

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-LD5-36HE-W-FLI-UNV-L850-ED3-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-LD5-36HE-W-FLI-UNV-L850-ED3-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

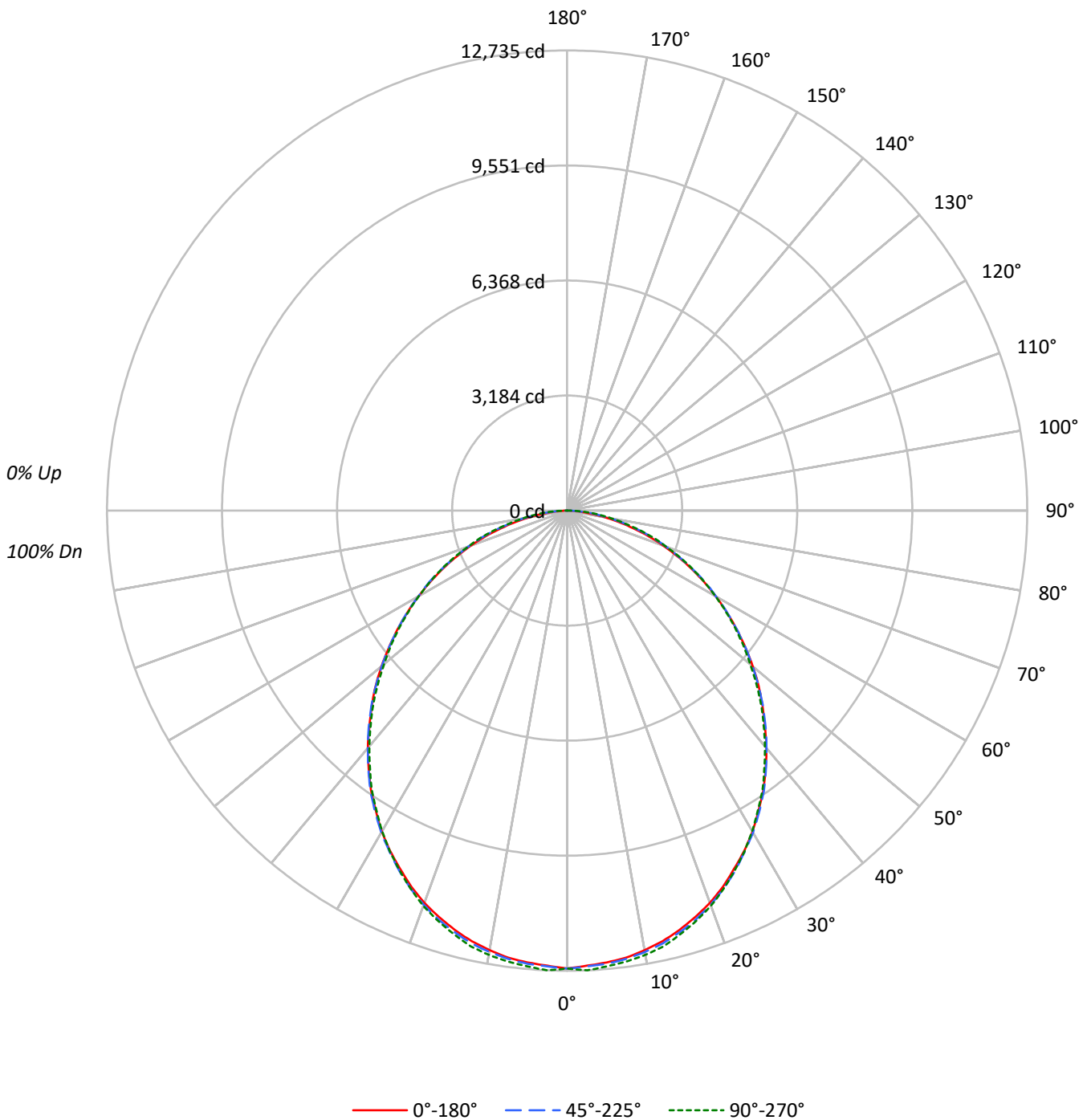
Lumens per Lamp: N/A
Luminaire Lumens: 33106.0 lumens
Efficiency: N/A
Efficacy: 156.7 lumens/watt
Spacing Criteria (0/90/45): 1.2 / 1.2 / 1.31
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 211.3
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-LD5-36HE-W-FLI-UNV-L850-ED3-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-36HE-W-FLI-UNV-L850-ED3-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	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°	17053	17053	17053
5°	16956	17003	17100
10°	16878	16947	17057
15°	16730	16821	16903
20°	16541	16620	16669
25°	16235	16327	16303
30°	15935	15978	15913
35°	15541	15580	15481
40°	15074	15074	14957
45°	14546	14586	14437
50°	14046	14023	13847
55°	13439	13441	13320
60°	12788	12803	12753
65°	12053	12173	12204
70°	11132	11436	11449
75°	9838	10475	10638
80°	8068	9174	9692
85°	5599	7702	8710



