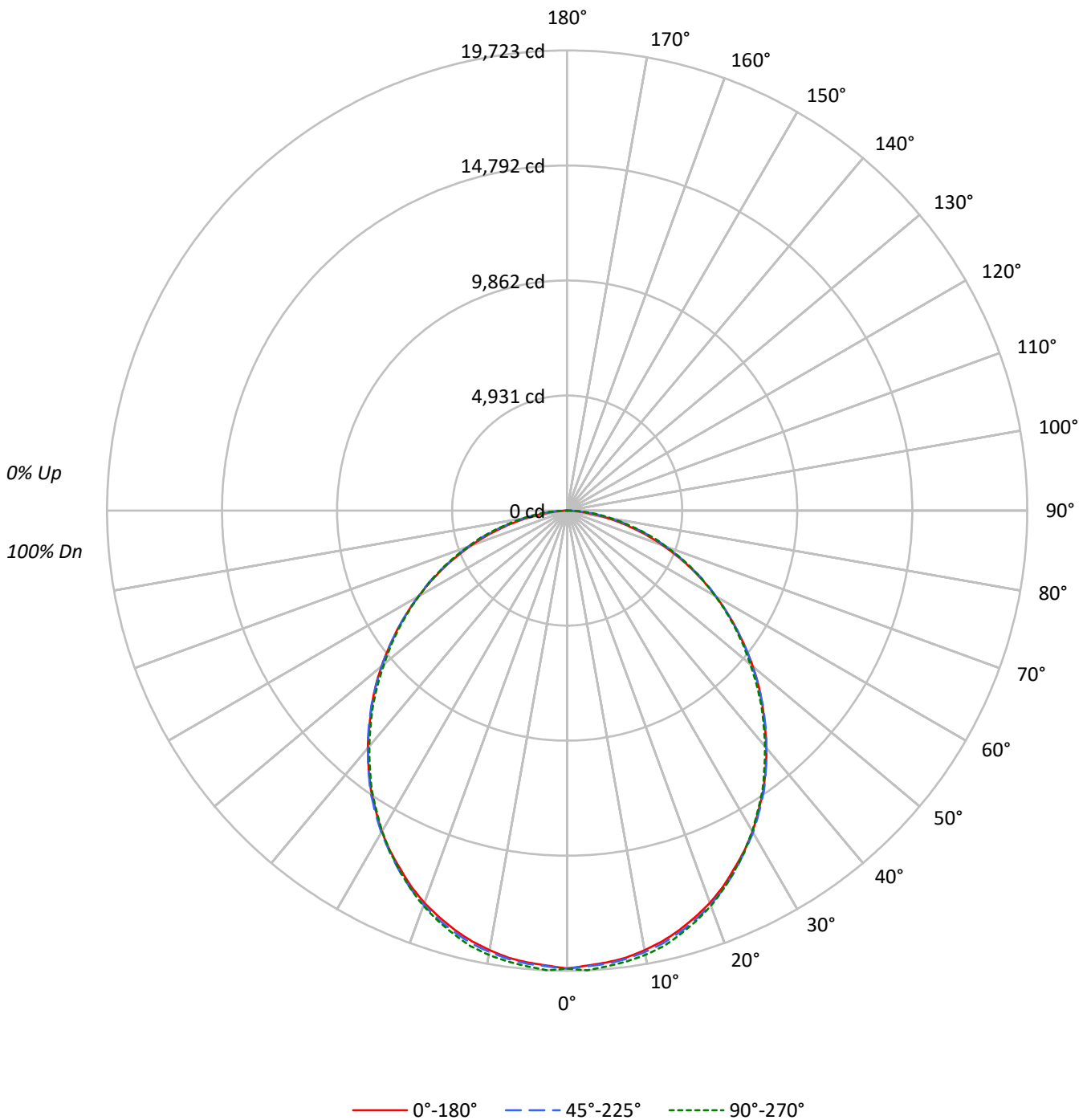
Lumens per Lamp: N/A  
Luminaire Lumens: 51271.0 lumens  
Efficiency: N/A  
Efficacy: 132.8 lumens/watt  
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 386  
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	104	100	96	106	102	98	95	98	95	92	94	91	89	90	88	86	84
2	99	91	85	79	97	89	83	78	86	81	76	83	78	74	80	76	73	71
3	91	80	72	66	88	79	71	65	76	69	64	73	68	63	71	66	62	60
4	83	71	63	56	81	70	62	56	68	61	55	65	59	54	63	58	53	51
5	77	64	55	49	75	63	54	48	61	53	48	59	52	47	57	51	47	45
6	71	58	49	42	69	57	48	42	55	47	42	53	47	42	52	46	41	39
7	66	52	44	38	64	52	43	38	50	43	37	49	42	37	47	41	37	35
8	61	48	39	34	60	47	39	34	46	39	33	45	38	33	43	37	33	31
9	57	44	36	30	56	43	36	30	42	35	30	41	35	30	40	34	30	28
10	54	41	33	28	52	40	33	28	39	32	27	38	32	27	37	31	27	25

