

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-N-UNV-L740-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 (P23767)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-18SE-N-UNV-L740-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

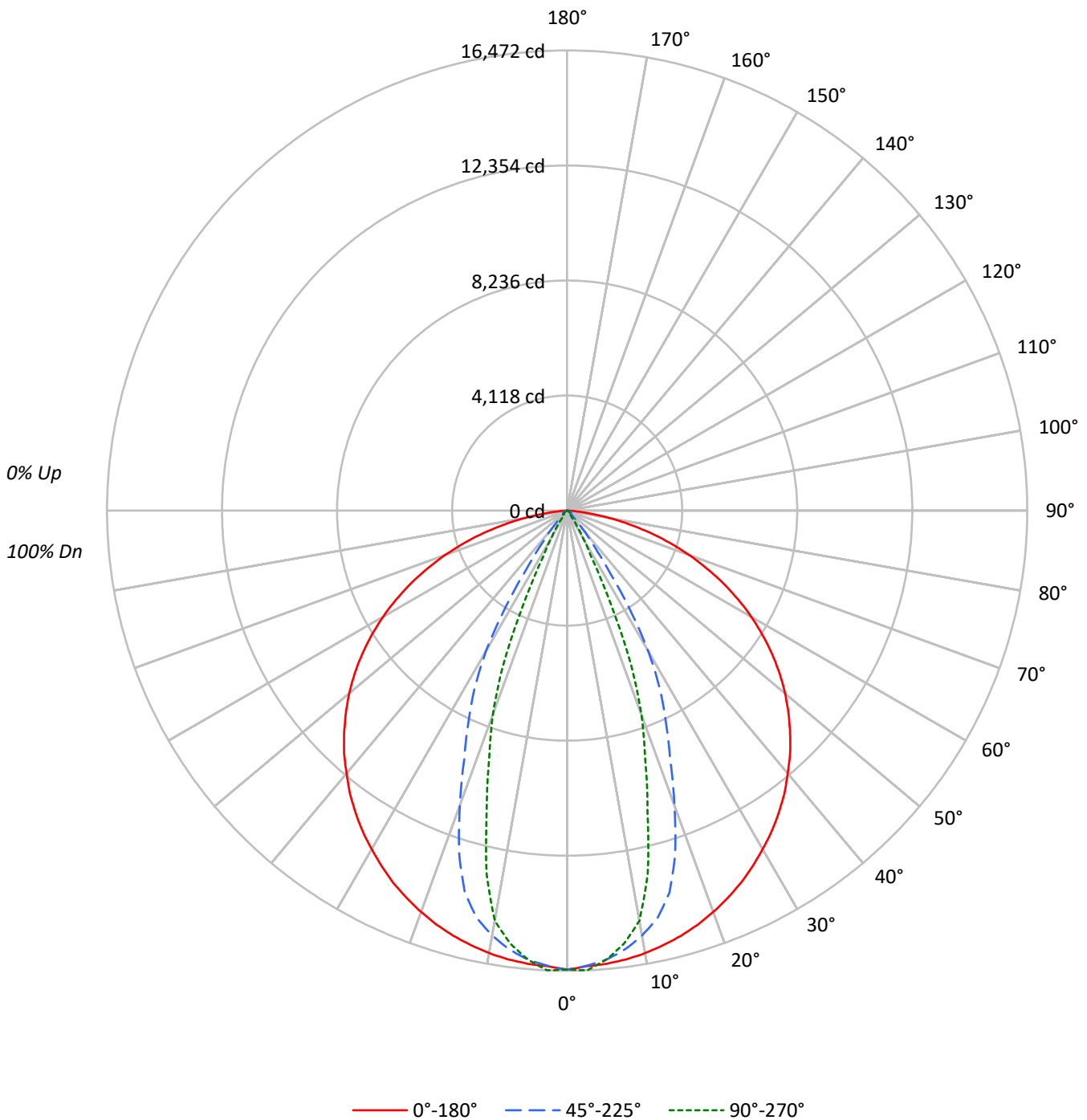
Lumens per Lamp: N/A  
Luminaire Lumens: 17465.0 lumens  
Efficiency: N/A  
Efficacy: 143.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 0.62 / 0.77  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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-N-UNV-L740-ED1-U

