

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-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-LD5-15SE-W-AI-UNV-L850-ED1-U  
Description: METALUX HIGH BAY LINEAR LED  
Light Source: -  
Ballast/Driver: -

Luminaire Equipment: Sample No.    Condition    Description

**Summary**

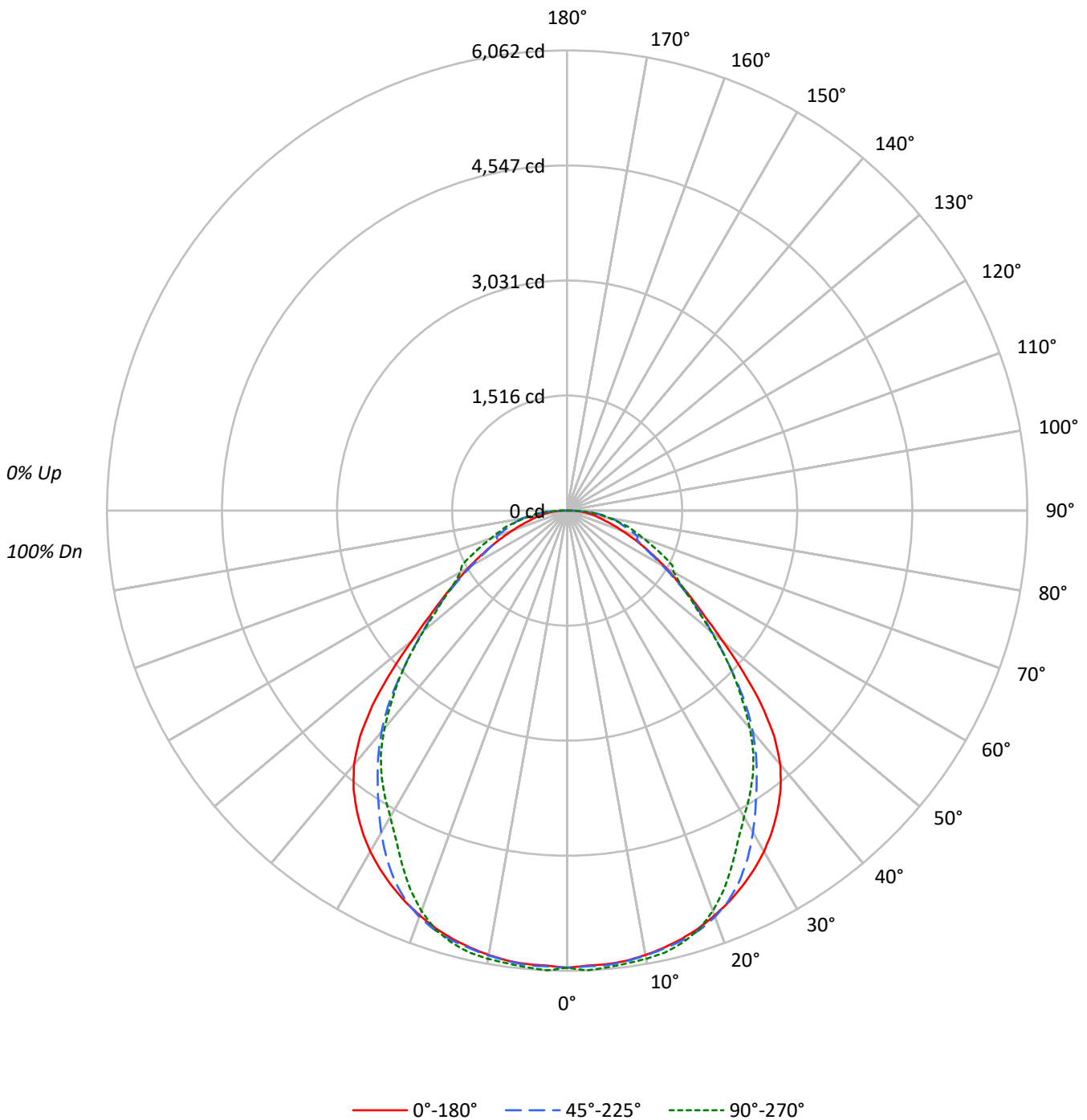
Lumens per Lamp: N/A  
Luminaire Lumens: 13938.0 lumens  
Efficiency: N/A  
Efficacy: 146.4 lumens/watt  
Spacing Criteria (0/90/45): 1.27 / 1.16 / 1.26  
Luminous Opening: Rectangular (W 2' x L: 4' x H: 0')  
CIE Type: Direct

