

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-LD5-12SE-W-CL-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 (P23762)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-W-CL-UNV-L840-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

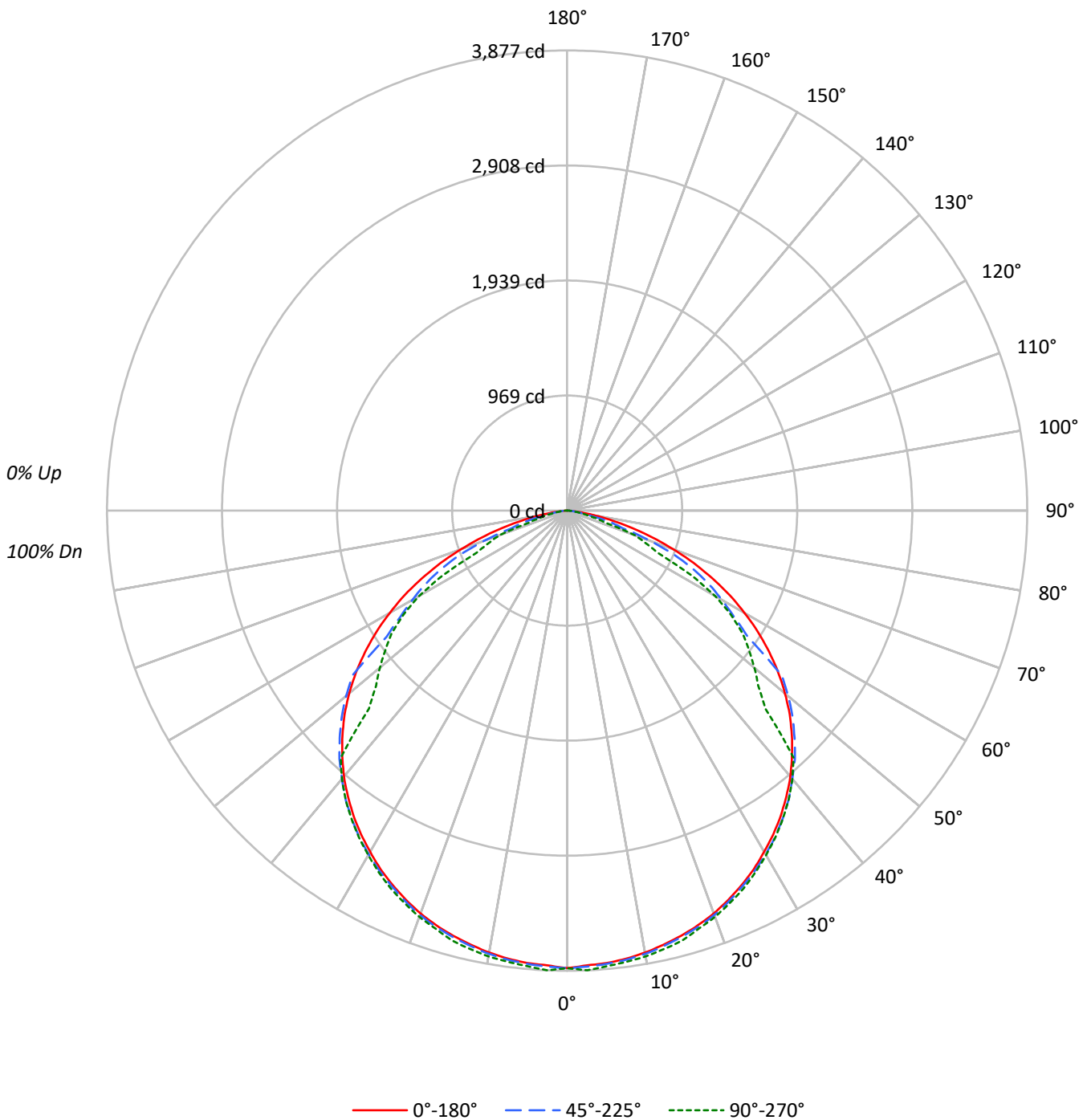
Lumens per Lamp: N/A  
Luminaire Lumens: 10420.0 lumens  
Efficiency: N/A  
Efficacy: 136.0 lumens/watt  
Spacing Criteria (0/90/45): 1.28 / 1.29 / 1.41  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 76.6  
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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	110	106	102	98	107	103	100	97	99	96	94	95	93	91	92	90	88	86
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	74	68	89	80	73	67	77	71	66	75	69	65	72	68	64	62
4	84	73	64	58	82	71	64	57	69	62	57	67	61	56	64	59	55	53
5	77	65	56	50	75	64	56	50	62	55	49	60	54	49	58	53	48	46
6	72	59	50	44	70	58	49	43	56	49	43	54	48	43	53	47	42	40
7	66	53	45	39	65	52	44	38	51	43	38	49	43	38	48	42	38	36
8	62	48	40	34	60	48	40	34	46	39	34	45	39	34	44	38	34	32
9	58	44	36	31	56	44	36	31	43	36	31	42	35	31	41	35	30	29
10	54	41	33	28	53	40	33	28	40	33	28	39	32	28	38	32	28	26

