

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: P563318

Luminaire Tested: **VHB-9-N-UNV-L850-CD**

Issue Date: 6/3/2022



Test Information

Test Method: LM-79-08
Report Number: P563318
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (P364424)
Test Lab: INNOVATION CENTER
Issue Date: 6/3/2022
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: METALUX
Catalog Number: VHB-9-N-UNV-L850-CD
Description: 9000 LUMEN, VHB LED LUMINAIRE WITH, NARROW LENS AND 80CRI, 5000K CCT
LEDS
Light Source: -
Ballast/Driver: -

Summary

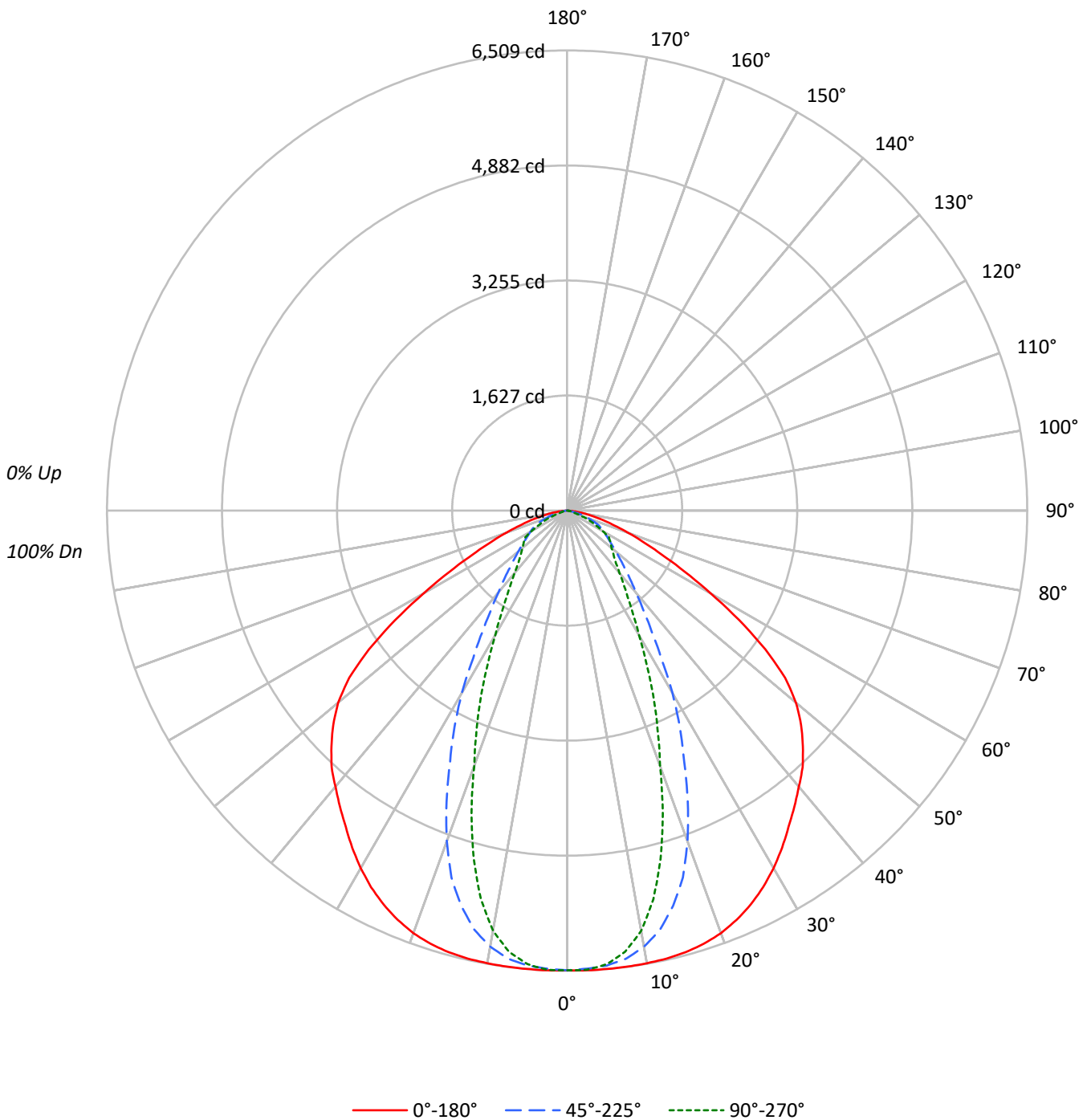
Lumens per Lamp: N/A
Luminaire Lumens: 9171.0 lumens
Efficiency: N/A
Efficacy: 163.8 lumens/watt
Spacing Criteria (0/90/45): 1.32 / 0.72 / 0.86
Luminous Opening: Rectangular (W 1.17' x L: 1.58' x H: 0')
CIE Type: Direct

