

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-N-CLI-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 (P23769)  
Test Lab: INNOVATION CENTER P2  
Issue Date: 3/3/2020  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: METALUX  
Catalog Number: HBLED-LD5-12SE-N-CLI-UNV-L850-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

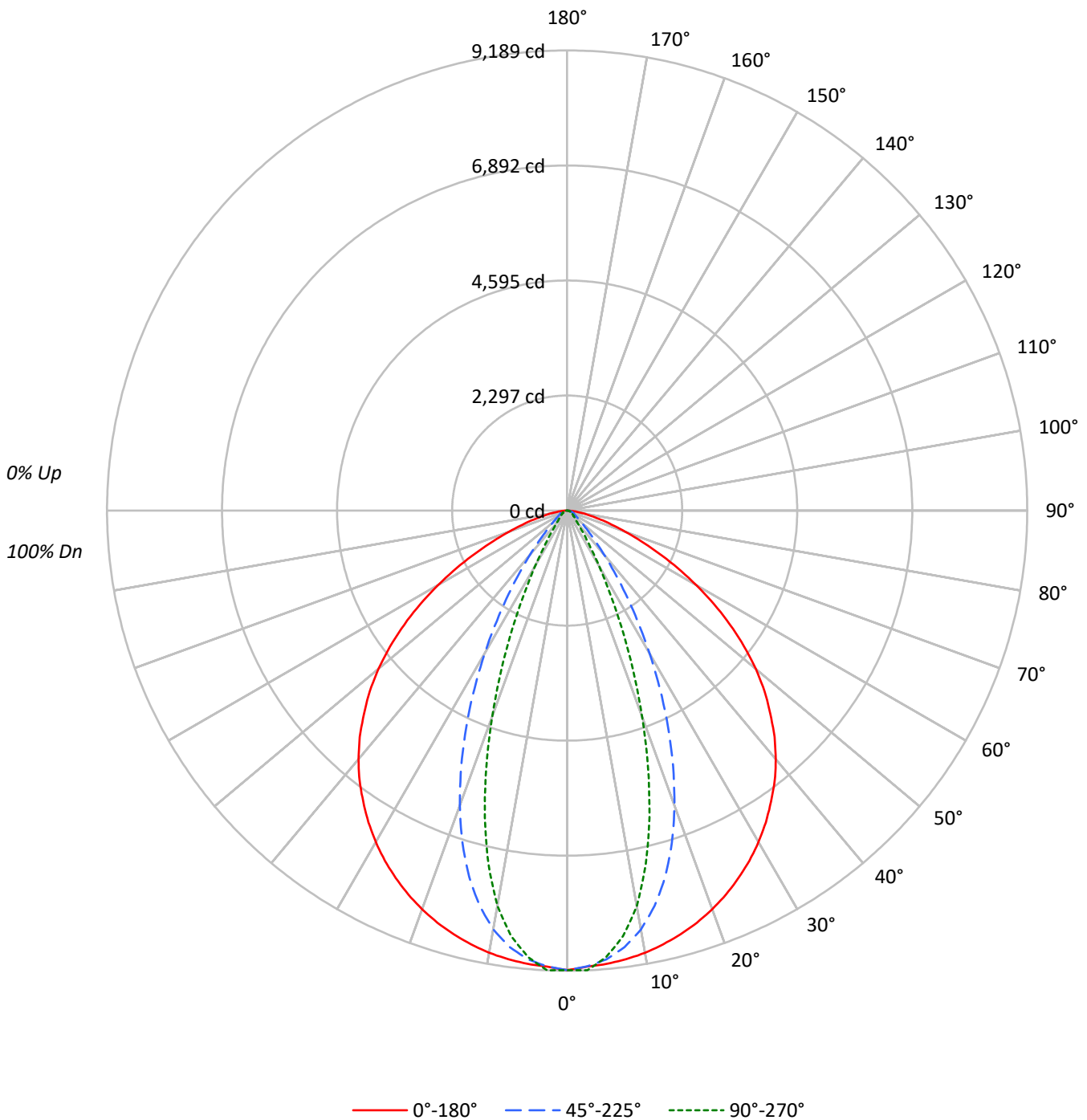
Lumens per Lamp: N/A  
Luminaire Lumens: 10046.0 lumens  
Efficiency: N/A  
Efficacy: 131.1 lumens/watt  
Spacing Criteria (0/90/45): 1.24 / 0.64 / 0.78  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	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°	12347	12347	12347
5°	12272	12150	12086
10°	12252	11600	10946
15°	12203	10544	8840
20°	12129	8972	6266
25°	12021	7075	3786
30°	11875	5106	1946
35°	11660	3338	972
40°	11384	2005	567
45°	10911	1197	424
50°	10291	783	356
55°	9314	594	311
60°	8004	506	284
65°	6438	462	268
70°	4850	494	266
75°	3568	470	274
80°	2610	468	300
85°	1954	567	387



