

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-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-LD5-60SE-W-UNV-L850-ED4-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

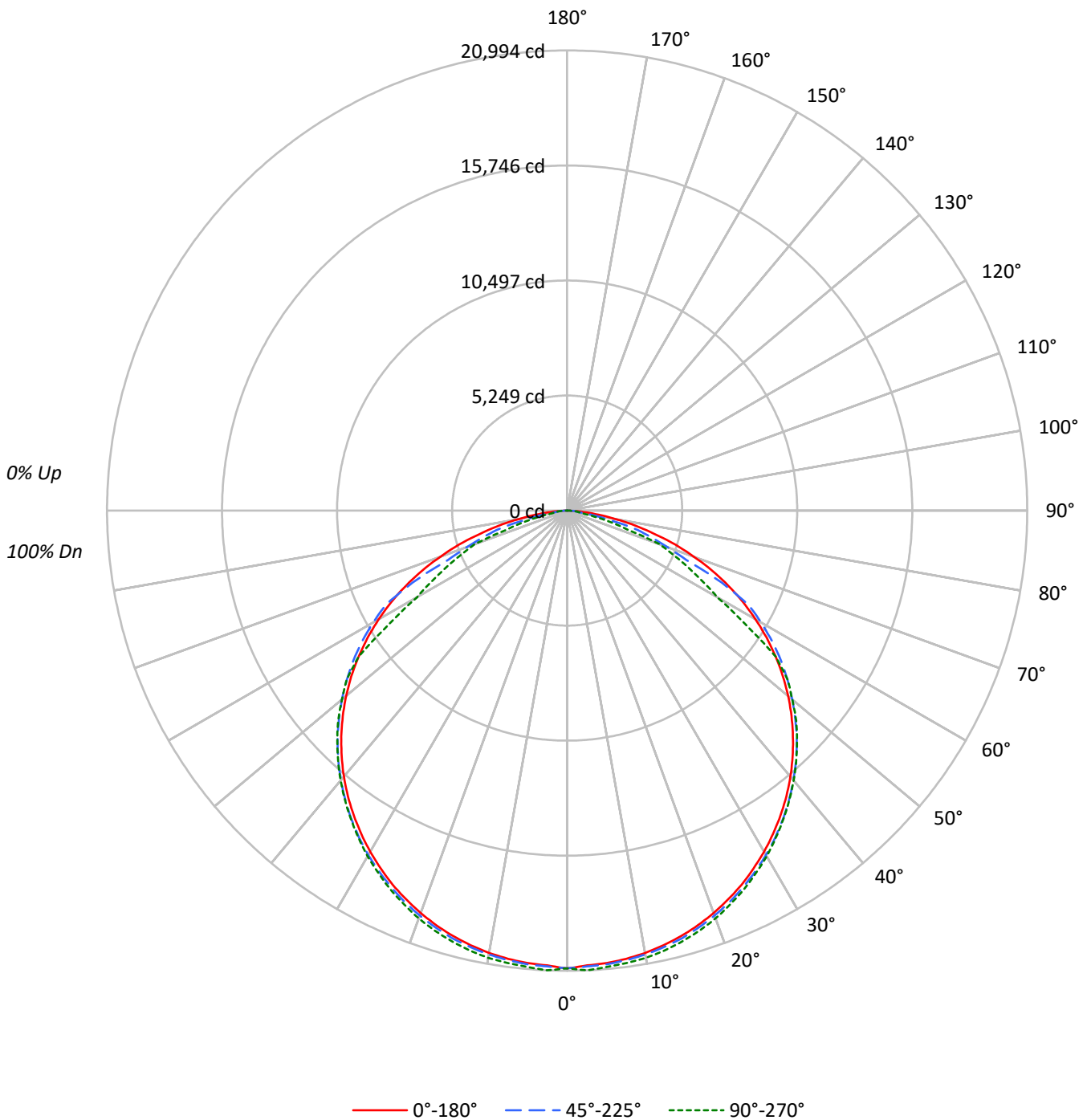
Lumens per Lamp: N/A  
Luminaire Lumens: 60289.0 lumens  
Efficiency: N/A  
Efficacy: 156.2 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.42  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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



