

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-LD5-18SE-W-AI-UNV-L850-ED1-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 (P23765)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-18SE-W-AI-UNV-L850-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

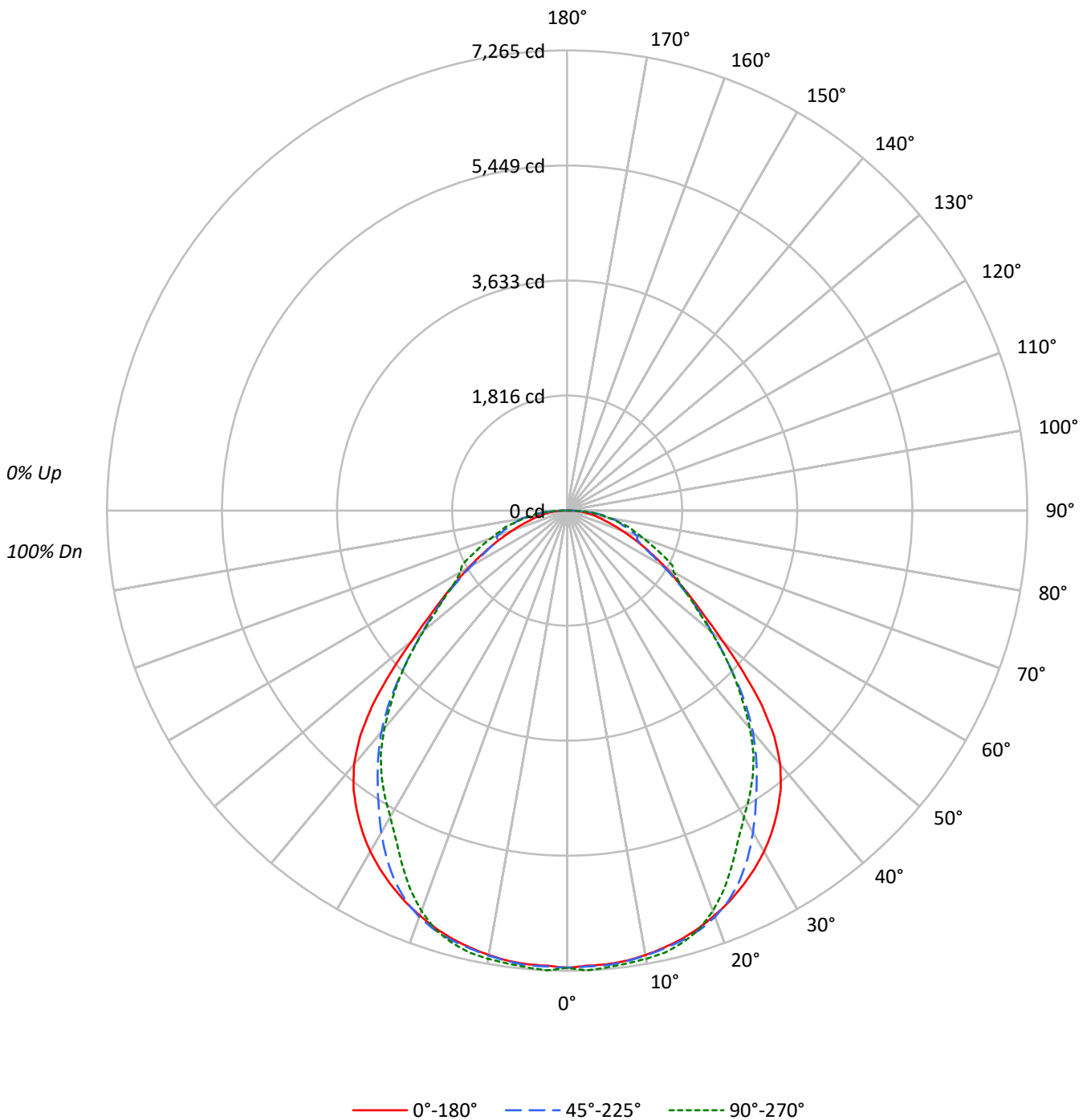
Lumens per Lamp: N/A
Luminaire Lumens: 16705.0 lumens
Efficiency: N/A
Efficacy: 137.2 lumens/watt
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 121.76
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-LD5-18SE-W-AI-UNV-L850-ED1-U

Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-18SE-W-AI-UNV-L850-ED1-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	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85					85			
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73					73			
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63					63			
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55					55			
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48					48			
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43					43			
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38					38			
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34					34			
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31					31			
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29					29			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	9711	9711	9711
5°	9710	9731	9779
10°	9734	9746	9818
15°	9749	9785	9833
20°	9739	9776	9630
25°	9715	9569	9153
30°	9657	9118	8673
35°	9512	8570	8391
40°	9194	8013	7880
45°	8264	7155	7128
50°	6702	6232	6189
55°	5565	5462	5460
60°	4818	4678	5230
65°	4176	4150	5271
70°	3601	4655	5025
75°	3229	4771	5239
80°	3356	5617	5256
85°	3810	6472	6005



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-18SE-W-AI-UNV-L850-ED1-U

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	687.2	4.1
10°-20°	1984.6	11.9
20°-30°	2947.5	17.6
30°-40°	3346.2	20.0
40°-50°	2991.4	17.9
50°-60°	2068.3	12.4
60°-70°	1364.8	8.2
70°-80°	920.7	5.5
80°-90°	394.3	2.4
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°	5619.2	33.6
0°-40°	8965.5	53.7
0°-60°	14025.2	84.0
0°-90°	16705.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	16705.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	7217	7217	7217	7217	7217	
5°	7189	7233	7205	7234	7240	684
15°	6999	7032	7025	7064	7059	1976
25°	6544	6606	6446	6254	6165	3015
35°	5791	5669	5217	5141	5109	3611
45°	4343	3975	3760	3789	3746	3303
55°	2372	2166	2328	2296	2328	2155
65°	1312	1165	1304	1524	1656	1309
75°	621	781	918	981	1008	678
85°	247	343	419	422	389	257
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-18SE-W-AI-UNV-L850-ED1-U

CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	7217.1	7217.1	7217.1	7217.1	7217.1
2.5°	7192.6	7237.5	7204.0	7235.1	7265.3
5°	7189.3	7233.4	7204.8	7234.2	7240.0
7.5°	7168.9	7209.7	7176.2	7204.8	7211.4
10°	7124.7	7172.9	7133.7	7177.8	7186.0
12.5°	7067.5	7116.6	7082.2	7142.7	7146.0
15°	6998.9	7032.4	7025.0	7064.3	7059.3
17.5°	6912.2	6950.7	6944.9	6954.7	6931.9
20°	6801.9	6845.2	6827.3	6782.3	6725.9
22.5°	6683.4	6735.7	6664.6	6551.0	6471.8
25°	6543.7	6605.8	6445.6	6253.5	6165.3
27.5°	6389.2	6444.8	6178.4	5943.0	5851.5
30°	6216.0	6239.7	5868.6	5644.7	5582.6
32.5°	6015.7	5981.4	5537.6	5389.7	5353.8
35°	5791.0	5669.2	5217.3	5141.3	5108.6
37.5°	5537.6	5314.5	4901.0	4865.9	4831.5
40°	5234.4	4905.1	4561.9	4539.0	4486.7
42.5°	4843.0	4459.7	4185.1	4158.1	4111.6
45°	4342.8	3975.1	3760.1	3788.7	3746.2
47.5°	3767.5	3488.8	3352.3	3430.8	3352.3
50°	3202.0	3014.8	2977.2	3048.3	2956.8
52.5°	2738.6	2570.2	2647.9	2660.1	2605.4
55°	2372.5	2165.7	2328.3	2295.6	2327.5
57.5°	2053.7	1822.5	2022.7	1985.1	2094.6
60°	1790.6	1530.7	1738.3	1730.1	1943.4
62.5°	1532.3	1324.8	1491.5	1611.6	1873.9
65°	1311.7	1164.6	1303.5	1524.2	1655.7
67.5°	1100.0	1044.4	1192.4	1314.9	1458.8
70°	915.3	943.9	1183.4	1160.5	1277.4
72.5°	760.0	857.3	1044.4	1048.5	1131.1
75°	621.1	781.3	917.8	980.7	1007.7
77.5°	516.5	708.6	828.7	850.8	824.6
80°	433.1	624.4	724.9	715.1	678.3
82.5°	349.8	473.2	571.3	580.2	536.9
85°	246.8	343.2	419.2	421.7	389.0
87.5°	132.4	211.7	254.2	261.5	241.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)