

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-LD5-15SE-N-CLI-UNV-L840-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 (P23769)
Test Lab: INNOVATION CENTER P2
Issue Date: 3/3/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: HBLED-LD5-15SE-N-CLI-UNV-L840-ED1-U
Description: METALUX HIGH BAY LINEAR LED
Light Source: -
Ballast/Driver: -

Luminaire Equipment: Sample No. Condition Description

Summary

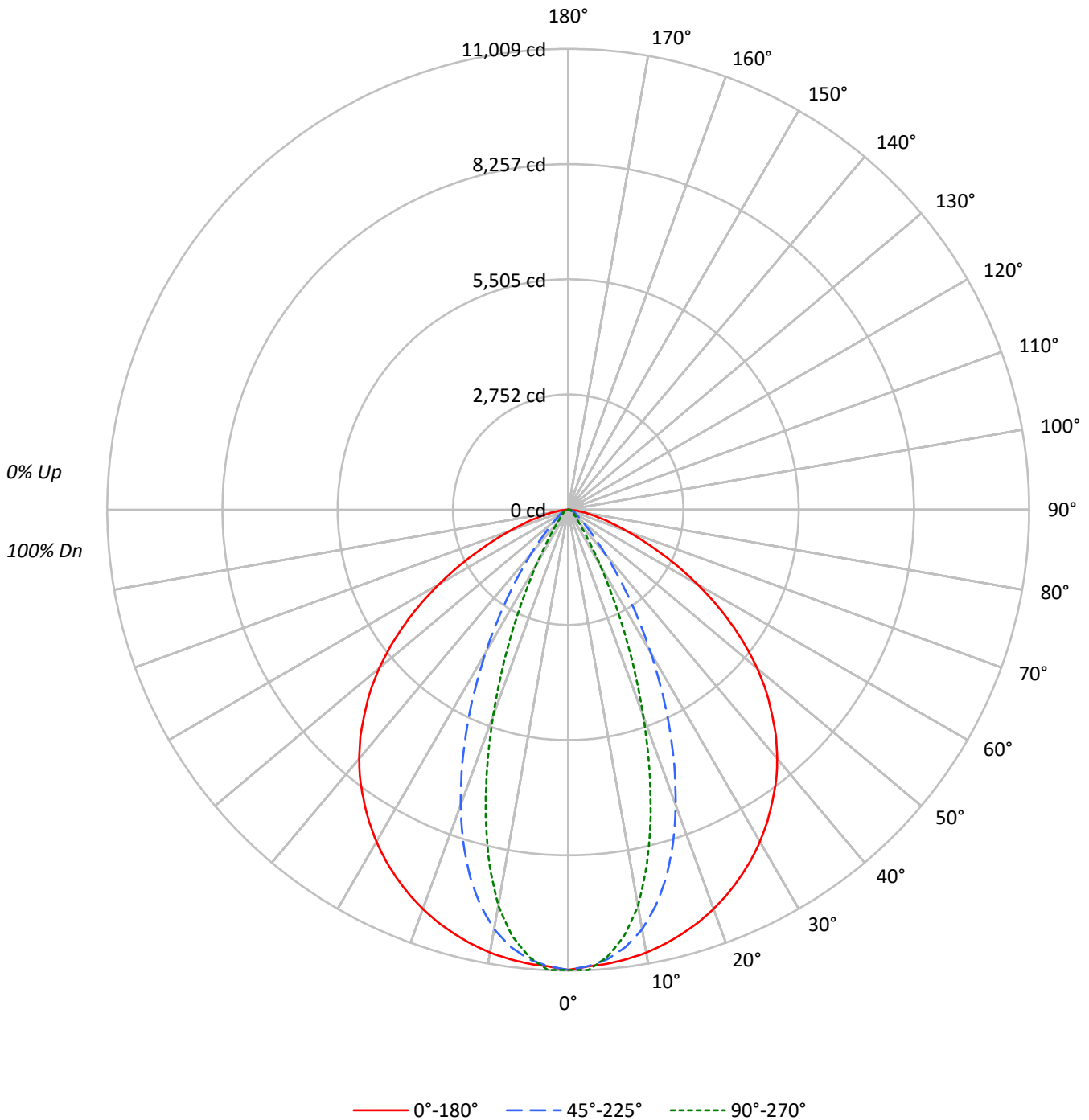
Lumens per Lamp: N/A
Luminaire Lumens: 12036.0 lumens
Efficiency: N/A
Efficacy: 126.4 lumens/watt
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')
CIE Type: Direct

