

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-N-CLI-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 (P23769)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-60HE-N-CLI-UNV-L850-ED4-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

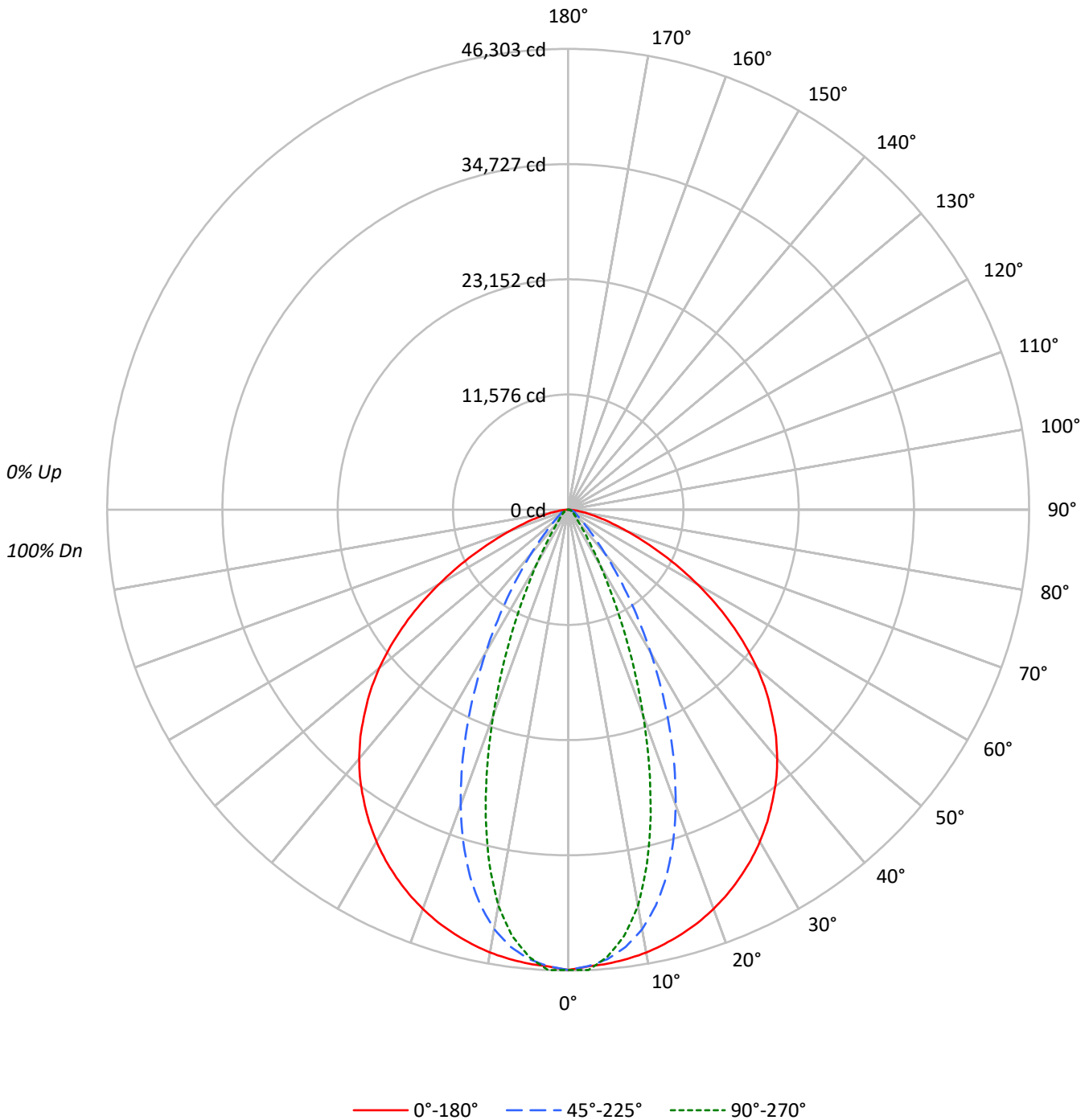
Lumens per Lamp: N/A
Luminaire Lumens: 50622.0 lumens
Efficiency: N/A
Efficacy: 137.2 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

