

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: FAIL-SAFE

Report Number: P580165

Luminaire Tested: **HVSL12-2-LD4-3LO-35-UNV-O-EDD-90**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580165  
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G3-2102-135-6)  
Test Lab: INNOVATION CENTER  
Issue Date: 12/16/2022  
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)  
Product Line: FAIL-SAFE  
Catalog Number: HVSL12-2-LD4-3LO-35-UNV-O-EDD-90  
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

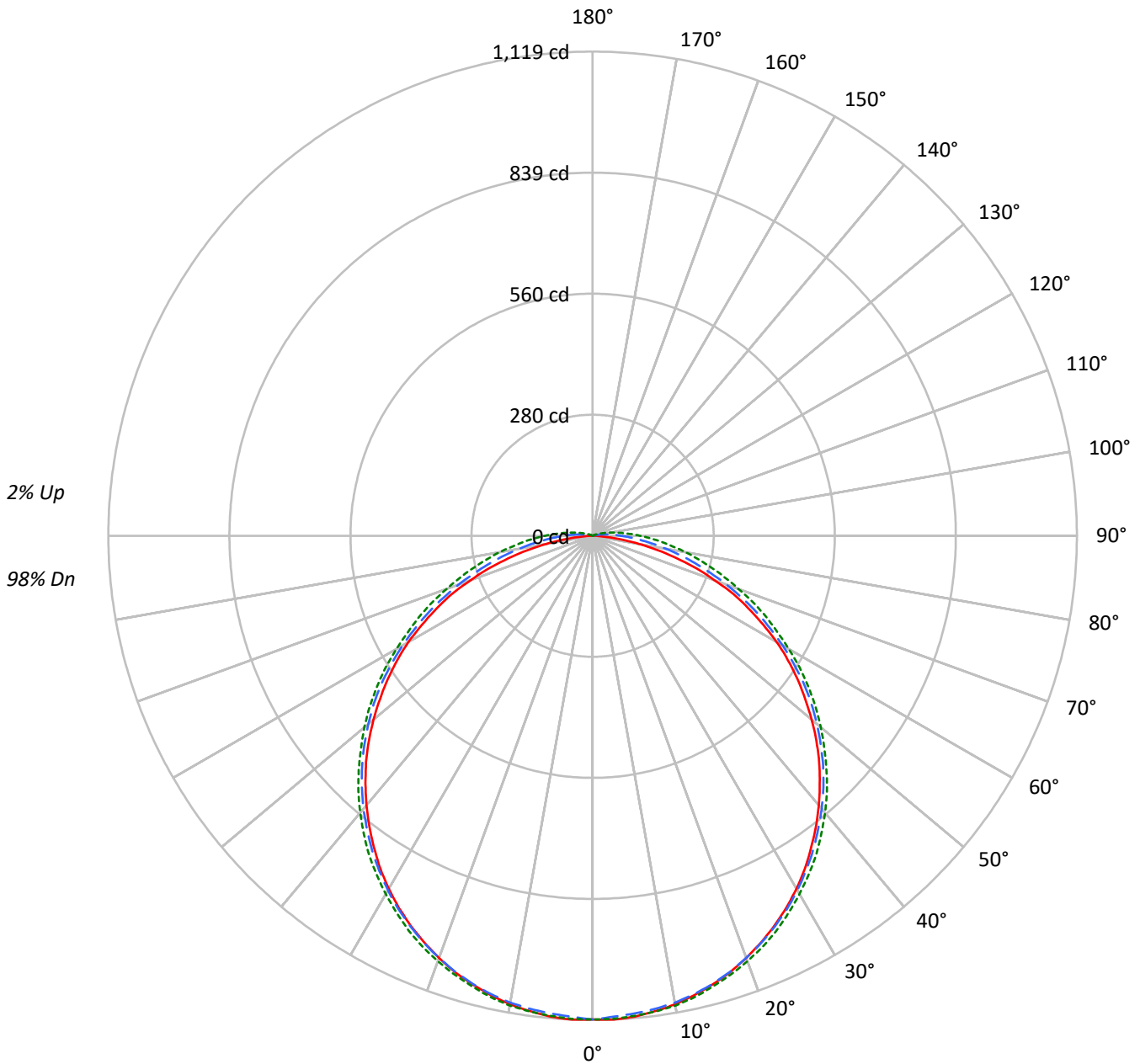
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 3380.0 lumens  
Efficiency: N/A  
Efficacy: 94.7 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 1' x L: 2' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 35.7  
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

