

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: P580166

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

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580166  
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  
Description: 2 FOOT, 12INCH WIDE, HVSL LED LUMINAIRE, WITH 3500K, 80 CRI LEDS  
Light Source: -  
Ballast/Driver: -

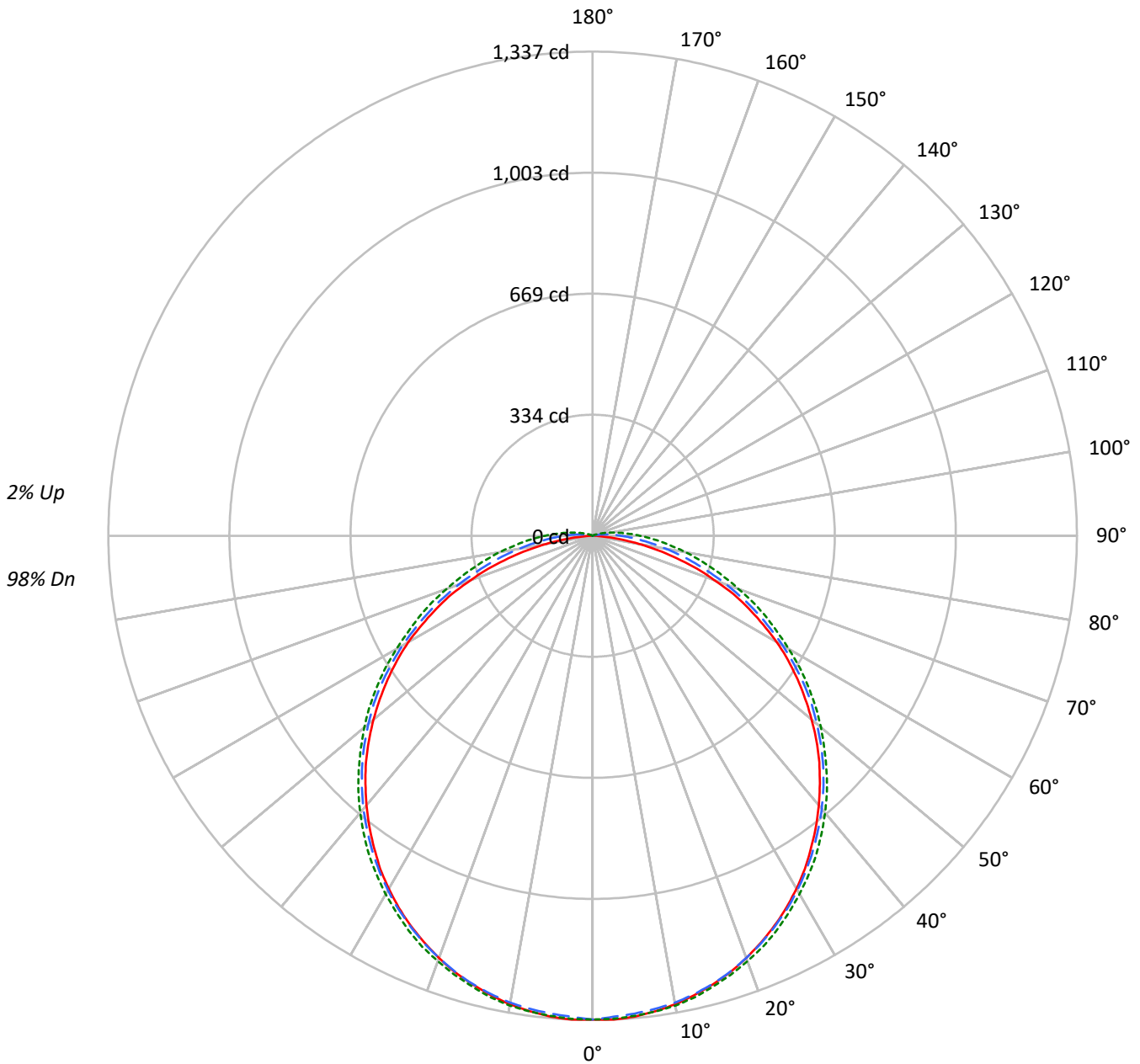
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 4039.0 lumens  
Efficiency: N/A  
Efficacy: 113.1 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

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### Luminous Intensity Polar Plot





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**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°	7190	7190	7190
5°	7149	7047	7086
10°	7076	6938	6993
15°	6989	6815	6870
20°	6897	6675	6749
25°	6792	6531	6625
30°	6673	6375	6477
35°	6529	6202	6331
40°	6379	6021	6153
45°	6217	5821	5957
50°	6013	5589	5746
55°	5791	5332	5508
60°	5527	4993	5224
65°	5127	4612	4949
70°	4572	4159	4623
75°	3811	3661	4352
80°	2730	3177	4149
85°	1316	2696	4036