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



TEST NUMBER: P#
CATALOG NUMBER: HBLED-LD5-60HE-N-CLI-UNV-L850-ED4-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-60HE-N-CLI-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	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	112	108	105	102	109	106	103	101	102	100	98	98	96	95	95	93	92	90					90			
2	105	98	93	89	102	97	92	88	93	89	86	90	87	84	87	85	82	81					81			
3	98	90	84	79	96	88	83	78	86	81	77	83	79	75	81	77	74	72					72			
4	92	82	75	70	90	81	75	70	79	73	69	77	72	68	75	71	67	65					65			
5	86	76	69	63	84	75	68	63	73	67	62	71	66	62	69	65	61	60					60			
6	81	70	63	58	79	69	62	57	68	62	57	66	61	57	65	60	56	55					55			
7	76	65	58	53	75	64	58	53	63	57	52	62	56	52	60	56	52	50					50			
8	72	61	54	49	70	60	53	49	59	53	48	58	52	48	57	52	48	46					46			
9	68	57	50	45	67	56	50	45	55	49	45	54	49	45	53	48	45	43					43			
10	64	53	47	42	63	53	46	42	52	46	42	51	46	42	50	45	42	40					40			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	62215	62215	62215
5°	61841	61225	60903
10°	61737	58453	55159
15°	61489	53133	44547
20°	61120	45211	31573
25°	60573	35650	19076
30°	59837	25730	9804
35°	58757	16821	4896
40°	57363	10104	2858
45°	54980	6034	2136
50°	51856	3946	1795
55°	46933	2994	1565
60°	40332	2549	1429
65°	32442	2326	1349
70°	24441	2491	1341
75°	17978	2367	1380
80°	13153	2359	1509
85°	9851	2858	1954



TEST NUMBER: P#

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

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	4258.4	8.4
10°-20°	10594.0	20.9
20°-30°	11734.4	23.2
30°-40°	9401.4	18.6
40°-50°	6711.4	13.3
50°-60°	4310.8	8.5
60°-70°	2336.2	4.6
70°-80°	998.5	2.0
80°-90°	276.9	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°	26586.9	52.5
0°-40°	35988.2	71.1
0°-60°	47010.4	92.9
0°-90°	50622.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	50622.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	46240	46240	46240	46240	46240	
5°	45786	45957	45331	45187	45092	###
15°	44143	42762	38144	33709	31980	12455
25°	40801	35976	24014	15645	12850	18796
35°	35772	25874	10241	4130	2981	22366
45°	28894	14937	3171	1349	1123	22271
55°	20007	6678	1276	784	667	17830
65°	10190	2742	731	504	424	10204
75°	3458	1003	455	317	266	3843
85°	638	266	185	153	127	779
90°	0	0	0	0	0	



TEST NUMBER: P#

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

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	46239.5	46239.5	46239.5	46239.5	46239.5
2.5°	45935.1	46222.5	45913.2	46105.6	46302.9
5°	45786.5	45957.0	45331.1	45187.4	45092.4
7.5°	45528.4	45479.7	44303.4	43541.1	43173.3
10°	45187.4	44792.9	42783.6	41108.0	40372.5
12.5°	44700.3	43886.9	40725.7	37783.6	36536.7
15°	44142.6	42761.7	38144.1	33709.1	31980.0
17.5°	43475.3	41446.6	35058.4	29339.9	27057.9
20°	42686.2	39858.6	31575.7	24697.9	22050.6
22.5°	41804.6	38027.2	27847.0	20070.6	17230.8
25°	40801.2	35976.5	24013.6	15645.4	12849.5
27.5°	39717.4	33699.4	20202.1	11690.2	9140.3
30°	38514.3	31234.7	16561.1	8429.1	6310.3
32.5°	37201.6	28614.2	13178.2	5927.9	4315.6
35°	35772.0	25874.3	10241.1	4130.5	2981.0
37.5°	34308.2	23078.4	7735.0	2920.1	2138.3
40°	32659.4	20292.2	5752.5	2138.3	1626.9
42.5°	30888.9	17559.6	4257.2	1646.4	1317.6
45°	28894.2	14936.6	3171.0	1349.2	1122.7
47.5°	26960.5	12491.4	2408.7	1149.5	976.6
50°	24773.4	10284.9	1885.0	1003.4	857.3
52.5°	22452.5	8343.9	1529.5	884.1	755.0
55°	20007.3	6678.0	1276.2	784.2	667.3
57.5°	17530.4	5289.8	1091.1	699.0	594.3
60°	14987.8	4230.4	947.4	625.9	530.9
62.5°	12506.1	3382.8	828.1	562.6	474.9
65°	10189.9	2742.3	730.6	504.1	423.8
67.5°	8049.2	2167.6	681.9	453.0	382.4
70°	6212.8	1687.8	633.2	404.3	341.0
72.5°	4707.7	1295.7	560.2	360.4	302.0
75°	3458.3	1003.4	455.4	316.6	265.5
77.5°	2474.4	772.0	370.2	275.2	228.9
80°	1697.5	574.8	304.4	236.2	194.8
82.5°	1103.3	406.7	246.0	194.8	160.7
85°	638.1	265.5	185.1	153.4	126.6
87.5°	275.2	146.1	126.6	114.5	97.4
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)