Input Watts (W): 56
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	111	108	104	101	109	105	102	100	101	99	96	97	95	94	94	92	91	89					89			
2	103	97	91	87	101	95	90	86	91	87	84	88	85	82	85	83	80	78					78			
3	96	87	81	75	94	86	80	75	83	78	73	80	76	72	78	74	71	69					69			
4	89	79	72	66	87	78	71	66	76	70	65	74	68	64	71	67	64	62					62			
5	83	72	65	59	81	71	64	59	69	63	58	68	62	58	66	61	57	55					55			
6	78	66	59	53	76	66	58	53	64	57	53	62	57	52	61	56	52	50					50			
7	73	61	54	48	71	61	53	48	59	53	48	58	52	48	57	51	47	46					46			
8	69	57	49	44	67	56	49	44	55	49	44	54	48	44	53	47	44	42					42			
9	65	53	46	41	63	52	45	41	51	45	41	50	44	40	49	44	40	39					39			
10	61	49	42	38	60	49	42	38	48	42	38	47	41	37	46	41	37	36					36			

AVERAGE LUMINANCE (cd/sqm):

	0°	45°	90°
0°	37894	37894	37894
5°	38072	37783	37673
10°	38472	37058	35705
15°	39020	34916	30786
20°	39441	30846	23835
25°	39520	25188	18469
30°	39298	20005	13669
35°	38849	14824	10629
40°	38789	11511	8773
45°	38871	9474	7793
50°	38319	8193	7433
55°	34786	7304	7510
60°	27348	6980	6843
65°	20313	6766	5150
70°	15579	5416	3143
75°	11858	3863	1734
80°	8708	1799	1399
85°	5449	1544	1244



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ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	611.0	6.7
10°-20°	1608.3	17.5
20°-30°	1942.2	21.2
30°-40°	1736.6	18.9
40°-50°	1359.9	14.8
50°-60°	1027.5	11.2
60°-70°	610.3	6.7
70°-80°	234.5	2.6
80°-90°	40.7	0.4
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°	4161.5	45.4
0°-40°	5898.1	64.3
0°-60°	8285.5	90.3
0°-90°	9171.0	100.0
90°-120°	0.0	0.0
90°-150°	0.0	0.0
90°-180°	0.0	0.0
0°-180°	9171.0	100.0

CANDELA DISTRIBUTION:

	0°	22.5°	45°	67.5°	90°	Flux
0°	6503	6503	6503	6503	6503	
5°	6509	6480	6459	6451	6440	621
15°	6468	6255	5788	5304	5103	1828
25°	6147	5424	3918	3089	2872	2830
35°	5461	3886	2084	1625	1494	3425
45°	4717	2010	1150	971	946	3631
55°	3424	1090	719	716	739	3007
65°	1473	612	491	409	374	1518
75°	527	294	172	85	77	577
85°	82	28	23	20	19	109
90°	0	0	0	0	0	



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CANDELA DISTRIBUTION (FULL):

	0°	22.5°	45°	67.5°	90°
0°	6502.9	6502.9	6502.9	6502.9	6502.9
2.5°	6509.1	6487.6	6485.9	6499.7	6501.8
5°	6508.6	6480.2	6459.2	6450.7	6440.5
7.5°	6506.6	6463.7	6392.7	6324.6	6292.9
10°	6501.8	6425.5	6262.9	6108.0	6034.2
12.5°	6491.2	6357.4	6070.3	5785.6	5630.7
15°	6468.1	6254.8	5787.7	5303.9	5103.2
17.5°	6426.3	6113.3	5441.4	4758.5	4500.2
20°	6360.2	5933.3	4974.3	4136.5	3843.7
22.5°	6265.3	5698.1	4459.7	3576.5	3342.5
25°	6146.6	5423.6	3917.5	3088.7	2872.5
27.5°	6005.5	5103.2	3450.3	2634.5	2421.6
30°	5840.4	4728.9	2973.1	2205.5	2031.5
32.5°	5655.9	4334.8	2474.8	1878.2	1735.1
35°	5461.2	3886.3	2083.9	1624.8	1494.2
37.5°	5277.9	3406.1	1764.8	1400.6	1308.9
40°	5099.2	2901.8	1513.3	1223.4	1153.3
42.5°	4930.5	2419.2	1321.1	1075.0	1029.1
45°	4716.8	2009.7	1149.6	971.2	945.6
47.5°	4490.0	1696.2	1013.3	886.8	877.9
50°	4226.9	1444.8	903.8	813.4	819.9
52.5°	3885.5	1246.1	800.0	761.5	780.6
55°	3424.0	1090.4	718.9	716.1	739.2
57.5°	2883.5	941.6	654.9	672.7	698.7
60°	2346.6	822.0	598.9	624.9	587.2
62.5°	1874.6	712.1	545.8	498.3	466.0
65°	1473.2	612.3	490.7	409.2	373.5
67.5°	1174.7	519.4	412.8	325.6	296.0
70°	914.4	436.7	317.9	244.5	184.5
72.5°	700.7	365.0	248.1	139.1	105.0
75°	526.7	294.4	171.6	84.8	77.0
77.5°	375.5	218.6	91.6	61.2	56.8
80°	259.5	140.3	53.6	44.2	41.7
82.5°	161.0	67.7	36.5	31.6	29.6
85°	81.5	28.4	23.1	20.3	18.6
87.5°	27.2	13.8	10.5	9.7	8.9
90°	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)