TEST NUMBER: P580165

CATALOG NUMBER: HVSL12-2-LD4-3LO-35-UNV-O-EDD-90

### Luminous Intensity Polar Plot





TEST NUMBER: P580165

CATALOG NUMBER: HVSL12-2-LD4-3LO-35-UNV-O-EDD-90

**COEFFICIENT OF UTILIZATION - ZONAL CAVITY METHOD:**

RF	20									20									20									20									
RC	80									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	0																
RCR																																					
0	119	119	119	119	116	116	116	116	110	110	110	105	105	105	101	101	101				98																
1	108	102	98	94	105	100	96	92	95	92	89	91	88	86	87	85	83				81																
2	98	89	82	76	95	87	80	75	83	77	73	79	75	71	76	72	69				67																
3	89	78	69	63	86	76	68	62	73	66	61	70	64	59	67	62	58				56																
4	81	69	60	53	79	67	59	52	65	57	52	62	56	51	60	54	50				47																
5	75	61	52	45	72	60	52	45	58	50	44	56	49	44	54	48	43				41																
6	69	55	46	40	67	54	46	39	52	45	39	50	44	38	49	43	38				36																
7	64	50	41	35	62	49	41	35	47	40	34	46	39	34	44	38	34				32																
8	59	46	37	31	58	45	37	31	43	36	31	42	35	30	41	35	30				28																
9	55	42	34	28	54	41	33	28	40	33	28	39	32	27	38	32	27				25																
10	52	39	31	25	51	38	30	25	37	30	25	36	29	25	35	29	25				23																

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

	0°	45°	90°
0°	6016	6016	6016
5°	5983	5897	5930
10°	5922	5806	5853
15°	5848	5703	5749
20°	5772	5586	5648
25°	5684	5465	5544
30°	5585	5335	5420
35°	5464	5190	5298
40°	5338	5038	5149
45°	5202	4871	4985
50°	5032	4676	4808
55°	4846	4462	4609
60°	4625	4178	4372
65°	4290	3860	4141
70°	3826	3480	3868
75°	3190	3064	3642
80°	2286	2659	3472
85°	1100	2257	3377



TEST NUMBER: P580165

CATALOG NUMBER: HVSL12-2-LD4-3LO-35-UNV-O-EDD-90

**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	105.8	3.1
10°-20°	303.4	9.0
20°-30°	460.4	13.6
30°-40°	556.7	16.5
40°-50°	580.9	17.2
50°-60°	531.1	15.7
60°-70°	414.0	12.2
70°-80°	259.0	7.7
80°-90°	117.6	3.5
90°-100°	39.4	1.2
100°-110°	9.9	0.3
110°-120°	1.6	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°	869.7	25.7
0°-40°	1426.4	42.2
0°-60°	2538.4	75.1
0°-90°	3329.1	98.5
90°-120°	50.9	1.5
90°-150°	50.9	1.5
90°-180°	51.0	1.5
0°-180°	3380.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1118	1118	1118	1118	1118	
5°	1116	1113	1108	1114	1114	106
15°	1073	1075	1072	1078	1078	303
25°	994	995	996	1005	1006	458
35°	880	884	888	897	900	551
45°	740	747	753	761	764	571
55°	578	585	596	604	608	516
65°	397	404	418	435	441	393
75°	201	214	245	274	284	214
85°	35	64	110	146	159	44
90°	0	24	65	98	110	1
95°	0	6	34	61	71	0
105°	0	1	6	16	22	1
115°	1	1	1	3	4	1
125°	0	0	0	0	0	0
135°	0	0	0	0	0	0
145°	0	0	0	0	0	0
155°	0	0	0	0	0	0
165°	0	0	0	0	0	0
175°	0	0	0	0	0	0
180°	0	0	0	0	0	0