TEST NUMBER: P#  
CATALOG NUMBER: HBLED-LD5-60SE-W-UNV-L850-ED4-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-W-UNV-L850-ED4-U

**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°	28099	28099	28099
5°	27983	28061	28220
10°	27998	28098	28310
15°	27991	28141	28337
20°	27977	28156	28353
25°	27967	28167	28323
30°	27918	28190	28295
35°	27882	28203	28240
40°	27832	28202	28246
45°	27727	28189	28223
50°	27562	28070	28065
55°	27240	27921	27228
60°	26734	27509	21304
65°	25842	24758	19195
70°	24210	19049	17690
75°	21437	16608	11025
80°	17654	9778	4927
85°	11634	5991	6455



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-W-UNV-L850-ED4-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1981.7	3.3
10°-20°	5717.5	9.5
20°-30°	8765.7	14.5
30°-40°	10750.1	17.8
40°-50°	11414.9	18.9
50°-60°	10426.1	17.3
60°-70°	7260.7	12.0
70°-80°	3386.4	5.6
80°-90°	585.8	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°	16464.9	27.3
0°-40°	27215.0	45.1
0°-60°	49056.0	81.4
0°-90°	60289.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	60289.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	20884	20884	20884	20884	20884	
5°	20718	20864	20776	20876	20894	###
15°	20095	20235	20202	20325	20343	5674
25°	18838	19003	18973	19113	19078	8681
35°	16975	17170	17170	17286	17193	10623
45°	14572	14792	14814	14910	14832	11238
55°	11612	11845	11903	11923	11607	10370
65°	8117	8367	7777	6184	6029	8009
75°	4124	4384	3195	2213	2121	4408
85°	754	496	388	416	418	973
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-W-UNV-L850-ED4-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	20883.6	20883.6	20883.6	20883.6	20883.6
2.5°	20773.4	20906.1	20818.5	20913.6	20993.7
5°	20718.3	20863.5	20775.9	20876.0	20893.6
7.5°	20628.2	20765.9	20685.8	20795.9	20823.5
10°	20493.0	20628.2	20565.6	20695.8	20720.8
12.5°	20310.2	20447.9	20400.3	20543.1	20560.6
15°	20094.9	20235.1	20202.5	20325.2	20342.8
17.5°	19842.0	19987.2	19949.7	20079.9	20092.4
20°	19539.1	19696.8	19664.2	19817.0	19802.0
22.5°	19198.6	19366.3	19341.3	19494.0	19448.9
25°	18838.0	19003.3	18973.2	19113.4	19078.4
27.5°	18414.9	18597.7	18570.1	18705.3	18650.2
30°	17969.2	18154.5	18144.5	18267.2	18212.1
32.5°	17488.5	17686.3	17676.3	17796.5	17711.3
35°	16975.2	17170.5	17170.5	17285.7	17193.1
37.5°	16431.9	16629.7	16632.2	16742.4	16654.8
40°	15846.1	16043.9	16056.4	16161.5	16081.4
42.5°	15230.2	15445.5	15455.5	15550.6	15475.5
45°	14571.7	14792.0	14814.5	14909.7	14832.1
47.5°	13883.1	14106.0	14126.0	14228.7	14173.6
50°	13167.1	13382.4	13409.9	13495.1	13407.4
52.5°	12411.0	12631.3	12668.8	12721.4	12681.4
55°	11612.3	11845.1	11902.7	11922.7	11607.3
57.5°	10786.0	11023.9	11079.0	10618.3	9604.3
60°	9934.8	10170.1	10222.7	8637.8	7916.8
62.5°	9048.5	9278.8	9336.4	7158.1	6927.8
65°	8117.1	8367.4	7776.6	6184.2	6029.0
67.5°	7160.7	7418.5	5881.2	5300.4	5207.7
70°	6154.2	6414.5	4842.2	4519.2	4496.7
72.5°	5187.7	5380.5	3973.4	3425.1	2884.3
75°	4123.6	4384.0	3194.8	2213.3	2120.7
77.5°	3197.3	2764.1	1927.9	1622.4	1279.4
80°	2278.4	1847.7	1261.9	673.5	635.9
82.5°	1444.6	1206.8	495.7	508.3	530.8
85°	753.6	495.7	388.1	415.6	418.1
87.5°	242.9	212.8	232.8	230.3	227.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)