

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: P580791

Luminaire Tested: **HVSL8-4-LD4-3LO-40-UNV-O-EDD-90**

Issue Date: 12/16/2022



**Test Information**

Test Method: LM-79-08  
Report Number: P580791  
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: HVSL8-4-LD4-3LO-40-UNV-O-EDD-90  
Description: 4 FOOT, 8INCH WIDE, HVSL LED LUMINAIRE, WITH 4000K, 90 CRI LEDS  
Light Source: -  
Ballast/Driver: -

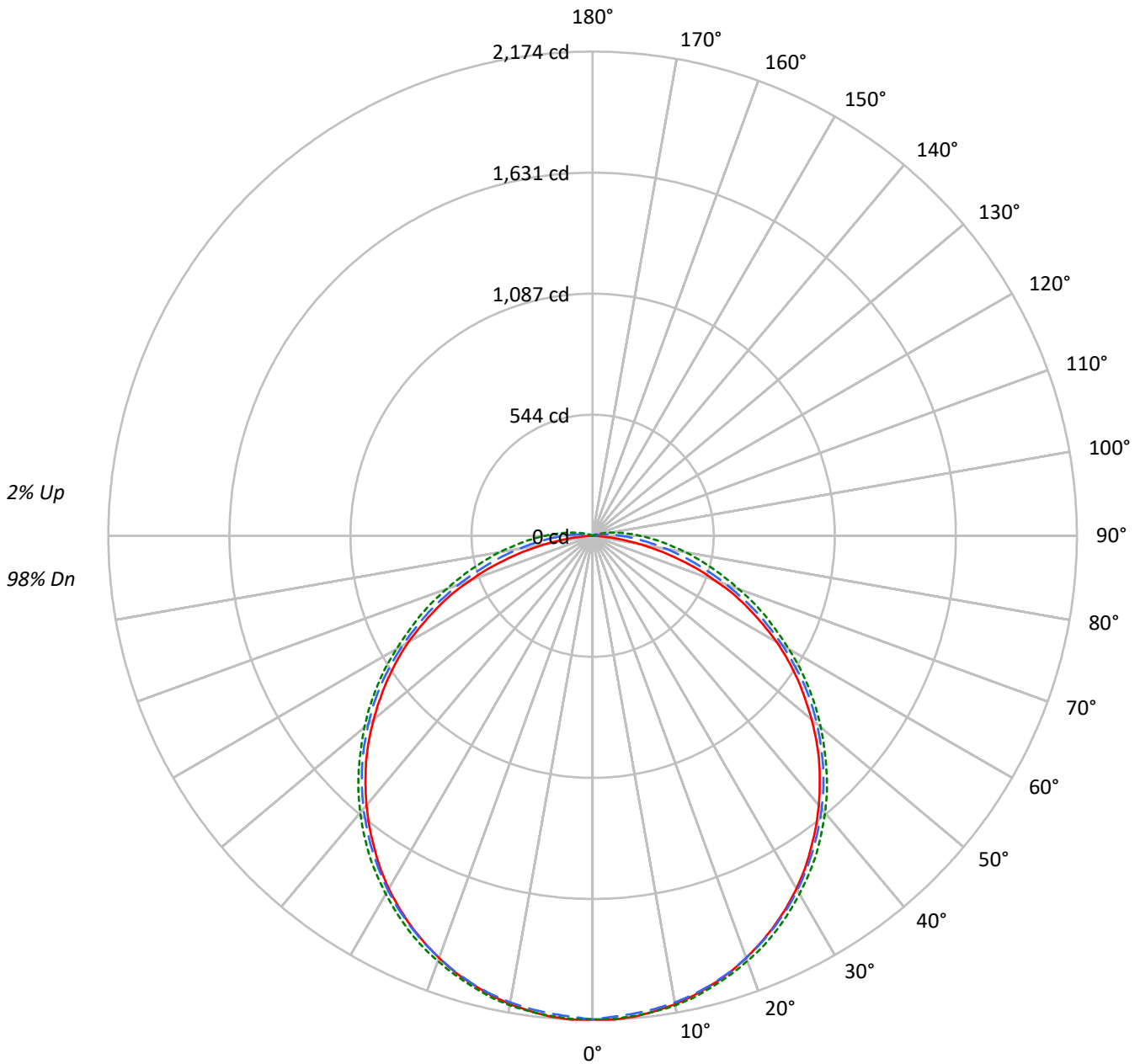
**Summary**

Lumens per Lamp: N/A  
Luminaire Lumens: 6566.0 lumens  
Efficiency: N/A  
Efficacy: 94.5 lumens/watt  
Spacing Criteria (0/90/45): 1.25 / 1.27 / 1.38  
Luminous Opening: Rectangular w/ Sides (W: 0.67' x L: 4' x H: 0.17')  
CIE Type: Direct  
  