### Luminous Intensity Polar Plot





TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-18SE-N-UNV-L740-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	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°	22109	22109	22109
5°	21991	21796	21787
10°	21977	21098	20358
15°	21946	19710	15493
20°	21895	16068	11152
25°	21839	12424	5494
30°	21743	9030	1782
35°	21691	4006	458
40°	21578	1627	309
45°	21481	457	329
50°	21314	324	365
55°	21007	385	156
60°	20488	429	95
65°	19645	274	112
70°	18251	243	138
75°	15966	183	191
80°	11938	224	273
85°	5913	290	363



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-18SE-N-UNV-L740-ED1-U

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	1524.9	8.7
10°-20°	3813.0	21.8
20°-30°	4130.1	23.6
30°-40°	3058.5	17.5
40°-50°	2202.9	12.6
50°-60°	1364.0	7.8
60°-70°	838.9	4.8
70°-80°	442.2	2.5
80°-90°	90.5	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°	9468.0	54.2
0°-40°	12526.5	71.7
0°-60°	16093.4	92.1
0°-90°	17465.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	17465.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	16432	16432	16432	16432	16432	
5°	16282	16342	16138	16150	16131	###
15°	15755	15389	14150	12033	11123	4447
25°	14711	13475	8369	5265	3700	6778
35°	13206	9310	2439	574	279	8262
45°	11289	5245	240	174	173	8706
55°	8955	1080	164	148	66	7994
65°	6171	114	86	55	35	6088
75°	3071	27	35	46	37	3244
85°	383	10	19	28	24	579
90°	0	0	0	0	0	



TEST NUMBER: P#

CATALOG NUMBER: HBLED-LD5-18SE-N-UNV-L740-ED1-U

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	16431.9	16431.9	16431.9	16431.9	16431.9
2.5°	16326.3	16430.3	16307.6	16399.0	16471.7
5°	16281.8	16342.0	16138.0	16149.7	16130.9
7.5°	16203.6	16189.5	15846.4	15696.3	15630.6
10°	16085.6	15992.6	15442.2	15128.8	14900.5
12.5°	15933.1	15725.2	14938.1	13941.4	13322.3
15°	15754.9	15389.1	14150.1	12033.3	11122.6
17.5°	15542.3	15024.0	12861.9	10085.3	9272.4
20°	15291.4	14616.8	11221.9	8580.6	7788.7
22.5°	15011.5	14121.2	9628.8	7131.3	6001.8
25°	14710.6	13474.7	8368.8	5264.7	3700.5
27.5°	14362.7	12643.8	7186.8	3101.0	1888.6
30°	13994.6	11643.2	5811.9	1668.1	1146.7
32.5°	13623.3	10509.0	4112.5	1042.0	650.4
35°	13205.8	9309.9	2438.9	573.8	279.1
37.5°	12770.4	8210.9	1441.4	261.1	179.0
40°	12285.0	7206.4	926.3	173.5	175.9
42.5°	11816.0	6269.9	521.4	171.2	174.3
45°	11289.1	5245.1	240.0	173.5	172.8
47.5°	10744.3	4182.8	155.6	175.1	175.1
50°	10182.3	2990.7	154.8	179.0	174.3
52.5°	9589.0	1865.9	161.0	178.2	143.0
55°	8955.0	1080.3	164.2	148.5	66.4
57.5°	8298.4	637.1	165.7	85.2	37.5
60°	7613.6	352.5	159.5	63.3	35.2
62.5°	6907.8	168.1	125.9	59.4	34.4
65°	6170.6	114.1	86.0	54.7	35.2
67.5°	5405.4	88.3	68.0	51.6	36.0
70°	4639.3	65.7	61.8	51.6	35.2
72.5°	3860.8	44.6	51.6	52.4	35.2
75°	3071.3	26.6	35.2	46.1	36.7
77.5°	2288.8	16.4	27.4	47.7	44.6
80°	1540.7	14.1	28.9	44.6	35.2
82.5°	904.4	12.5	28.1	34.4	28.1
85°	383.0	10.2	18.8	28.1	23.5
87.5°	71.9	8.6	14.9	22.7	20.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)