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

	0°	45°	90°
0°	26409	26409	26409
5°	26259	26333	26483
10°	26140	26245	26416
15°	25910	26051	26178
20°	25616	25740	25815
25°	25142	25285	25248
30°	24679	24745	24644
35°	24068	24129	23975
40°	23344	23344	23164
45°	22528	22590	22359
50°	21754	21717	21445
55°	20812	20815	20628
60°	19804	19827	19750
65°	18665	18852	18900
70°	17240	17712	17731
75°	15236	16222	16475
80°	12496	14207	15010
85°	8671	11927	13488



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1856.3	3.6
10°-20°	5280.8	10.3
20°-30°	7847.6	15.3
30°-40°	9176.0	17.9
40°-50°	9148.7	17.8
50°-60°	7937.7	15.5
60°-70°	5862.9	11.4
70°-80°	3282.6	6.4
80°-90°	875.9	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°	14984.8	29.2
0°-40°	24160.7	47.1
0°-60°	41247.1	80.4
0°-90°	51268.4	100.0
90°-120°	2.6	0.0
90°-150°	2.6	0.0
90°-180°	3.0	0.0
0°-180°	51271.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	19628	19628	19628	19628	19628	
5°	19442	19564	19497	19583	19608	###
15°	18601	18730	18702	18792	18793	5246
25°	16936	17072	17032	17069	17007	7808
35°	14653	14781	14690	14688	14596	9153
45°	11839	11965	11872	11823	11751	9140
55°	8872	8933	8874	8858	8794	7934
65°	5863	5920	5922	5951	5936	5798
75°	2931	3018	3120	3143	3169	3121
85°	562	679	773	841	874	682
90°	0	12	15	34	31	23
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-LD5-60SE-W-FLI-UNV-L740-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	19628.0	19628.0	19628.0	19628.0	19628.0
2.5°	19520.6	19636.7	19555.6	19633.0	19722.9
5°	19442.0	19564.3	19496.9	19583.1	19608.0
7.5°	19327.2	19445.7	19380.8	19467.0	19493.2
10°	19132.5	19261.0	19209.8	19307.2	19334.7
12.5°	18905.3	19026.4	18992.7	19106.2	19125.0
15°	18600.7	18730.5	18701.8	18791.7	18792.9
17.5°	18263.7	18386.0	18364.8	18434.7	18432.2
20°	17890.5	18021.6	17976.6	18052.8	18029.0
22.5°	17448.6	17588.4	17532.3	17595.9	17536.0
25°	16935.6	17071.7	17031.7	17069.2	17006.8
27.5°	16438.8	16563.6	16481.3	16526.2	16460.0
30°	15884.6	15990.7	15927.1	15942.0	15862.2
32.5°	15261.8	15387.8	15310.5	15308.0	15223.1
35°	14652.7	14781.2	14690.1	14687.6	14596.5
37.5°	13978.6	14098.4	13991.1	13997.3	13891.2
40°	13290.9	13394.5	13290.9	13285.9	13188.5
42.5°	12544.4	12681.7	12586.9	12598.1	12468.3
45°	11839.2	11965.3	11871.7	11823.0	11750.6
47.5°	11136.5	11191.4	11114.0	11101.5	10999.2
50°	10392.5	10433.7	10375.1	10360.1	10245.2
52.5°	9623.6	9694.8	9619.9	9599.9	9523.8
55°	8872.2	8933.4	8873.5	8858.5	8793.6
57.5°	8115.8	8195.7	8134.5	8119.6	8067.1
60°	7359.4	7383.1	7368.1	7390.6	7339.4
62.5°	6608.0	6662.9	6680.4	6674.1	6634.2
65°	5862.8	5920.2	5921.5	5951.4	5936.5
67.5°	5100.2	5175.0	5196.3	5227.5	5241.2
70°	4382.4	4439.9	4502.3	4521.0	4507.3
72.5°	3659.7	3752.1	3822.0	3838.2	3896.9
75°	2930.8	3018.2	3120.5	3143.0	3169.2
77.5°	2254.3	2370.3	2462.7	2492.7	2525.1
80°	1612.7	1741.2	1833.6	1874.8	1937.2
82.5°	1058.5	1189.5	1283.2	1324.3	1400.5
85°	561.7	679.0	772.6	841.3	873.7
87.5°	166.0	265.9	319.5	339.5	368.2
90°	0.0	12.5	15.0	33.7	31.2
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)