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	845.1	8.4
10°-20°	2102.4	20.9
20°-30°	2328.7	23.2
30°-40°	1865.7	18.6
40°-50°	1331.9	13.3
50°-60°	855.5	8.5
60°-70°	463.6	4.6
70°-80°	198.2	2.0
80°-90°	54.9	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°	5276.2	52.5
0°-40°	7141.9	71.1
0°-60°	9329.3	92.9
0°-90°	10046.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	10046.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	9176	9176	9176	9176	9176	
5°	9086	9120	8996	8968	8949	864
15°	8760	8486	7570	6690	6346	2472
25°	8097	7140	4766	3105	2550	3730
35°	7099	5135	2032	820	592	4439
45°	5734	2964	629	268	223	4420
55°	3970	1325	253	156	132	3538
65°	2022	544	145	100	84	2025
75°	686	199	90	63	53	763
85°	127	53	37	30	25	155
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	9176.3	9176.3	9176.3	9176.3	9176.3
2.5°	9115.9	9172.9	9111.5	9149.7	9188.9
5°	9086.4	9120.2	8996.0	8967.5	8948.7
7.5°	9035.2	9025.5	8792.1	8640.8	8567.8
10°	8967.5	8889.2	8490.5	8157.9	8012.0
12.5°	8870.8	8709.4	8082.1	7498.2	7250.8
15°	8760.2	8486.1	7569.7	6689.6	6346.5
17.5°	8627.7	8225.1	6957.4	5822.5	5369.7
20°	8471.1	7910.0	6266.2	4901.3	4376.0
22.5°	8296.2	7546.5	5526.3	3983.0	3419.5
25°	8097.0	7139.6	4765.5	3104.8	2550.0
27.5°	7882.0	6687.7	4009.1	2319.9	1813.9
30°	7643.2	6198.6	3286.6	1672.8	1252.3
32.5°	7382.7	5678.5	2615.2	1176.4	856.4
35°	7099.0	5134.8	2032.4	819.7	591.6
37.5°	6808.5	4579.9	1535.0	579.5	424.4
40°	6481.3	4027.0	1141.6	424.4	322.9
42.5°	6129.9	3484.7	844.8	326.7	261.5
45°	5734.1	2964.2	629.3	267.8	222.8
47.5°	5350.3	2478.9	478.0	228.1	193.8
50°	4916.3	2041.1	374.1	199.1	170.1
52.5°	4455.7	1655.9	303.5	175.4	149.8
55°	3970.5	1325.3	253.3	155.6	132.4
57.5°	3478.9	1049.8	216.5	138.7	117.9
60°	2974.3	839.5	188.0	124.2	105.4
62.5°	2481.8	671.3	164.3	111.6	94.2
65°	2022.2	544.2	145.0	100.0	84.1
67.5°	1597.4	430.2	135.3	89.9	75.9
70°	1232.9	334.9	125.7	80.2	67.7
72.5°	934.3	257.1	111.2	71.5	59.9
75°	686.3	199.1	90.4	62.8	52.7
77.5°	491.1	153.2	73.5	54.6	45.4
80°	336.9	114.1	60.4	46.9	38.7
82.5°	218.9	80.7	48.8	38.7	31.9
85°	126.6	52.7	36.7	30.4	25.1
87.5°	54.6	29.0	25.1	22.7	19.3
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)