Input Watts (W): 95.2
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



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Luminous Intensity Polar Plot





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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°	14792	14792	14792
5°	14703	14557	14480
10°	14679	13898	13115
15°	14620	12633	10591
20°	14532	10750	7507
25°	14402	8476	4536
30°	14227	6118	2331
35°	13970	3999	1164
40°	13639	2402	679
45°	13072	1435	508
50°	12329	938	427
55°	11159	712	372
60°	9589	606	340
65°	7713	553	321
70°	5811	592	319
75°	4275	563	328
80°	3127	561	359
85°	2342	679	465



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	1012.5	8.4
10°-20°	2518.9	20.9
20°-30°	2790.0	23.2
30°-40°	2235.3	18.6
40°-50°	1595.7	13.3
50°-60°	1025.0	8.5
60°-70°	555.5	4.6
70°-80°	237.4	2.0
80°-90°	65.8	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°	6321.3	52.5
0°-40°	8556.6	71.1
0°-60°	11177.3	92.9
0°-90°	12036.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	12036.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	10994	10994	10994	10994	10994	
5°	10886	10927	10778	10744	10721	###
15°	10495	10167	9069	8015	7604	2961
25°	9701	8554	5710	3720	3055	4469
35°	8505	6152	2435	982	709	5318
45°	6870	3551	754	321	267	5295
55°	4757	1588	303	186	159	4239
65°	2423	652	174	120	101	2426
75°	822	239	108	75	63	914
85°	152	63	44	36	30	185
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	10994.0	10994.0	10994.0	10994.0	10994.0
2.5°	10921.6	10990.0	10916.4	10962.2	11009.1
5°	10886.3	10926.8	10778.0	10743.9	10721.3
7.5°	10824.9	10813.3	10533.7	10352.4	10265.0
10°	10743.9	10650.1	10172.3	9773.9	9599.1
12.5°	10628.1	10434.6	9683.0	8983.5	8687.0
15°	10495.4	10167.1	9069.2	8014.8	7603.6
17.5°	10336.8	9854.4	8335.6	6975.9	6433.3
20°	10149.2	9476.9	7507.5	5872.2	5242.8
22.5°	9939.5	9041.4	6621.0	4772.0	4096.8
25°	9701.0	8553.9	5709.5	3719.9	3055.1
27.5°	9443.3	8012.4	4803.3	2779.5	2173.2
30°	9157.2	7426.4	3937.6	2004.1	1500.3
32.5°	8845.1	6803.4	3133.3	1409.4	1026.1
35°	8505.2	6151.9	2434.9	982.1	708.8
37.5°	8157.2	5487.2	1839.1	694.3	508.4
40°	7765.2	4824.7	1367.7	508.4	386.8
42.5°	7344.2	4175.0	1012.2	391.4	313.3
45°	6870.0	3551.4	753.9	320.8	266.9
47.5°	6410.2	2970.0	572.7	273.3	232.2
50°	5890.2	2445.4	448.2	238.6	203.8
52.5°	5338.3	1983.9	363.6	210.2	179.5
55°	4757.0	1587.8	303.4	186.5	158.7
57.5°	4168.1	1257.7	259.4	166.2	141.3
60°	3563.5	1005.8	225.3	148.8	126.2
62.5°	2973.5	804.3	196.9	133.8	112.9
65°	2422.8	652.0	173.7	119.9	100.8
67.5°	1913.8	515.4	162.1	107.7	90.9
70°	1477.2	401.3	150.6	96.1	81.1
72.5°	1119.3	308.1	133.2	85.7	71.8
75°	822.3	238.6	108.3	75.3	63.1
77.5°	588.3	183.6	88.0	65.4	54.4
80°	403.6	136.7	72.4	56.2	46.3
82.5°	262.3	96.7	58.5	46.3	38.2
85°	151.7	63.1	44.0	36.5	30.1
87.5°	65.4	34.7	30.1	27.2	23.2
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)