Input Watts (W): 69.5  
Input Voltage (V): NR  
Input Current (A<sub>in</sub>): 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°	8766	8766	8766
5°	8749	8570	8578
10°	8690	8416	8406
15°	8615	8247	8200
20°	8535	8057	8000
25°	8438	7862	7796
30°	8328	7655	7565
35°	8187	7426	7336
40°	8041	7186	7068
45°	7883	6924	6780
50°	7678	6621	6469
55°	7457	6289	6127
60°	7193	5859	5727
65°	6764	5376	5331
70°	6147	4809	4870
75°	5272	4187	4452
80°	3965	3576	4070
85°	2121	2959	3706



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**ZONAL LUMENS:**

Zone	Lumens	% Fixture
0°-10°	205.5	3.1
10°-20°	589.5	9.0
20°-30°	894.4	13.6
30°-40°	1081.5	16.5
40°-50°	1128.5	17.2
50°-60°	1031.8	15.7
60°-70°	804.3	12.2
70°-80°	503.1	7.7
80°-90°	228.5	3.5
90°-100°	76.6	1.2
100°-110°	19.2	0.3
110°-120°	3.0	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°	1689.4	25.7
0°-40°	2770.9	42.2
0°-60°	4931.2	75.1
0°-90°	6467.2	98.5
90°-120°	98.8	1.5
90°-150°	98.8	1.5
90°-180°	99.0	1.5
0°-180°	6566.0	100.0

**CANDELA DISTRIBUTION:**

	0°	22.5°	45°	67.5°	90°	Flux
0°	2172	2172	2172	2172	2172	
5°	2167	2163	2153	2163	2163	206
15°	2085	2088	2083	2094	2094	588
25°	1932	1933	1935	1952	1955	890
35°	1710	1718	1725	1742	1749	1070
45°	1438	1451	1463	1477	1485	1108
55°	1123	1136	1157	1174	1182	1003
65°	772	785	812	844	858	763
75°	391	415	475	532	552	416
85°	68	125	214	284	309	86
90°	0	47	126	190	213	3
95°	0	12	66	119	137	0
105°	1	2	11	32	42	1
115°	2	2	2	6	8	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°	2171.6	2171.6	2171.6	2171.6	2171.6
2.5°	2174.2	2171.1	2161.4	2171.1	2170.6
5°	2167.0	2162.9	2153.2	2163.4	2163.4
7.5°	2152.7	2151.2	2142.5	2154.2	2154.2
10°	2135.8	2135.3	2128.1	2140.9	2141.4
12.5°	2112.3	2114.3	2107.6	2119.9	2121.5
15°	2084.6	2088.2	2082.6	2094.3	2093.8
17.5°	2054.4	2056.5	2052.4	2065.7	2065.2
20°	2017.0	2019.6	2016.5	2030.3	2031.9
22.5°	1975.6	1979.1	1978.6	1993.0	1997.1
25°	1931.5	1933.1	1935.1	1951.5	1954.6
27.5°	1882.9	1885.5	1889.0	1903.9	1907.0
30°	1829.7	1833.8	1837.9	1853.2	1857.3
32.5°	1773.3	1777.4	1782.6	1802.5	1804.6
35°	1709.9	1717.5	1724.7	1742.1	1749.3
37.5°	1646.4	1656.1	1662.8	1681.2	1686.8
40°	1579.3	1589.1	1599.8	1619.3	1622.8
42.5°	1509.2	1520.5	1533.3	1550.7	1556.8
45°	1438.5	1451.3	1463.1	1477.4	1484.6
47.5°	1362.3	1375.1	1389.4	1405.8	1410.4
50°	1283.4	1298.3	1313.6	1329.0	1337.2
52.5°	1202.5	1220.5	1237.9	1254.2	1261.9
55°	1122.7	1136.0	1157.0	1173.9	1181.6
57.5°	1039.7	1051.0	1069.9	1097.6	1101.7
60°	955.3	965.5	985.0	1007.5	1016.7
62.5°	862.1	875.9	896.4	925.1	933.3
65°	771.5	784.8	811.9	844.2	857.5
67.5°	683.9	688.6	723.4	757.2	778.7
70°	580.5	597.9	638.4	679.9	696.2
72.5°	491.5	508.9	553.4	602.0	622.5
75°	390.6	414.7	475.1	531.9	551.9
77.5°	302.0	328.7	403.4	460.7	483.8
80°	210.9	252.4	333.8	398.3	423.4
82.5°	132.6	183.8	270.8	338.4	360.4
85°	67.6	124.9	214.5	283.6	308.7
87.5°	17.9	80.9	166.9	232.9	258.5
90°	0.5	46.6	126.4	189.9	213.0
92.5°	0.5	26.1	94.2	151.0	174.6
95°	0.5	12.3	65.5	118.8	137.2
97.5°	0.5	5.1	45.1	89.6	108.0
100°	0.5	2.6	28.7	65.0	80.9
102.5°	1.0	1.5	17.9	46.6	59.4
105°	1.0	1.5	10.8	31.7	42.5



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**CANDELA DISTRIBUTION (continued):**

	0°	22.5°	45°	67.5°	90°
112.5°	1.5	1.5	2.0	8.7	12.8
115°	1.5	1.5	2.0	5.6	8.2
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°	1.0	1.5	6.1	21.5	29.2
110°	1.5	1.5	3.6	13.3	19.5



(END OF REPORT)