

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-N-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 (P23767)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-60SE-N-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

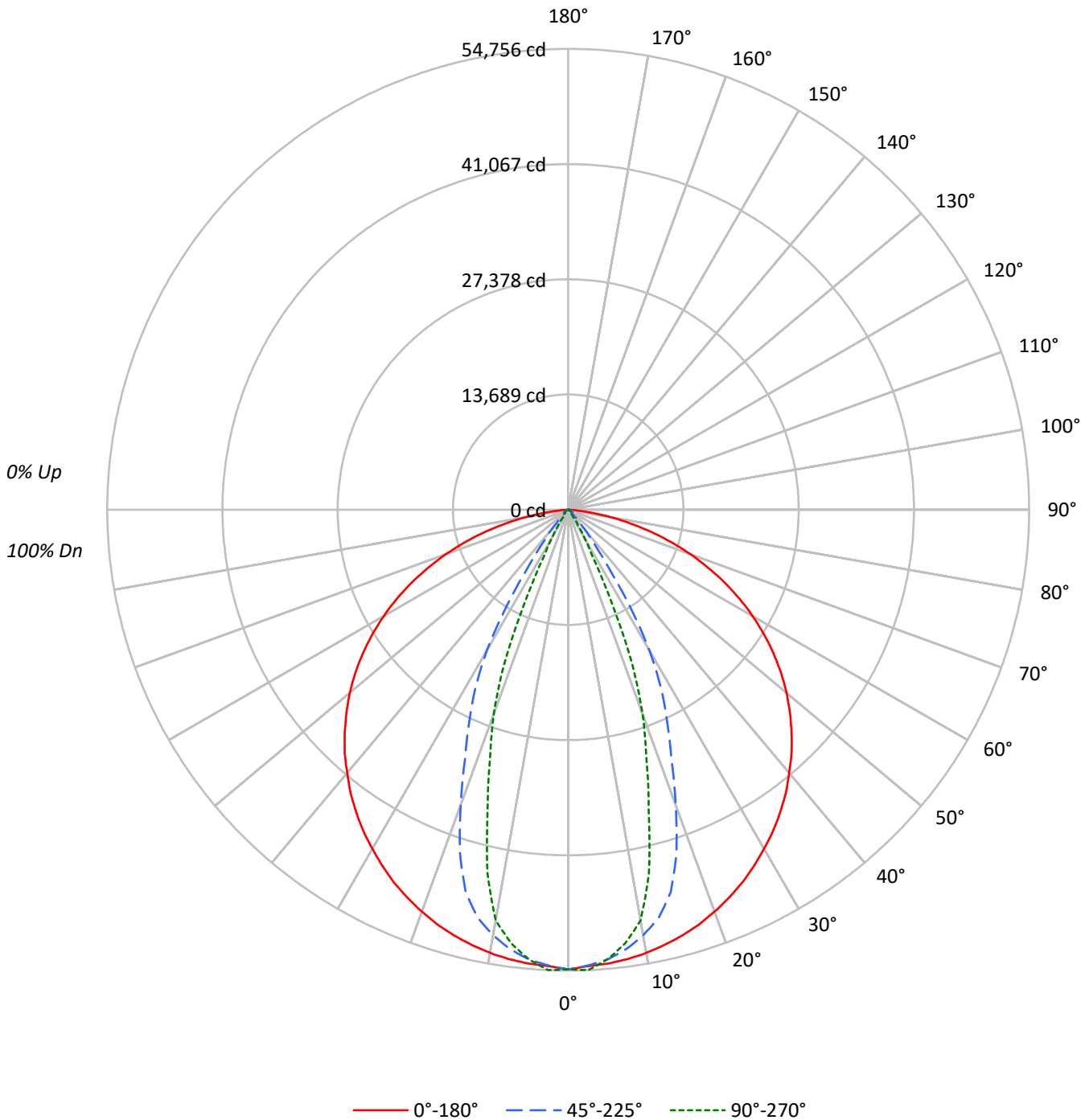
Lumens per Lamp: N/A
Luminaire Lumens: 58058.0 lumens
Efficiency: N/A
Efficacy: 150.4 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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-N-UNV-L850-ED4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60SE-N-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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81
3	98	90	84	79	96	88	83	78	86	81	77	83	79	76	81	77	74	73
4	92	82	76	70	90	81	75	70	79	73	69	77	72	68	75	71	67	66
5	86	76	69	64	84	75	68	63	73	67	63	71	66	62	70	65	62	60
6	81	70	63	58	79	70	63	58	68	62	58	66	61	57	65	60	57	55
7	76	66	58	54	75	65	58	53	63	57	53	62	57	53	61	56	52	51
8	72	61	54	49	71	61	54	49	59	53	49	58	53	49	57	52	49	47
9	68	57	51	46	67	57	50	46	56	50	46	55	49	46	54	49	45	44
10	65	54	47	43	64	53	47	43	53	47	43	52	46	43	51	46	42	41