**AVERAGE LUMINANCE (cd/sqm):**

	0°	45°	90°
0°	5186	5186	5186
5°	5167	5178	5204
10°	5167	5181	5211
15°	5166	5182	5224
20°	5173	5192	5216
25°	5167	5186	5218
30°	5157	5195	5207
35°	5155	5202	5205
40°	5139	5184	5184
45°	5094	5156	4493
50°	5016	5092	4311
55°	4874	4358	4234
60°	4645	4051	3868
65°	4295	3761	2679
70°	3740	2926	2387
75°	2954	1964	1283
80°	1901	938	800
85°	783	573	630



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	365.6	3.5
10°-20°	1053.8	10.1
20°-30°	1615.7	15.5
30°-40°	1980.3	19.0
40°-50°	2035.9	19.5
50°-60°	1737.5	16.7
60°-70°	1148.7	11.0
70°-80°	425.6	4.1
80°-90°	56.9	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°	3035.1	29.1
0°-40°	5015.4	48.1
0°-60°	8788.8	84.3
0°-90°	10420.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10420.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	3854	3854	3854	3854	3854	
5°	3826	3852	3834	3849	3853	364
15°	3709	3731	3720	3748	3750	1048
25°	3480	3499	3493	3525	3514	1605
35°	3138	3160	3167	3186	3169	1963
45°	2677	2704	2710	2706	2361	2063
55°	2078	2116	1858	1804	1805	1854
65°	1349	1360	1181	971	841	1330
75°	568	498	378	254	247	610
85°	51	36	37	40	41	84
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	3854.3	3854.3	3854.3	3854.3	3854.3
2.5°	3835.5	3859.5	3845.4	3863.2	3876.8
5°	3825.7	3852.4	3834.1	3849.2	3852.9
7.5°	3808.8	3833.7	3816.8	3836.5	3833.7
10°	3781.6	3804.1	3792.4	3813.0	3814.4
12.5°	3746.9	3769.4	3758.6	3783.9	3783.5
15°	3708.8	3731.4	3720.1	3748.3	3750.1
17.5°	3664.3	3684.9	3676.5	3702.3	3691.9
20°	3612.6	3630.5	3626.2	3650.6	3643.1
22.5°	3549.3	3567.6	3563.4	3591.5	3580.3
25°	3480.3	3498.6	3493.4	3524.9	3514.5
27.5°	3405.7	3423.0	3422.6	3452.1	3436.2
30°	3319.3	3342.3	3343.7	3370.0	3351.2
32.5°	3233.9	3255.5	3261.6	3280.8	3264.9
35°	3138.2	3159.8	3166.8	3186.5	3169.1
37.5°	3034.9	3053.2	3065.9	3080.5	3066.8
40°	2925.6	2942.0	2951.4	2969.2	2951.4
42.5°	2803.6	2827.0	2840.2	2852.8	2823.7
45°	2677.3	2704.1	2709.7	2705.5	2361.0
47.5°	2543.6	2572.7	2576.0	2246.5	2183.2
50°	2396.2	2432.8	2432.4	2076.2	2059.3
52.5°	2242.8	2278.0	2276.5	1942.9	1931.6
55°	2077.6	2115.6	1857.9	1804.0	1804.9
57.5°	1909.1	1936.3	1666.9	1669.3	1638.3
60°	1726.1	1751.9	1505.5	1490.9	1437.5
62.5°	1542.6	1553.4	1349.2	1278.4	1176.5
65°	1349.2	1360.5	1181.2	971.4	841.4
67.5°	1150.7	1162.0	980.4	722.7	712.9
70°	950.8	858.8	743.8	602.1	606.8
72.5°	753.7	659.8	486.2	466.5	337.0
75°	568.3	497.9	377.8	253.9	246.8
77.5°	395.6	343.1	202.3	173.2	161.9
80°	245.4	172.2	121.1	107.5	103.2
82.5°	124.4	99.0	65.7	65.7	65.7
85°	50.7	36.1	37.1	40.4	40.8
87.5°	10.8	14.5	17.8	18.3	17.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)