TEST NUMBER: P580165

CATALOG NUMBER: HVSL12-2-LD4-3LO-35-UNV-O-EDD-90

**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1117.9	1117.9	1117.9	1117.9	1117.9
2.5°	1119.2	1117.6	1112.6	1117.6	1117.4
5°	1115.5	1113.4	1108.4	1113.7	1113.7
7.5°	1108.1	1107.4	1102.9	1108.9	1108.9
10°	1099.5	1099.2	1095.5	1102.1	1102.4
12.5°	1087.3	1088.4	1085.0	1091.3	1092.1
15°	1073.1	1074.9	1072.0	1078.1	1077.8
17.5°	1057.6	1058.6	1056.5	1063.3	1063.1
20°	1038.3	1039.6	1038.0	1045.2	1046.0
22.5°	1017.0	1018.8	1018.5	1025.9	1028.0
25°	994.3	995.1	996.1	1004.6	1006.2
27.5°	969.3	970.6	972.4	980.1	981.7
30°	941.9	944.0	946.1	954.0	956.1
32.5°	912.9	915.0	917.6	927.9	928.9
35°	880.2	884.1	887.8	896.8	900.5
37.5°	847.5	852.5	855.9	865.4	868.3
40°	813.0	818.0	823.5	833.5	835.4
42.5°	776.9	782.7	789.3	798.2	801.4
45°	740.5	747.1	753.2	760.6	764.2
47.5°	701.3	707.8	715.2	723.7	726.0
50°	660.7	668.3	676.2	684.1	688.3
52.5°	619.0	628.3	637.2	645.7	649.6
55°	577.9	584.8	595.6	604.3	608.2
57.5°	535.2	541.0	550.8	565.0	567.1
60°	491.7	497.0	507.0	518.6	523.4
62.5°	443.8	450.9	461.4	476.2	480.4
65°	397.1	404.0	418.0	434.6	441.4
67.5°	352.1	354.4	372.4	389.8	400.8
70°	298.8	307.8	328.6	350.0	358.4
72.5°	253.0	262.0	284.9	309.9	320.5
75°	201.1	213.5	244.6	273.8	284.1
77.5°	155.5	169.2	207.7	237.2	249.0
80°	108.6	129.9	171.8	205.0	217.9
82.5°	68.3	94.6	139.4	174.2	185.5
85°	34.8	64.3	110.4	146.0	158.9
87.5°	9.2	41.6	85.9	119.9	133.1
90°	0.3	24.0	65.1	97.8	109.6
92.5°	0.3	13.4	48.5	77.7	89.9
95°	0.3	6.3	33.7	61.1	70.6
97.5°	0.3	2.6	23.2	46.1	55.6
100°	0.3	1.3	14.8	33.5	41.6
102.5°	0.5	0.8	9.2	24.0	30.6
105°	0.5	0.8	5.5	16.3	21.9



TEST NUMBER: P580165

CATALOG NUMBER: HVSL12-2-LD4-3LO-35-UNV-O-EDD-90

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.8	0.8	1.1	4.5	6.6
115°	0.8	0.8	1.1	2.9	4.2
117.5°	0.0	0.0	0.0	0.0	0.0
120°	0.0	0.0	0.0	0.0	0.0
122.5°	0.0	0.0	0.0	0.0	0.0
125°	0.0	0.0	0.0	0.0	0.0
127.5°	0.0	0.0	0.0	0.0	0.0
130°	0.0	0.0	0.0	0.0	0.0
132.5°	0.0	0.0	0.0	0.0	0.0
135°	0.0	0.0	0.0	0.0	0.0
137.5°	0.0	0.0	0.0	0.0	0.0
140°	0.0	0.0	0.0	0.0	0.0
142.5°	0.0	0.0	0.0	0.0	0.0
145°	0.0	0.0	0.0	0.0	0.0
147.5°	0.0	0.0	0.0	0.0	0.0
150°	0.0	0.0	0.0	0.0	0.0
152.5°	0.0	0.0	0.0	0.0	0.0
155°	0.0	0.0	0.0	0.0	0.0
157.5°	0.0	0.0	0.0	0.0	0.0
160°	0.0	0.0	0.0	0.0	0.0
162.5°	0.0	0.0	0.0	0.0	0.0
165°	0.0	0.0	0.0	0.0	0.0
167.5°	0.0	0.0	0.0	0.0	0.0
170°	0.0	0.0	0.0	0.0	0.0
172.5°	0.0	0.0	0.0	0.0	0.0
175°	0.0	0.0	0.0	0.0	0.0
177.5°	0.0	0.0	0.0	0.0	0.0
180°	0.0	0.0	0.0	0.0	0.0



Report Generated By 670246072 / DESKTOP-MV3F9LC







— 0°-180°    - - 45°-225°    - - - - 90°-270°







107.5°	0.5	0.8	3.2	11.1	15.0
110°	0.8	0.8	1.8	6.9	10.0



(END OF REPORT)