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-36HE-W-FLI-UNV-L850-ED3-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1198.6	3.6
10°-20°	3409.9	10.3
20°-30°	5067.3	15.3
30°-40°	5925.0	17.9
40°-50°	5907.3	17.8
50°-60°	5125.4	15.5
60°-70°	3785.7	11.4
70°-80°	2119.6	6.4
80°-90°	565.5	1.7
90°-100°	1.7	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°	9675.8	29.2
0°-40°	15600.7	47.1
0°-60°	26633.5	80.4
0°-90°	33104.3	100.0
90°-120°	1.7	0.0
90°-150°	1.7	0.0
90°-180°	2.0	0.0
0°-180°	33106.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	12674	12674	12674	12674	12674	
5°	12554	12633	12589	12645	12661	###
15°	12011	12094	12076	12134	12135	3387
25°	10935	11023	10998	11022	10981	5042
35°	9461	9544	9486	9484	9425	5910
45°	7645	7726	7666	7634	7587	5901
55°	5729	5768	5730	5720	5678	5123
65°	3786	3823	3824	3843	3833	3744
75°	1892	1949	2015	2029	2046	2015
85°	363	438	499	543	564	440
90°	0	8	10	22	20	15
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-LD5-36HE-W-FLI-UNV-L850-ED3-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	12673.9	12673.9	12673.9	12673.9	12673.9
2.5°	12604.6	12679.6	12627.2	12677.1	12735.2
5°	12553.8	12632.8	12589.3	12644.9	12661.0
7.5°	12479.7	12556.2	12514.3	12569.9	12586.9
10°	12353.9	12437.0	12403.9	12466.8	12484.5
12.5°	12207.3	12285.4	12263.7	12337.0	12349.1
15°	12010.6	12094.4	12075.9	12133.9	12134.7
17.5°	11793.0	11872.0	11858.3	11903.4	11901.8
20°	11552.0	11636.6	11607.6	11656.8	11641.5
22.5°	11266.7	11357.0	11320.7	11361.8	11323.1
25°	10935.4	11023.3	10997.5	11021.7	10981.4
27.5°	10614.7	10695.3	10642.1	10671.1	10628.4
30°	10256.8	10325.3	10284.2	10293.9	10242.3
32.5°	9854.6	9936.0	9886.1	9884.4	9829.6
35°	9461.3	9544.3	9485.5	9483.9	9425.0
37.5°	9026.1	9103.5	9034.1	9038.2	8969.7
40°	8582.0	8648.9	8582.0	8578.8	8515.9
42.5°	8100.0	8188.7	8127.4	8134.7	8050.9
45°	7644.6	7726.0	7665.6	7634.2	7587.4
47.5°	7190.9	7226.3	7176.4	7168.3	7102.2
50°	6710.5	6737.1	6699.2	6689.6	6615.4
52.5°	6214.0	6260.0	6211.6	6198.7	6149.6
55°	5728.9	5768.3	5729.7	5720.0	5678.1
57.5°	5240.4	5292.0	5252.5	5242.8	5209.0
60°	4752.0	4767.3	4757.7	4772.2	4739.1
62.5°	4266.8	4302.3	4313.6	4309.5	4283.7
65°	3785.7	3822.7	3823.5	3842.9	3833.2
67.5°	3293.2	3341.6	3355.3	3375.4	3384.3
70°	2829.8	2866.8	2907.1	2919.2	2910.4
72.5°	2363.1	2422.8	2467.9	2478.4	2516.2
75°	1892.4	1948.8	2014.9	2029.4	2046.4
77.5°	1455.6	1530.5	1590.2	1609.5	1630.5
80°	1041.3	1124.3	1184.0	1210.6	1250.9
82.5°	683.5	768.1	828.5	855.1	904.3
85°	362.7	438.4	498.9	543.2	564.2
87.5°	107.2	171.7	206.3	219.2	237.8
90°	0.0	8.1	9.7	21.8	20.1
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



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-36HE-W-FLI-UNV-L850-ED3-U

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)