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	73495	73495	73495
5°	73102	72457	72425
10°	73057	70135	67674
15°	72954	65522	51504
20°	72784	53414	37073
25°	72599	41301	18262
30°	72277	30016	5922
35°	72107	13317	1524
40°	71729	5409	1027
45°	71408	1518	1093
50°	70852	1077	1213
55°	69831	1280	518
60°	68108	1426	315
65°	65307	910	372
70°	60670	808	460
75°	53075	608	635
80°	39685	745	906
85°	19657	963	1204



TEST NUMBER: P#

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	5069.1	8.7
10°-20°	12675.4	21.8
20°-30°	13729.4	23.6
30°-40°	10167.2	17.5
40°-50°	7323.1	12.6
50°-60°	4534.3	7.8
60°-70°	2788.6	4.8
70°-80°	1470.0	2.5
80°-90°	300.9	0.5
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°	31473.9	54.2
0°-40°	41641.1	71.7
0°-60°	53498.5	92.1
0°-90°	58058.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	58058.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	54624	54624	54624	54624	54624	
5°	54125	54325	53647	53686	53623	###
15°	52373	51157	47038	40002	36974	14784
25°	48902	44793	27820	17501	12301	22532
35°	43900	30948	8107	1907	928	27464
45°	37528	17436	798	577	574	28942
55°	29769	3591	546	494	221	26575
65°	20513	379	286	182	117	20239
75°	10210	88	117	153	122	10783
85°	1273	34	62	94	78	###
90°	0	0	0	0	0	



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	54623.6	54623.6	54623.6	54623.6	54623.6
2.5°	54272.8	54618.4	54210.4	54514.5	54756.1
5°	54124.7	54324.8	53646.6	53685.5	53623.2
7.5°	53864.8	53818.1	52677.3	52178.4	51960.1
10°	53472.5	53163.2	51333.9	50291.9	49533.1
12.5°	52965.7	52274.5	49657.8	46344.7	44286.7
15°	52373.3	51157.2	47038.5	40001.7	36974.4
17.5°	51666.5	49943.7	42756.1	33526.2	30823.7
20°	50832.4	48589.8	37304.4	28524.0	25891.7
22.5°	49902.1	46942.4	32008.6	23706.3	19951.5
25°	48901.7	44793.4	27819.8	17501.1	12301.4
27.5°	47745.3	42031.1	23890.8	10308.4	6278.0
30°	46521.4	38705.0	19320.0	5545.3	3812.0
32.5°	45287.1	34934.6	13670.8	3463.8	2162.0
35°	43899.5	30948.4	8107.4	1907.3	927.7
37.5°	42452.1	27294.9	4791.7	867.9	595.1
40°	40838.4	23955.8	3079.3	576.9	584.7
42.5°	39279.3	20842.8	1733.2	569.1	579.5
45°	37527.9	17436.1	797.7	576.9	574.3
47.5°	35716.7	13904.7	517.1	582.1	582.1
50°	33848.4	9942.0	514.5	595.1	579.5
52.5°	31876.1	6202.7	535.3	592.5	475.5
55°	29768.7	3591.2	545.7	493.7	220.9
57.5°	27585.9	2117.8	550.9	283.2	124.7
60°	25309.6	1171.9	530.1	210.5	116.9
62.5°	22963.2	558.7	418.4	197.5	114.3
65°	20512.8	379.4	285.8	181.9	116.9
67.5°	17968.8	293.6	226.1	171.5	119.5
70°	15422.2	218.3	205.3	171.5	116.9
72.5°	12834.1	148.1	171.5	174.1	116.9
75°	10209.6	88.3	116.9	153.3	122.1
77.5°	7608.5	54.6	90.9	158.5	148.1
80°	5121.7	46.8	96.1	148.1	116.9
82.5°	3006.5	41.6	93.5	114.3	93.5
85°	1273.3	33.8	62.4	93.5	78.0
87.5°	239.1	28.6	49.4	75.4	67.6
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)