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	126.4	3.1
10°-20°	362.6	9.0
20°-30°	550.2	13.6
30°-40°	665.3	16.5
40°-50°	694.2	17.2
50°-60°	634.7	15.7
60°-70°	494.8	12.2
70°-80°	309.5	7.7
80°-90°	140.6	3.5
90°-100°	47.1	1.2
100°-110°	11.8	0.3
110°-120°	1.9	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°	1039.2	25.7
0°-40°	1704.5	42.2
0°-60°	3033.4	75.1
0°-90°	3978.2	98.5
90°-120°	60.8	1.5
90°-150°	60.8	1.5
90°-180°	61.0	1.5
0°-180°	4039.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	1336	1336	1336	1336	1336	
5°	1333	1330	1324	1331	1331	127
15°	1282	1284	1281	1288	1288	362
25°	1188	1189	1190	1200	1202	547
35°	1052	1056	1061	1072	1076	658
45°	885	893	900	909	913	682
55°	691	699	712	722	727	617
65°	475	483	500	519	528	470
75°	240	255	292	327	340	256
85°	42	77	132	174	190	53
90°	0	29	78	117	131	2
95°	0	8	40	73	84	0
105°	1	1	7	20	26	1
115°	1	1	1	4	5	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



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**CANDELA DISTRIBUTION (FULL):**

	0°	22.5°	45°	67.5°	90°
0°	1335.9	1335.9	1335.9	1335.9	1335.9
2.5°	1337.4	1335.5	1329.6	1335.5	1335.2
5°	1333.0	1330.5	1324.5	1330.8	1330.8
7.5°	1324.2	1323.3	1317.9	1325.2	1325.2
10°	1313.8	1313.5	1309.1	1317.0	1317.3
12.5°	1299.3	1300.6	1296.5	1304.1	1305.0
15°	1282.3	1284.5	1281.1	1288.3	1288.0
17.5°	1263.7	1265.0	1262.5	1270.7	1270.4
20°	1240.8	1242.3	1240.4	1248.9	1249.9
22.5°	1215.2	1217.5	1217.1	1226.0	1228.5
25°	1188.2	1189.1	1190.4	1200.4	1202.3
27.5°	1158.2	1159.8	1162.0	1171.2	1173.0
30°	1125.5	1128.0	1130.5	1140.0	1142.5
32.5°	1090.9	1093.4	1096.5	1108.8	1110.1
35°	1051.8	1056.5	1060.9	1071.6	1076.1
37.5°	1012.8	1018.7	1022.8	1034.2	1037.6
40°	971.5	977.5	984.1	996.1	998.3
42.5°	928.4	935.3	943.2	953.9	957.6
45°	884.9	892.8	900.0	908.8	913.2
47.5°	838.0	845.9	854.7	864.7	867.6
50°	789.5	798.6	808.1	817.5	822.6
52.5°	739.7	750.8	761.5	771.5	776.3
55°	690.6	698.8	711.7	722.1	726.8
57.5°	639.6	646.5	658.2	675.2	677.7
60°	587.6	593.9	605.9	619.7	625.4
62.5°	530.3	538.8	551.4	569.0	574.1
65°	474.6	482.8	499.5	519.3	527.5
67.5°	420.7	423.6	445.0	465.8	479.0
70°	357.1	367.8	392.7	418.2	428.3
72.5°	302.3	313.0	340.4	370.3	382.9
75°	240.3	255.1	292.2	327.2	339.5
77.5°	185.8	202.2	248.2	283.4	297.6
80°	129.7	155.3	205.3	245.0	260.4
82.5°	81.6	113.1	166.6	208.2	221.7
85°	41.6	76.8	131.9	174.5	189.9
87.5°	11.0	49.8	102.7	143.3	159.0
90°	0.3	28.7	77.8	116.8	131.0
92.5°	0.3	16.1	57.9	92.9	107.4
95°	0.3	7.6	40.3	73.1	84.4
97.5°	0.3	3.1	27.7	55.1	66.4
100°	0.3	1.6	17.6	40.0	49.8
102.5°	0.6	0.9	11.0	28.7	36.5
105°	0.6	0.9	6.6	19.5	26.1



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

**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	0.9	0.9	1.3	5.4	7.9
115°	0.9	0.9	1.3	3.5	5.0
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°	0.6	0.9	3.8	13.2	17.9
110°	0.9	0.9	2.2	8.2	12.0



(END OF REPORT)