Input Watts (W): 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	0
RCR																		
0	119	119	119	119	116	116	116	116	111	111	111	106	106	106	102	102	102	100
1	109	105	101	97	107	103	99	96	98	95	93	95	92	90	91	89	87	85
2	100	93	86	81	98	91	85	80	87	82	78	84	80	76	81	78	75	73
3	92	82	75	69	90	81	74	68	78	72	67	75	70	66	73	68	65	63
4	85	74	66	59	83	73	65	59	70	64	58	68	62	57	66	61	57	55
5	79	67	58	52	77	66	58	52	64	57	51	62	55	51	60	54	50	48
6	73	61	52	46	71	60	52	46	58	51	45	56	50	45	55	49	45	43
7	68	55	47	41	66	54	47	41	53	46	41	52	45	40	50	44	40	38
8	64	51	43	37	62	50	42	37	49	42	37	48	41	36	46	41	36	34
9	60	47	39	34	58	46	39	33	45	38	33	44	38	33	43	37	33	31
10	56	43	36	31	55	43	35	31	42	35	30	41	35	30	40	34	30	29

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

	0°	45°	90°
0°	8102	8102	8102
5°	8102	8119	8159
10°	8122	8132	8192
15°	8134	8165	8204
20°	8126	8156	8035
25°	8106	7984	7637
30°	8058	7608	7237
35°	7936	7150	7001
40°	7671	6685	6575
45°	6895	5970	5948
50°	5592	5200	5164
55°	4643	4557	4556
60°	4020	3903	4363
65°	3484	3463	4398
70°	3004	3884	4193
75°	2694	3981	4371
80°	2800	4686	4386
85°	3179	5400	5011



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	573.3	4.1
10°-20°	1655.8	11.9
20°-30°	2459.3	17.6
30°-40°	2792.0	20.0
40°-50°	2495.9	17.9
50°-60°	1725.7	12.4
60°-70°	1138.7	8.2
70°-80°	768.2	5.5
80°-90°	329.0	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°	4688.5	33.6
0°-40°	7480.5	53.7
0°-60°	11702.1	84.0
0°-90°	13938.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	13938.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	6022	6022	6022	6022	6022	
5°	5998	6035	6011	6036	6041	571
15°	5840	5868	5861	5894	5890	1648
25°	5460	5512	5378	5218	5144	2516
35°	4832	4730	4353	4290	4262	3013
45°	3624	3317	3137	3161	3126	2756
55°	1980	1807	1943	1915	1942	1798
65°	1094	972	1088	1272	1382	1092
75°	518	652	766	818	841	566
85°	206	286	350	352	325	215
90°	0	0	0	0	0	



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	6021.6	6021.6	6021.6	6021.6	6021.6
2.5°	6001.2	6038.7	6010.7	6036.6	6061.9
5°	5998.5	6035.3	6011.4	6036.0	6040.7
7.5°	5981.4	6015.5	5987.6	6011.4	6016.9
10°	5944.6	5984.8	5952.1	5988.9	5995.7
12.5°	5896.9	5937.8	5909.1	5959.6	5962.3
15°	5839.6	5867.5	5861.4	5894.1	5890.0
17.5°	5767.3	5799.4	5794.6	5802.8	5783.7
20°	5675.3	5711.4	5696.4	5658.9	5611.8
22.5°	5576.4	5620.0	5560.7	5465.9	5399.8
25°	5459.8	5511.6	5378.0	5217.7	5144.1
27.5°	5330.9	5377.3	5155.0	4958.6	4882.2
30°	5186.3	5206.1	4896.6	4709.7	4657.9
32.5°	5019.3	4990.7	4620.4	4497.0	4467.0
35°	4831.8	4730.2	4353.1	4289.7	4262.4
37.5°	4620.4	4434.2	4089.2	4059.9	4031.3
40°	4367.4	4092.6	3806.2	3787.1	3743.5
42.5°	4040.8	3721.0	3491.9	3469.4	3430.5
45°	3623.5	3316.6	3137.3	3161.2	3125.7
47.5°	3143.4	2910.9	2797.1	2862.5	2797.1
50°	2671.6	2515.4	2484.1	2543.4	2467.0
52.5°	2285.0	2144.5	2209.3	2219.5	2173.8
55°	1979.5	1807.0	1942.7	1915.4	1942.0
57.5°	1713.6	1520.6	1687.6	1656.3	1747.6
60°	1494.0	1277.2	1450.4	1443.5	1621.5
62.5°	1278.5	1105.3	1244.4	1344.7	1563.5
65°	1094.4	971.7	1087.6	1271.7	1381.5
67.5°	917.8	871.4	994.9	1097.1	1217.1
70°	763.7	787.6	987.4	968.3	1065.8
72.5°	634.1	715.3	871.4	874.8	943.7
75°	518.2	651.9	765.7	818.3	840.8
77.5°	430.9	591.2	691.4	709.8	688.0
80°	361.4	521.0	604.8	596.6	566.0
82.5°	291.8	394.8	476.6	484.1	448.0
85°	205.9	286.4	349.8	351.8	324.6
87.5°	110.5	176.6	212.1	218.2	201.8
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)